

GKV-Bündnis für
GESUNDHEIT



Literatur- und Datenbankrecherche zu Gesundheitsförderungs- und Präventionsansätzen bei Menschen mit Migrationshintergrund und Auswertung der vorliegenden Evidenz

ERGEBNISBERICHT



Impressum

Literatur- und Datenbankrecherche zu Gesundheitsförderungs- und Präventionsansätzen bei Menschen mit Migrationshintergrund und Auswertung der vorliegenden Evidenz

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Leibniz-Institut
für Präventionsforschung und
Epidemiologie – BIPS



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Über das GKV-Bündnis für GESUNDHEIT:

Das GKV-Bündnis für GESUNDHEIT ist eine gemeinsame Initiative der gesetzlichen Krankenkassen zur Weiterentwicklung und Umsetzung von Gesundheitsförderung und Prävention in Lebenswelten. Das Bündnis fördert dabei u. a. Strukturaufbau und Vernetzungsprozesse, die Entwicklung und Erprobung gesundheitsfördernder Konzepte, insbesondere für sozial und gesundheitlich benachteiligte Zielgruppen, sowie Maßnahmen zur Qualitätssicherung und wissenschaftlichen Evaluation. Der GKV-Spitzenverband hat gemäß § 20a Abs. 3 und 4 SGB V die Bundeszentrale für gesundheitliche Aufklärung damit beauftragt, die Aufgaben des GKV-Bündnisses für GESUNDHEIT mit Mitteln der Krankenkassen umzusetzen.

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Zusammenfassung

Im Auftrag der Bundeszentrale für gesundheitliche Aufklärung (BZgA) hat das Leibniz-Institut für Präventionsforschung und Epidemiologie – BIPS im Zeitraum vom 01.03.2017-31.07.2017 die wissenschaftliche Evidenz zu migrationssensiblen Maßnahmen in der Prävention und Gesundheitsförderung aufbereitet. Als migrationssensibel oder allgemeiner als soziokulturell sensibel werden Präventionsmaßnahmen definiert, die bewusst und systematisch die sozioökonomische und kulturelle Vielfalt von Lebensweisen und Wertesystemen in der Bevölkerung berücksichtigen.

Die Aufbereitung der Evidenz erfolgte in einem mehrstufigen Verfahren. Im ersten Schritt wurden neun telefonische Interviews mit Expertinnen und Experten im Bereich der migrationssensiblen Gesundheitsförderung durchgeführt. Ziel der Befragung war es, den Begriff „migrationssensible Prävention“ zu explorieren (Bedeutung, Kennzeichen guter Ansätze, praktische Beispiele). Im zweiten Schritt wurden zwei wissenschaftliche Datenbanken (PubMed, PsycInfo) systematisch nach soziokulturell adaptierten Interventionen der Prävention und Gesundheitsförderung durchsucht. Ein geschlossen wurden systematische Übersichtsarbeiten, welche Primärstudien aus verschiedenen Handlungsfeldern enthielten (Settings: Kita, Schule, Kommune/Quartier; Publikationszeitraum 2000–2017; Sprachen: Deutsch, Englisch). Titel und Abstracts wurden gescreent und bei Einschluss der Volltexte wurde eine Qualitätsbewertung der Reviews vorgenommen. Die Ergebnisse der eingeschlossenen Reviews wurden extrahiert und narrativ zusammengefasst. Zusätzlich zur Suche in den wissenschaftlichen Datenbanken wurde in einem dritten Schritt eine Handsuche in deutschsprachigen Projektdatenbanken (Gesundheitliche Chancengleichheit, KNP Kooperation für nachhaltige Präventionsforschung, Grüne Liste Prävention) durchgeführt. Dadurch sollten Beispiele für Anwendungen soziokulturell sensibler Ansätze im deutschen Kontext identifiziert werden.

Basierend auf den Experteneinschätzungen und der systematischen Literatursuche konnten die zentralen Prinzipien der soziokulturellen Anpassung identifiziert werden. Diese lassen sich in fünf Gruppen klassifizieren: (1) äußerliche Anpassung (Bild- und Farbwahl der Interventionsmaterialien, Logos, Symbole, Schrifttype), (2) evidenzbezogene Anpassung (zielgruppenspezifische Risikokommunikation; Bedarfsanalyse), (3) sprachliche Anpassung (Übersetzung der Materialien, Einsatz von Dolmetscherinnen und Dolmetschern, Anpassung des Sprachniveaus), (4) einbeziehende Anpassung (Partizipation der Zielgruppe und lokaler Akteure in der Programmwicklung und Umsetzung, Einsatz von Gesundheitsmediatoren) (5) soziokulturelle Anpassung der Tiefenstruktur (z. B. handlungsfeldübergreifende Maßnahmen, Berücksichtigung sozioökonomischer Verhältnisse, Einbezug des familiären und sozialen Umfeldes, Bezugnahme auf kulturell geprägte Überzeugungen und Verhaltensweisen, Berücksichtigung der Heterogenität der Zielgruppe).

Als abgesichert kann die Verbesserung der Erreichbarkeit der Zielgruppe und Akzeptanz durch soziokulturell adaptierte Programme gelten. Noch nicht geklärt ist, ob die soziokulturell adaptierten Programme tatsächlich besser wirken als nicht adaptierte Programme. Die Wirksamkeit einzelner Adoptionskomponenten ist ebenfalls ungeklärt. Jedoch geben die Übersichtsarbeiten Hinweise, dass die Kombination mehrerer Strategien zu einer verbesserten Wirksamkeit führt.

Die Handsuche nach soziokulturell sensiblen Maßnahmen im deutschen Sprachraum ergab 20 Praxisbeispiele. Darunter befinden sich einige Projekte, die viele der genannten Merkmale bereits erfolgreich implementieren konnten. Auch Manuale und Leitfäden für die weitere Verbreitung dieser Programme liegen zum Teil bereits vor. Auffällig ist jedoch das Fehlen von Outcome-Evaluationen.

Zukünftigen Projekten im Bereich der soziokulturell sensiblen Prävention und Gesundheitsförderung wird empfohlen, die identifizierten Leitprinzipien für die Planung ihrer Interventionen zu nutzen. Empfohlen wird auch die vermehrte Durchführung von Outcome-Evaluationen der Programme in Deutschland und mehr Forschung zur Wirksamkeit der einzelnen Anpassungsstrategien.

1 Hintergrund

Die Bevölkerung mit Migrationshintergrund ist eine in sich sehr heterogene Gruppe, deren gesundheitliche Lage sich in vielen Aspekten von derjenigen der autochthonen Bevölkerung unterscheidet. Dabei ist nicht durchweg von einer gesundheitlichen Benachteiligung auszugehen. So zeigt sich beispielweise eine geringere vorzeitige Mortalität unter Personen mit türkischem Migrationshintergrund ebenso wie unter Spätaussiedlern [1]. Dennoch ist zu konstatieren, dass ein Teil der Bevölkerung mit Migrationshintergrund größeren Gesundheitsbelastungen durch schlechte Arbeits- und Wohnbedingungen ausgesetzt ist sowie einen im Mittel geringeren sozioökonomischen Status hat [2]. Auch in Bezug auf die Inanspruchnahme von individuellen Präventionsangeboten ist eine deutlich geringere Teilnahme in der Bevölkerung mit Migrationshintergrund belegt [3].

Eines der zentrales Anliegen des 2015 verabschiedeten Präventionsgesetzes ist die Stärkung von Maßnahmen der Prävention und Gesundheitsförderung in Lebenswelten (Settings) nach §20a SGB V. Die Maßnahmen erscheinen Erfolg versprechender als individuelle Präventionsangebote, um den Zugang für die Bevölkerung mit Migrationshintergrund zu verbessern und damit einen Beitrag zur gesundheitlichen Chancengleichheit zu leisten. Die Bundeszentrale für gesundheitliche Aufklärung (BZgA) unterstützt die Krankenkassen bei den im Präventionsgesetz vorgesehenen Aufgaben zur Gesundheitsförderung und Prävention in Lebenswelten bei der Entwicklung der Art und Qualität krankenkassenübergreifender Leistungen, deren Implementierung und deren wissenschaftlicher Evaluation. In diesem Zusammenhang wurde das Leibniz-Institut für Präventionsforschung und Epidemiologie – BIPS von der BZgA damit beauftragt, eine aktuelle Zusammenstellung der Evidenzbasis für migrationssensible/soziokulturell sensible Ansätze in der Prävention und Gesundheitsförderung zu erarbeiten. Als migrationssensibel oder allgemeiner als soziokulturell sensibel werden Präventionsmaßnahmen definiert, die bewusst und systematisch die sozioökonomische und kulturelle Vielfalt von Lebensweisen und Wertesystemen in der Bevölkerung berücksichtigen [3]. Die Recherche fokussierte dabei auf settingbasierte Ansätze der Prävention und Gesundheitsförderung, welche in der Regel verhaltens- und verhältnisorientierte Maßnahmen kombinieren. Als Handlungsfelder wurden Bewegung, Ernährung, psychosoziale Ressourcen/Stress und Suchtmittelkonsum (Tabak und Alkohol) abgedeckt, wobei psychosoziale Ressourcen auch Elemente der Gesundheitsförderung wie soziale Unterstützung, Resilienz und Lebenskompetenzen beinhalteten. Die Settings wurden auf Kommune/Quartier, Kitas und Schule eingegrenzt. Das Setting Betrieb wurde aus der Suche ausgeschlossen, da sich die Beauftragung auf nicht betriebliche Lebenswelten bezog. In der migrationssensiblen Prävention und Gesundheitsförderung lässt sich zwischen gezielten Ansätzen (Angebote nur für Personen mit einem Migrationshintergrund) und diversitätsorientierten Angeboten (interkulturelle Öffnung bestehender Angebote) unterscheiden – beide Ansätze wurden in die Recherche einbezogen.

2 Methodik

Die Aufbereitung der Evidenz zu Maßnahmen der migrationssensiblen Prävention und Gesundheitsförderung erfolgte in einem mehrstufigen Verfahren. Im ersten Schritt wurden telefonische Interviews mit Expertinnen und Experten im Bereich der migrationssensiblen Gesundheitsförderung durchgeführt. Im zweiten Schritt wurde eine systematische Suche nach soziokulturell adaptierten Interventionen der Prävention und Gesundheitsförderung in wissenschaftlichen Datenbanken durchgeführt. Zusätzlich zur systematischen Literaturrecherche wurde in einem dritten Schritt eine Handsuche in deutschsprachigen Projektdatenbanken durchgeführt. Dadurch sollten Beispiele für Anwendungen soziokulturell sensibler Ansätze im deutschen Kontext identifiziert werden.

2.1 Expertenbefragung

Das Hauptziel der Expertenbefragung war die Exploration des Begriffs „migrationssensible Prävention“, um die Suchstrategien bei der Literaturrecherche zu optimieren. Weiterhin diente die Expertenbefragung dazu, (1) einen Überblick über Maßnahmen und Interventionsstrategien zu bekommen, die in Deutschland eingesetzt werden, sowie (2) Kriterien zu identifizieren, die für eine erfolgreiche Umsetzung migrationssensibler Prävention und Gesundheitsförderung von Bedeutung sind. Zu diesem Zwecke wurde ein Interviewleitfaden mit drei Hauptfragen entwickelt, der mit der BZgA abgestimmt wurde.

Die Fragen lauteten:

1. Was verstehen Sie unter migrationssensibler Prävention und Gesundheitsförderung?
2. Welche Ansätze der migrationssensiblen Prävention und Gesundheitsförderung kennen Sie?
3. Was zeichnet Ihrer Meinung nach gute Ansätze der migrationssensiblen Prävention und Gesundheitsförderung aus?

Um die Handlungsfelder, die in die Literaturrecherche einbezogen wurden, möglichst gut abzudecken, wurden Expertinnen und Experten mit Erfahrung in der migrantenbezogenen Projektarbeit aus den Bereichen Bewegung, Ernährung und psychische Gesundheit und auch aus dem allgemeinen Bereich Migration und Gesundheit gesucht. Wichtig war, dass die Expertinnen und Experten nicht nur aus der Wissenschaft, sondern auch aus der Praxis kamen. Es sollten auch Personen mit Migrationshintergrund an den Interviews teilnehmen.

Tabelle 1: Expertise der Befragten

PERSON	BEREICH DER EXPERTISE
P1	Wissenschaftlerin, Migration und Gesundheit
P2	Wissenschaftler, psychische Gesundheit
P3	Wissenschaftlerin, Bewegung
P4	Wissenschaftlerin, Ältere/Setting-basierte Interventionen
P5	Wissenschaftlerin, Bewegung
P6	Ernährungsfachfrau
P7	Mitarbeiter eines Gesundheitszentrum, Gesundheit von Migrantinnen und Migranten/Setting-basierte Interventionen

P8*	Pastor, gemeindebasierte Arbeit
P9*	Projektleiter Gesundheitsprojekte für Migrantinnen und Migranten

* Personen mit Migrationshintergrund

Insgesamt wurden neun Expertinnen und Experten über bestehende Kooperationsbeziehungen und Internetrecherchen identifiziert. Nach Abstimmung der Liste der Expertinnen und Experten mit der BZgA wurden sie per E-Mail oder Telefon kontaktiert und gebeten, an der telefonische Befragung teilzunehmen. Alle gaben ihre Zustimmung. Damit sie sich auf das Interview vorbereiten konnten, bekamen die Expertinnen und Experten die Fragen vorab per E-Mail zugesandt. Die geänderten Namen der Personen und der Bereich ihrer Expertise sind in Tabelle 1 abgebildet.

Mit Einverständnis der Expertinnen und Experten wurden die Interviews aufgezeichnet. Danach wurden sie zusammengefasst und inhaltsanalytisch ausgewertet. Dabei wurden folgende Oberbegriffe anhand der Leitfragen abgeleitet:

- Begriffsverständnis migrationssensibler Prävention und Gesundheitsförderung
- Relevante Projekte bzw. Interventionsstrategien im Bereich migrationssensibler Prävention und Gesundheitsförderung
- Charakteristika guter Ansätze in der migrationssensiblen Prävention und Gesundheitsförderung

2.2 Systematische Literatursuche in wissenschaftlichen Datenbanken

Die Recherche wurde als Rapid Review durchgeführt. Rapid Reviews lassen sich als eine Form von Evidenzsynthese beschreiben, in welcher die zentralen Schritte eines systematischen Reviews in vereinfachter Form durchgeführt und dadurch in kürzerer Zeit praxisrelevante Informationen gewonnen werden [4, 5]. Für das Rapid Review wurde nach passender Literatur gesucht, die zwischen Januar 2000 und März 2017 in den Datenbanken PubMed und PsychInfo publiziert wurde. Dabei lag der Fokus auf systematischen Literaturübersichten zu Interventionen, die von den Autorinnen und Autoren als migrationssensibel oder soziokulturell sensibel charakterisiert wurden. Die Methode des Rapid Reviews lässt sich auf Studien mit unterschiedlichen Designs anwenden. Um jedoch auf schnellem Wege zu einer Übersicht der aktuellen Evidenz zu gelangen, empfiehlt es sich, auf der höchsten Evidenzstufe (systematische Reviews und Metaanalysen) mit der Suche zu beginnen. Erst wenn auf dieser Ebene keine Evidenz zu finden ist, wird die Suche auf Einzelstudien ausgeweitet. Da zu jedem der eingeschlossenen Handlungsfelder mehrere relevante systematische Übersichtsarbeiten vorlagen, wurde die Suche nicht auf Einzelstudien ausgeweitet.

Die Ein- und Ausschlusskriterien wurden anhand des PICOS-Schemas (Populations, Interventions, Comparators, Outcomes, Study design) entwickelt, wobei die Vergleichsgruppen (Comparators) und die Outcomes nicht eingeschränkt wurden (Tabelle 2). Zusätzlich zu den dargestellten Kriterien wurden Reviews ausgeschlossen, für die kein Abstract oder Volltext verfügbar war. Da es sich um eine Suche auf Reviewebene handelte, kam es vor, dass Reviews nur teilweise die Einschlusskriterien erfüllten. Dies war der Fall, wenn eine Anzahl der darin enthaltenen Einzelstudien die Kriterien erfüllten, andere jedoch nicht. Diese Reviews wurden in die Analyse einbezogenen, wenn die einzubziehenden Einzelstudien in den Ergebnissen identifizierbar und nicht bereits in anderen Reviews enthalten waren. Extrahiert wurden in diesen Fällen nur die Ergebnisse der Einzelstudien, die die Kriterien erfüllten.

Suchstrategie

Anhand der Ein- und Ausschlusskriterien wurden die Suchbegriffe und eine vorläufige Suchstrategie für die beiden Datenbanken von einer erfahrenen Bibliothekarin entwickelt. Nach Absprache mit der BZgA wurde die Suchstrategie finalisiert. Im Anhang befindet sich eine genaue Dokumentation der Suchbegriffe und deren Verknüpfung (Anhang A1 und A2). Die Suche wurde getrennt für jedes Handlungsfeld durchgeführt.

Tabelle 2: Ein- und Ausschlusskriterien der systematischen Suche von Reviews

EINSCHLUSS	AUSSCHLUSS
Population	
Ethnisch diverse Gruppen; Menschen mit Migrationshintergrund; Asylsuchende; Geflüchtete, Menschen ohne Aufenthaltsgenehmigung	Allgemeinbevölkerung ohne spezifische Angabe zu Menschen mit Migrationshintergrund
Alle Altersgruppen, alle Geschlechter	
Intervention	
Primärprävention, Gesundheitsförderung	Sekundärprävention (Screeningprogramme), Tertiärprävention in erkrankten Populationen
Nicht medizinische Interventionen	Medizinische Interventionen
Diversitätsorientierte Interventionen oder gezielte Intervention für Migrantinnen/Migranten	Kein Hinweis auf kulturelle Adaptierung
Kombination aus Verhaltens- und Verhältnisprävention	Einzelaktivitäten
Maßnahmen zur migrationssensiblen Gestaltung	Migrationssensible Maßnahmen nicht berichtet
Handlungsfelder	
Bewegung: Prävention körperliche Inaktivität/sitzendes Verhalten; Prävention von muskuloskeletalen o. a. Erkrankungen durch ein spezifisches Sportprogramm	Sturzprävention („fall prevention“) oder Verletzungsprävention („injury prevention“)
Ernährung: Vermeidung und Reduzierung von Übergewicht und Adipositas; Vermeidung von Fehl- und Mangelernährung	Ernährungsprogramme für Erkrankte (z. B. Diabetiker, Personen mit einer Lebensmittelunverträglichkeit)
Psychosoziale Gesundheit: Stressreduktion, Stressbewältigung, Förderung von Entspannung, Stärkung psychosozialer Ressourcen (Selbstwirksamkeit, Resilienz, Lebenskompetenzen, soziale Unterstützung)	
Sucht: Alkohol/Reduzierung von Alkoholkonsum (bei Nichterkrankten), Förderung des Nichtrauchens	Entzugsprogramme (Alkohol), andere Abhängigkeiten (z. B. Spielsucht) oder Konsum illegaler Drogen
Comparators (Vergleichsgruppen)	
Nicht spezifiziert	Nicht spezifiziert
Outcomes	
Nicht spezifiziert	Nicht spezifiziert
Studiendesign	
Systematische Reviews; Metaanalysen; Rapid Reviews	Andere (nicht systematische Übersichtsarbeiten, einzelne Studien, etc.)

Settings	
Kita, Schule, Kommune	Betrieb, Krankenhaus, Arztpraxis (wenn nicht Teil einer kommunalen Strategie)
Sprache	
Deutsch, Englisch	Andere Sprachen

Sichtung der Recherchetreffer

In der ersten Runde wurden alle Titel der Treffer gesichtet. Für jedes der vier Handlungsfelder wurde diese erste Sichtung durch eine Wissenschaftlerin durchgeführt. Danach wurden die Abstracts aller eingeschlossenen Treffer gesichtet. Diese zweite Sichtung wurde durch zwei Wissenschaftlerinnen unabhängig voneinander durchgeführt, die ihre Entscheidungen dann verglichen. Bei Unstimmigkeiten wurde eine dritte Person hinzugezogen. Nach diesem Schritt wurden die Volltexte aller eingeschlossenen Treffer gesichtet. Die Auswahl der Treffer für jedes Handlungsfeld wurde anhand eines PRISMA-Flussdiagrams dokumentiert, wobei das Screening nach Titel und Abstract als ein Auswahlsschritt berichtet wird (siehe Ergebnisteil). PRISMA steht für Preferred Reporting Items for Systematic Reviews and Meta-Analyses und umfasst verschiedene Checklisten und Instrumente für ein transparentes und vergleichbares Berichten von Übersichtsarbeiten [6]. Bei Bedarf kann eine Referenzliste der ausgeschlossenen Treffer vorgelegt werden.

Qualitätsbewertung und Datenextraktion

Die Qualität aller eingeschlossenen Treffer wurde anhand der AMSTAR-Checkliste bewertet [7]. Die AMSTAR-Checkliste ist ein Instrument zur kritischen Bewertung von systematischen Literaturübersichten. Sie umfasst 11 Items mit den Antwortkategorien „ja“, „nein“, „nicht beantwortbar“ und „nicht anwendbar“. Für die Gesamteinschätzung der Qualität einer Studie wurde aus der Anzahl der mit Ja beantworteten Items ein Summenscore gebildet. Im Ergebnisabschnitt wird grob zwischen Reviews mit einer geringen (Score ≤ 4), einer moderaten (Score = 5–7) und einer hohen methodischen Qualität (Score ≥ 8) unterschieden. Eine Beschreibung zu den einzelnen Items befindet sich im Anhang A3. Die Qualitätsbewertung erfolgte durch eine Person. In ca. 20 % der Fälle wurde eine doppelte Bewertung durch eine zweite Person durchgeführt. Für die Extraktion der Studieninformationen und -ergebnisse wurden Exceltabellen erstellt. Die extrahierten Daten zu allen eingeschlossenen Reviews sind im Anhang A6–A9 aufgeführt.

Synthese

Aus den Extraktionsstabellen wurde die narrative Synthese der eingeschlossenen Studien entwickelt. Die Synthese wurde für jedes Handlungsfeld einzeln erstellt. Dabei ging es erstens darum, die Maßnahmen zur migrationssensiblen Gestaltung zu identifizieren. Zweitens wurden die beschriebenen Effekte der migrationssensiblen Maßnahmen zusammengefasst. Bei der Bewertung der Effekte wurde die Qualität der Reviews und der darunterliegenden Einzelstudien mit einbezogen. Es wurde jedoch kein Schema zur Bewertung der Evidenz angelegt, da die eingeschlossenen Übersichtsarbeiten in ihrer Bandbreite und in ihrem Fokus sehr unterschiedlich waren.

2.3 Suche in deutschsprachigen Projektdatenbanken

Um Beispiele für migrationssensible Interventionen aus Deutschland zu identifizieren, wurde eine Handsuche der folgenden Projektdatenbanken durchgeführt: Gesundheitliche Chancengleichheit, Grüne Liste Prävention und Kooperation für nachhaltige Präventionsforschung (KNP). Die Suche und Sichtung der Treffer in den Handlungsfeldern Bewegung, Ernährung, psychosoziale Gesundheit und Sucht erfolgte in der Zeit vom 09.03. bis zum 22.03.2017.

Da die Datenbanken über unterschiedliche Suchfunktionen verfügen, musste die Suchstrategie an jede Datenbank angepasst werden. Eine Dokumentation der Suchbegriffe und der Treffer befindet sich im Anhang (Anhang A5). In der ersten Runde wurden Projekte eingeschlossen, bei denen im Titel oder in der Beschreibung explizit Personen mit Migrationshintergrund erwähnt wurden.

Danach wurden folgende Projekte ausgeschlossen:

- Keine Primärprävention
- Keine genaue Beschreibung der Maßnahmen vorhanden
- Keine Angaben darüber, ob Personen mit Migrationshintergrund tatsächlich erreicht wurden bzw. teilgenommen haben
- Nur Beratungsangebote/Sprechstunde und kein breiteres Interventionsprogramm
- Einmalige Maßnahmen von kurzer Dauer, z. B. Sportangebote für Flüchtlinge im Freiwilligenzentrum o. Ä.

Zusätzlich wurden Projekte, die in der Expertenbefragung genannt wurden, einbezogen und gemeinsam mit den Treffern aus der Datenbankrecherche in einer Tabelle im Anhang A5 zusammengestellt. Ausgewählte Projekte werden zudem in den einzelnen Ergebnisabschnitten der Handlungsfelder vorgestellt, um Umsetzungsbeispiele aus dem deutschen Kontext zu zeigen.

3 Ergebnisse

3.1 Ergebnisse der Expertenbefragung

Definition von migrationssensibler/soziokulturell sensibler Prävention und Gesundheitsförderung

Es wurde zwischen den Begriffen der Kultursensibilität, der Migrationssensibilität sowie der soziokulturellen Sensibilität unterschieden. Der Begriff der Kultursensibilität wurde von den Befragten kritisch gesehen, weil er ein starres und einheitliches Verständnis von der Kultur einer Bevölkerungsgruppe nahelegt. Migrationssensibilität beinhaltet dagegen eine Biografie-Orientierung und die Berücksichtigung verschiedener Migrationsfaktoren wie beispielsweise Sprachkompetenzen, Herkunftsregion, Migrationsmotive und -umstände oder Aufenthaltsdauer und -status. Soziokulturelle Sensibilität wurde als ein noch weitergehender Begriff verstanden, da dieser auch die Unterschiede zwischen sozialen Schichten, das Geschlechterverhältnis und die sozialen Netzwerke mit einschließt.

Migrationssensible oder soziokulturell sensible Prävention und Gesundheitsförderung erfordert aus Sicht der Expertinnen und Experten, dass projektseitig

- (1) ein Bewusstsein für die sozialen und kulturellen Bedarfe und Bedürfnisse von Menschen mit Migrationshintergrund vorhanden ist,

- (2) Kenntnisse über spezifische Gesundheitsbelastungen und -ressourcen in dieser heterogenen Zielgruppe vorliegen
- (3) und dass spezielle Zugänge zu Menschen mit Migrationshintergrund geschaffen werden.

Die Berücksichtigung der Heterogenität innerhalb der Bevölkerung mit Migrationshintergrund ist eines der zentralen Themen in den Interviews. Den Expertinnen und Experten war es wichtig, darauf hinzuweisen, dass eine genaue Definition und Differenzierung der Zielgruppe sowohl nach Migrationsaspekten als auch sozialen Aspekten für die Planung notwendig sei. Je nach genauer Zielgruppdefinition kann ein gezieltes Angebot, beispielsweise für kürzlich angekommene Flüchtlinge, sinnvoll sein. In anderen Fällen ist eine interkulturelle Öffnung von etablierten Angeboten zu bevorzugen. Soziale Aspekte wie die Einbindung in soziale Netzwerke sind ebenfalls zu berücksichtigen. Während der Zugang zu sozial eingebundenen Personen zu Gruppenveranstaltungen, wie beispielsweise Kochkurse, gelingen kann, so ist der Zugang zu weitgehend isolierten Personen eher indirekt über Vertrauenspersonen zu erzielen.

In praktischer Hinsicht wird die soziokulturelle Sensibilität häufig durch mehrsprachige Informationsmaterialien, den Einsatz von Dolmetschern, den Einsatz von Gesundheitsmediatoren, den Einbezug von Übungsleiterinnen und Übungsleitern mit ähnlichem Migrationshintergrund und der Partizipation der Zielgruppe in der Entwicklung der Maßnahmen erreicht. Im Folgenden werden diese Ansätze näher beleuchtet.

Ansätze in der migrationssensiblen Prävention und Gesundheitsförderung

Das BIG-Projekt ist ein gutes Beispiel für die Partizipation sowohl der Zielgruppe als auch der lokalen Akteure an der Planung der Maßnahmen (www.big-projekt.de; siehe auch Tabelle A5) [8]. In diesem Projekt wurden Bewegungsangebote für Frauen in schwierigen Lebenslagen (mit und ohne Migrationshintergrund) entwickelt. Es wurde anhand dieser und anderer Studien das Modell des kooperativen Planungsprozesses als systematischer Ansatz für den Einbezug der lokalen Akteure entwickelt [9]. Die Partizipation der Zielgruppe ist dabei nicht auf den Einbezug von Expertinnen und Experten oder Vertreterinnen und Vertretern von Migrantenorganisationen zu begrenzen. Stattdessen sollten direkt Personen einbezogen werden, für die die Maßnahmen entwickelt werden. Hingewiesen wurde von den Befragten auch auf die häufig wenig differenzierte Datenlage in der Gesundheitsberichterstattung, welche eine adäquate Bedarfsanalyse der Gesundheitsbelastungen und -ressourcen erschwert.

Einer der zentralen Ansätze ist die lokale Kapazitätsentwicklung (Capacity Building) durch die Schulung von Fachkräften hinsichtlich ihrer interkulturellen Kompetenzen. Zu diesen Capacity-Building-Maßnahmen ist auch die Ausbildung von Gesundheitsmediatoren zu zählen. Dies sind in der Regel Personen, die einen ähnlichen soziokulturellen Hintergrund wie die Zielgruppe haben. Nach der Schulung bieten diese Gesundheitsmediatoren Informationsveranstaltungen oder Beratungen zu Gesundheitsthemen an. Beispiele hierfür sind das Stadtteilmütter(und Stadtteilväter)-Projekt [10] und das Mit-Migranten-für-Migranten(MiMi)-Projekt.

Das Projekt „Integration durch Sport“ (<https://integration.dosb.de/>) wurde als Beispiel genannt für die Notwendigkeit der Schaffung eines beidseitigen Zugangs zwischen etablierten Angeboten und der Bevölkerung mit Migrationshintergrund. Das bedeutet, dass auf der einen Seite das Wissen über vorhandene Angebote und Vertrauen in der Bevölkerung mit Migrationshintergrund ausgebaut werden muss. Dazu wurden im Rahmen dieses Projekts mehrsprachige Flyer verteilt. Aus

Sicht der Befragten reicht Wissen über die verfügbaren Angebote nicht aus. Für die Etablierung des Zugangs muss eine Vertrauensbasis über Mittlerinnen und Mittler zwischen den Sportvereinen und der Zielgruppe hergestellt werden. Auf der anderen Seite müssen sich auch die Sportvereine aktiv über die Bedürfnisse und Bedarfe der Bevölkerung mit Migrationshintergrund informieren und Angebote mit einem geringen Verpflichtungsgrad vorhalten.

Handlungsfeldübergreifende Ansätze wurden von mehreren Befragten als erfolgsversprechendes Vorgehen angesehen, um Zugänge zu spezielleren Gesundheitsthemen zu schaffen. Offene Angebote, wie gemeinsame Frühstücksrunden, wurden als ein Mittel verwendet, um Vertrauen aufzubauen und mehr über die Bedürfnisse der Zielgruppe zu erfahren. Gesundheitsthemen stehen oft nicht an erster Stelle, weshalb ein Bewusstsein für diese Themen zum Teil erst geweckt werden muss. In der Initiative „Frauengesundheit in Tenever“ wurde ausgehend von Frauenfrühstückstreffs und Integrationskursen beispielsweise ein Schwimmangebot für muslimische Frauen entwickelt (www.frauengesundheitintenever.de).

Sowohl migrationsspezifische als auch diversitätsorientierte Angebote (interkulturelle Öffnung bestehender Angebote) sollten aus Sicht der Befragten gefördert werden. Die Wahl des Vorgehens hängt vom Gesundheitsthema und von den Bedarfen in den verschiedenen Bevölkerungsgruppen ab. Hierbei wurde von den Befragten auch auf regionale Unterschiede der Zusammensetzung der Migrationsbevölkerung innerhalb Deutschlands verwiesen, was die Übertragbarkeit oder das Ausrollen von Programmen über das Bundesgebiet einschränkt. Als Herausforderungen wurden in diesem Zusammenhang die Realisierung von niedrigen Schwellen der Erreichbarkeit aller Zielgruppen und der Integration in diversifizierten/interkulturell geöffneten Kursangeboten beschrieben. Ein geringer (finanzieller) Verpflichtungsgrad für Gesundheitskurse wurde von mehreren Befragten als wichtige Voraussetzung genannt. Die Durchführung der Maßnahmen in Wohnortsnähe oder in vertrauten Räumen (z. B. in religiösen Einrichtungen) wurde als weitere Maßnahme zur besseren Erreichbarkeit benannt. Als Problem wurde beschrieben, dass auch in interkulturell geöffneten Angeboten eher die Personen mit einem starken Gesundheitsbewusstsein erreicht werden und sich innerhalb der Kurse einzelne Gruppen separieren. Um diesem Problem zu begegnen, wurde eine Art Quotierung der Kursteilnehmerplätze empfohlen, d. h. das Freihalten von Plätzen für ansonsten unterrepräsentierte Personengruppen.

Die Nachhaltigkeit der Angebote wurde von verschiedenen Befragten thematisiert. Die Kurzfristigkeit und der Projektcharakter der Angebote wurden zum Teil kritisiert, zumal der Aufbau von Vertrauen und Kooperation im Setting in der Regel nur langfristig gelingen kann. Eine Zusammenarbeit mit Krankenkassen und/oder anderen lokalen Partnern zur Absicherung der Finanzierung wurde empfohlen. Ebenfalls wurde eine Evaluation der Maßnahmen als wichtig erachtet. Wobei darauf hingewiesen wurde, dass Wirksamkeitsevaluationen der Maßnahmen bisher weitgehend fehlen.

Merkmale guter Ansätze in der migrationssensiblen Prävention und Gesundheitsförderung

Zusammenfassend lassen sich aus Sicht der Befragten folgende Merkmale guter Ansätze nennen:

- Beschreibung und Berücksichtigung der Heterogenität der Zielgruppe hinsichtlich migrationspezifischer und sozialer Faktoren
- Durchführung einer Bedarfsanalyse zu den spezifischen Gesundheitsrisiken und -ressourcen
- Kooperativer Planungsprozess unter Beteiligung möglichst aller relevanten lokalen Akteure
- Partizipation der Zielgruppe in der Entwicklung der Maßnahmen

- Minimierung sprachlicher Barrieren durch Visualisierungen, einfache Sprache, mehrsprachige Materialien oder Dolmetscherinnen und Dolmetscher
- Ausbildung und Einsatz von Mediatorinnen und Mediatoren oder Übungsleiterinnen und Übungsleiter mit ähnlichem soziokulturellem Hintergrund
- Handlungsfeldübergreifende Maßnahmen und offene Angebote zum Vertrauensaufbau
- Durchführung der Maßnahmen in der Nähe des Wohnorts oder in vertrauten Räumen
- Kostengünstige Angebote
- Nachhaltigkeit: Zusammenarbeit mit Krankenkassen und/oder anderen lokalen Partnern zur Absicherung der Finanzierung; Evaluation der Maßnahmen

3.2 Überblick zur systematischen Literaturrecherche

Über alle vier Handlungsfelder hinweg wurden insgesamt 3531 Treffer identifiziert. Nach Abschluss des Screenings wurden insgesamt 65 Literaturübersichten eingeschlossen. Einige Reviews behandeln mehrere Handlungsfelder. In diesen Fällen wurde so verfahren, dass die Ergebnisse jeweils für die einzelnen Handlungsfelder extrahiert wurden. Aus diesem Grund finden sich einzelne Reviews mehrfach in den Extraktionstabellen.

Neben den handlungsfeldspezifischen Reviews wurden auch einige Übersichtsarbeiten identifiziert, die sich mit den konzeptionellen Grundlagen von soziokulturell sensibler Prävention und Gesundheitsförderung auseinandersetzen. Diesen Arbeiten wird im Folgenden ein eigener Abschnitt gewidmet.

Konzeptionelle Übersichtsarbeiten

In der Literatur wird insbesondere auf zwei Konzepte soziokulturell sensibler Prävention und Gesundheitsförderung Bezug genommen. Resnicow et al. definieren Kultursensibilität als das Ausmaß, in welchem ethnische/kulturelle Merkmale, Erfahrungen, Normen, Werte, Verhaltensmuster und Überzeugungen einer Zielpopulation sowie historische, umweltbedingte und soziale Kräfte in Design, Implementation und Evaluation von Gesundheitsfördermaterialien und -programmen integriert wurden [11]. Dabei unterscheiden sie zwischen zwei Dimensionen von Kultursensibilität: surface structure (Oberflächenstruktur) und deep structure (Tiefenstruktur). Adaptierungen der Oberflächenstruktur beziehen sich auf die kulturelle Anpassung von Bildern oder Texten in bestehenden oder bereits validierten Programminhalten, um die Akzeptanz und Vertrautheit der vermittelten Konzepte unter der Zielgruppe zu erhöhen. Adaptierungen der Tiefenstruktur beziehen sich auf kulturelle Anpassungen der Inhalte einer Intervention an kulturell geprägte Vorstellungen (z.B. Modelle von Krankheit und Gesundheit) und Verhaltensweisen einer Zielgruppe sowie deren historisch gewachsene Position in einer Gesellschaft. Einer Anpassung der Tiefenstruktur wird dabei eine größere Wirksamkeit zugeschrieben als der Anpassung der Oberflächenstruktur.

In einem interessanten Beitrag zur Erreichung kultureller Angemessenheit von Maßnahmen der Gesundheitsförderung führen Kreuter et al. die Diskussion von Resnicow et al. weiter aus [12]. Sie unterscheiden zwischen fünf Strategien, um die kulturelle Angemessenheit von Gesundheitsfördermaßnahmen zu erhöhen:

- Peripheral: die kultursensible Anpassung visueller Bestandteile von Materialien oder Programmen, wie das Benutzen bestimmter Farben oder Bilder, um deren Aufnahmebereitschaft und Akzeptanz durch die Zielgruppe zu erhöhen (surface structure)

- Evidential: das Heranziehen von zielgruppenspezifischen epidemiologischen oder anderen Daten, um die Zielgruppe für die gesundheitliche Problematik zu sensibilisieren
- Linguistic: das Übersetzen von Materialien und Programmen in die Sprache der Zielgruppe, um diese zugänglicher zu machen
- Constituent-involving: die Einbeziehung von Angehörigen der kulturellen Zielgruppe, wie z. B. Mitarbeiterinnen und Mitarbeiter mit entsprechendem kulturellem Hintergrund, Ausbildung und Einsatz von Mittlerinnen und Mittler sowie Partizipation der Zielgruppe in die Entwicklung von Maßnahmen, um tiefgreifende Einblicke in kulturelle Merkmale zu erlangen
- Sociocultural: die Berücksichtigung von kulturellen Werten, Normen, Überzeugungen sowie Verhaltensmustern der Zielgruppe, um die Besonderheit von Maßnahmen für die Zielpopulation hervorzuheben (deep structure)

Zu dem weiteren nennenswerten Konzepten für die Entwicklung, Auswertung und/oder Evaluation kultursensibler Interventionen, die im Rahmen des Rapid Reviews identifiziert wurden, gehören Lofton et al., Davidson et al. sowie Netto et al. [13–16].

Der Beitrag von Lofton et al. [16] beschreibt ein Modell, welches zur Evaluation der Stärken und Schwächen von soziokulturell adaptierten Interventionsprogrammen genutzt wurde (Tabelle 3).

Tabelle 3: Beschreibung des PEN-3 Modells (vgl. [16])

PEN-3 DOMÄNE	KONSTRUKTE	BESCHREIBUNG
Kulturelle Identität	Person	Individuen als Zielgruppe einer Intervention
	Erweiterte Familie	Kernfamilien oder erweiterte Familien (Großeltern, Tanten, Onkel) als Zielgruppe einer Intervention
	Nachbarschaft	Nachbarschaften/Quartiere als Interventionssetting; Einbezug von lokalen Akteuren in die Interventionsplanung
Beziehungen und Erwartungen	Wahrnehmung	Bezugnahme auf Überzeugung und Werte der Adressatengruppe (Welchen Stellenwert hat ein bestimmtes Gesundheitsverhalten? Welche Aktivitäten zur Förderung des Gesundheitsverhaltens werden bevorzugt?)
	Wegbereiter	Soziokulturell bedingte Faktoren, die eine Verhaltensänderung fördern oder verhindern (beispielsweise Zugänglichkeit von Gemeindezentren, angemessene Sprache/Kommunikationsmedien der Präventionsbotschaften)
	Förderer	Verständnis, wie sich die sozialen Normen der Bezugsgruppe auf die Einstellungen und Verhaltensweisen der Zielgruppe auswirken
Kulturelles Empowerment	Positiv	Bezugnahme auf kulturell geprägte Überzeugungen oder Verhaltensweisen, die ein positives Gesundheitsverhalten unterstützen (Welche positiven Fähigkeiten, Wissensbestände oder Verhaltensweisen sind bereits vorhanden?)
	Existenziell	Bezugnahme auf Spiritualität, alternativmedizinische oder traditionelle Gesundheitsvorstellungen
	Negativ	Bezugnahme auf kulturell geprägte Gesundheitsvorstellungen oder -praktiken, die sich nachweislich negativ auswirken.

Die Domänen und Konstrukte des PEN-3 haben eine wenig intuitive Begriffswahl. Dahinter verbergen sich allerdings viele relevante Aspekte von soziokultureller Adaptierung. Im Vergleich zu den Konzepten von Resnikow et al. [11] und Kreuter et al. [12] wird hier die Tiefenstruktur von Interventionen differenzierter betrachtet, insbesondere in der Domäne des kulturellen Empowerments. Das PEN-3 Modell wurde in partizipativen Prozessen mit afrikanischen und afroamerikanischen Teilnehmenden entwickelt. Es scheint insgesamt gut geeignet, um die Interventionen zu planen oder zu evaluieren, wenn diese sich gezielt an eine relativ einheitliche ethnische Gruppe richten. Ansonsten könnte durch die Betonung der Bezugnahme auf kulturell geprägte Überzeugungen einer Stereotypisierung von Migrantengruppen Vorschub geleistet werden. Die Leitprinzipien von Netto et al. [13] ähneln denen der vorangegangenen Modelle. Jedoch wird hier auch die Berücksichtigung unterschiedlicher Grade von Identifizierung mit der eigenen Herkunftskultur bzw. des Akkulturationsstatus thematisiert. Dies passt zu dem von den Expertinnen und Experten benannten Merkmal der Berücksichtigung der Heterogenität innerhalb der Zielgruppe.

3.3 Ergebnisse Ernährung

Die Datenbankrecherche identifizierte 989 Treffer, von denen nach Ausschluss von Duplikaten, Sichtung der Titel und Abstracts sowie Sichtung der Volltexte 23 Publikationen alle Einschlusskriterien erfüllen (Abb. 1). Die Qualität der 23 eingeschlossenen Reviews wurde mit der AMSTAR-Checkliste bewertet. Sieben Reviews wiesen ein geringe, zwölf eine moderate und fünf eine hohe methodische Qualität auf (Anhang A4).

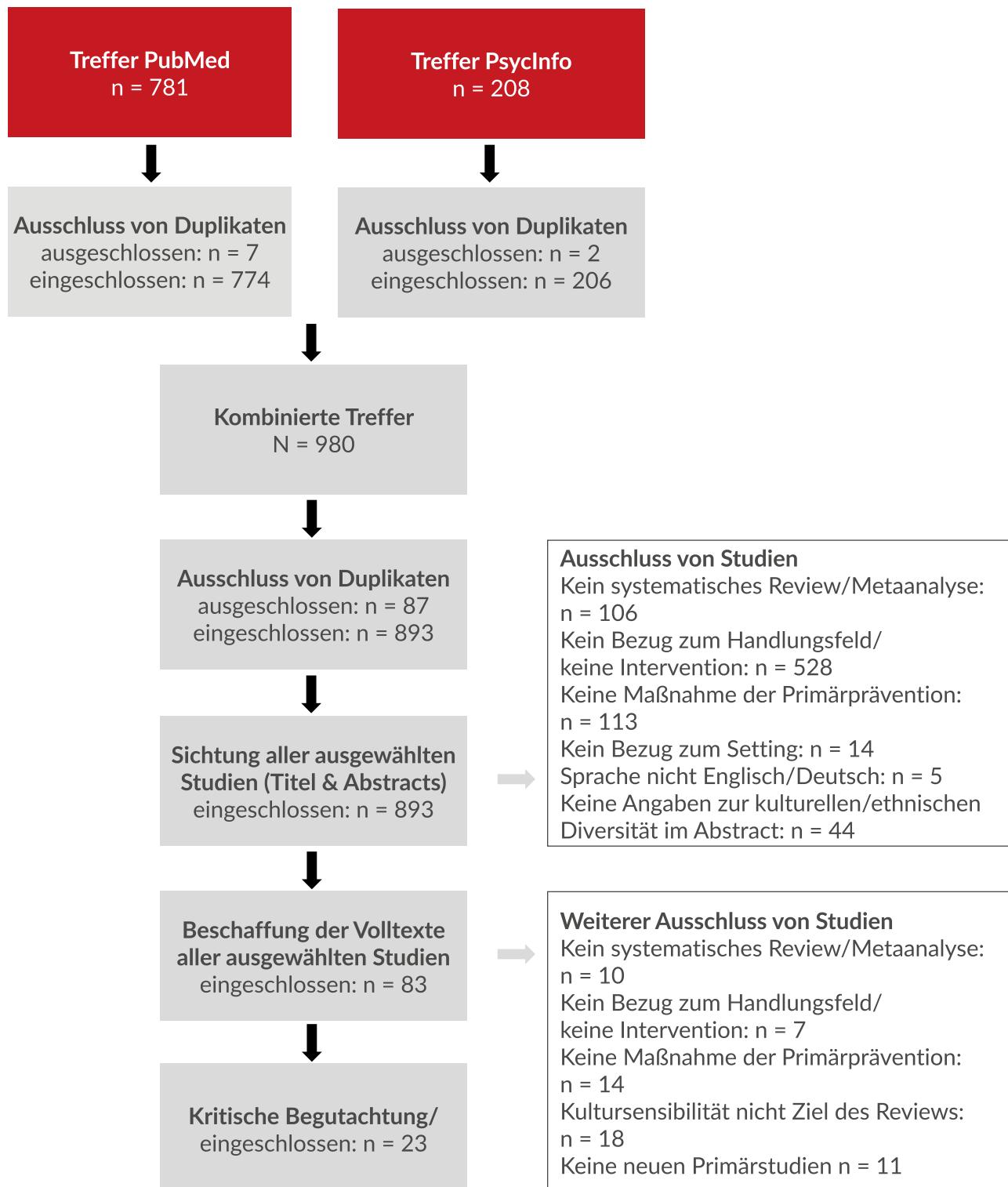
Reviews

Die 23 eingeschlossenen Übersichtsarbeiten wurden zwischen 2004 und 2017 publiziert, drei davon vor 2010. Alle 23 Übersichtsarbeiten sind narrative systematische Reviews, darunter ein Cochrane Review [17] und ein Health Technology Assessments (HTA) [18].

Mit Ausnahme von drei Übersichtsarbeiten [19–21] lag der Hauptfokus aller Arbeiten auf der kulturellen Anpassung von Interventionen. Dabei wurden zum größten Teil die von Kreuter et al. beschriebenen Strategien benutzt, um die kulturellen Anpassungen zu charakterisieren. In zwei Arbeiten wurden jedoch andere konzeptionelle Rahmen benutzt. Wie oben beschrieben, benutzten Lofton et al. das PEN-3 Modell, um kulturell angepasste Übergewichtspräventionsmaßnahmen für afroamerikanische Jugendliche zu evaluieren [16]. Des Weiteren haben Lagisetty et al. einen theoretischen Rahmen für die Charakterisierung und Evaluierung kulturell angepasster Diabetespräventionsmaßnahmen für ethnische Minderheiten entwickelt [22].

In den meisten der in die Reviews eingeschlossenen Publikationen ging es sowohl um ernährungs- als auch um bewegungsbezogene Interventionen. Nur wenige fokussierten ausschließlich auf Ernährung. Alle eingeschlossenen Übersichtsarbeiten berichteten von verschiedenen Formen der kulturellen Anpassung.

Abbildung 1: Flussdiagramm Handlungsfeld Ernährung



Studienpopulation

In zehn Übersichtsarbeiten richten sich die Interventionen der eingeschlossenen Publikationen hauptsächlich an Erwachsene, in acht an Kinder und Jugendliche und in fünf an Erwachsene und Kinder/Jugendliche bzw. Familien. In fast allen Übersichtsarbeiten richteten sich die Interventionen an indigene und bestimmte ethnische Minderheiten, wie Latinos, Chinesen oder Afroamerikaner. Fast alle 273 Einzelstudien, die für diese Recherche von Interesse waren, berichteten von Interventionen, die in Nordamerika durchgeführt wurden, vor allem in den USA. Nur eine Übersichtsarbeit fokussierte auf Interventionen für ethnische Minderheiten aus Afrika, China und Südostasien in Großbritannien [18]. Die meisten Interventionen für Erwachsene fokussierten auf Frauen, die Mehrheit von ihnen auf Afroamerikanerinnen.

Settings

Die Interventionen von Einzelstudien mit Kindern und/oder Jugendlichen wurden teils nur in Schulen und teils in Schulen und in der Gemeinde durchgeführt, öfter mit Einbeziehung des häuslichen Umfelds. Die mit Erwachsenen wurden überwiegend in der Gemeinde/Kommune, darunter auch im häuslichen Umfeld durchgeführt. In einer Arbeit fanden alle Interventionen in einer Kirche statt [23] und in zwei weiteren waren Kirchen unter den Interventionsorten [20, 24, 25]. Insbesondere bei den Medienkampagnen wurden auch Informationen wie Broschüren und Flyer per Post nach Hause geschickt.

Eingesetzte kultursensiblen Maßnahmen

Zu den wichtigsten kultursensiblen Interventionsmaßnahmen zählen:

- Die kulturelle Anpassung der Interventionseinheiten und Materialien
- Personen- und familienzentrierte bzw. auf das soziale Umfeld zentrierte/einbeziehende Maßnahmen
- Partizipative Interventionen (Einbezug von Teilnehmenden und bilingualen und bikulturellen Mediatorinnen und Mediatoren in die Planung, Erstellung von Interventionsmaterialien, und Durchführung von Interventionen)
- Einbezug von bilingualen und bikulturellen Mediatorinnen und Mediatoren bei der Rekrutierung und Informationsdissemination
- Berücksichtigung von historischen Geschehnissen/Einflüssen auf das Leben der Zielgruppe (insbesondere bei Afroamerikanern) und Spiritualität

Effekte kultureller Anpassung

Lagisetty et al. evaluierten Diabetespräventionsprogramme ($n = 34$) anhand des von ihnen entwickelten Framework "FiLLM: Facilitating interventions through Language, Location and Message" [22]. Insgesamt konnten 25 der 34 Studien signifikante Verbesserungen in den Blutzuckerwerten (HbA1C, Nüchternglukose) und/oder im Gewichtsstatus nachweisen. Einbezogen wurden dabei sowohl randomisierte als auch quasi-experimentelle Studiendesign. Der Stichprobenumfang der Einzelstudien variierte erheblich (zwischen $n=10$ bis $n=1638$). Die Interventionseffekte beschreiben in den meisten Fällen die kurzfristigen Wirkungen ohne Langzeit-Follow-up. Im Review wurden die eingesetzten Maßnahmen nach den vier Domänen des Frameworks klassifiziert (Umsetzende/Facilitators, Sprache, Umsetzungsort, Botschaften). Sie berichten, dass 27 Interventionen die erste Domäne (Facilitator – Mediatorinnen und Mediatoren) benutzt haben, aber acht davon keinen Erfolg hinsichtlich der Veränderung der Blutzuckerwerte oder des Gewichtsstatus hatten. Zwei der erfolglosen Interventionen haben Community Health Workers (CHWs) als Mediatorinnen und Mediatoren

eingesetzt: In der ersten wird berichtet, dass die CHWs ihr eigenes Curriculum entwickelt haben, was zu einer Vielfalt von Vorgehensmaßnahmen bei der Rekrutierung und dem Umgang mit Teilnehmenden führte. Dies wird als möglicher Grund für die fehlenden Effekte angegeben. In der zweiten sollten die Mediatorinnen und Mediatoren die Teilnehmenden bei der Planung kulturell angepasster Maßnahmen mit einbeziehen. Das Zeitbudget der Mediatorinnen und Mediatoren war jedoch sehr knapp, weil sie weiteren Teilzeiterwerbstätigkeiten nachgingen. Des Weiteren berichten Lagisetty et al., dass fast alle Interventionen, die Sprache als Anpassungsstrategie benutzt haben, erfolgreich waren [22]. Von den sieben Interventionen, die sprachliche Strategien benutzten und keinen Erfolg zeigten konnten, hatten zwei nur die Materialen übersetzt und nicht den Inhalt kulturell angepasst. Sieben Studien, die zielgruppenspezifische Orte für die Interventionsdurchführung gewählt haben, zeigten keinen Erfolg. Vier der sieben Interventionen nutzten Gemeindezentren, wie Schule oder Läden, und konnten keine signifikanten Änderungen in BMI oder Gewichtsabnahme aufweisen. Die restlichen drei erfolglosen Interventionen fanden in kirchlichen Gemeinden statt. Insgesamt haben 11 der 27 Interventionen alle vier Domänen benutzt und alle konnten signifikante Ergebnisse zeigen. Dies spricht dafür, dass eine intensivere soziokulturelle Adaptierung zu einer höheren Effektivität führt.

Von allen elf von Lofton et al. einbezogenen Interventionsstudien (nur RCTs) konnte nur eine Studie eine signifikante Gewichtsreduzierung bei adipösen/übergewichtigen Kindern nachweisen [16]. Bei fünf der elf Einzelstudien war der Stichprobenumfang relativ klein ($n < 100$). Teils wurden nur Vorher-nachher-Untersuchungen durchgeführt, teils wurden Follow-up-Untersuchungen bis zu 2 Jahren durchgeführt. Basierend auf dem oben beschriebenen PEN-3 Modell wird berichtet, dass alle Interventionen elterliche Bezugspersonen einbezogen, jedoch die kulturelle Empowerment-Domäne vernachlässigten. Das bedeutet, dass kein Bezug auf kulturell geprägte Überzeugungen, Wissensbestände oder Praktiken genommen wurde, welche gesunde Ernährung fördern oder behindern. Insgesamt konnten die Autorinnen und Autoren keinen direkten Einfluss der einzelnen soziokulturellen Anpassungsstrategien auf die Effektivität der Interventionen nachweisen.

Insgesamt zeigen die gefundenen Übersichtsarbeiten gemischte Ergebnisse bezüglich der Effektivität kulturell angepasster Interventionen, insbesondere, weil bei den meisten Primärstudien ein Vergleich zwischen kultureller Anpassung und keiner Anpassung nicht möglich war [26]. Interventionen, die mehrere Komponenten adressieren, z.B. nicht nur die Anpassung der Art der Bereitstellung, sondern auch der Normen, Einstellungen, und Überzeugungen, sowie die Einbeziehung des sozialen Umfelds scheinen mehr Erfolg zu haben. Obwohl es Konsens darüber gibt, dass die Schule ein wichtiger Ort für Interventionen mit Kindern und Jugendlichen ist, wird in mehreren Arbeiten deutlich, dass die Fokussierung auf dieses Setting allein nicht vielversprechend ist [27]. Barr-Anderson et al. zeigten, dass Interventionen, bei denen das häusliche Umfeld der Kinder berücksichtigt wurde, mehr Erfolg hatten als die Interventionen, die das nicht taten [28].

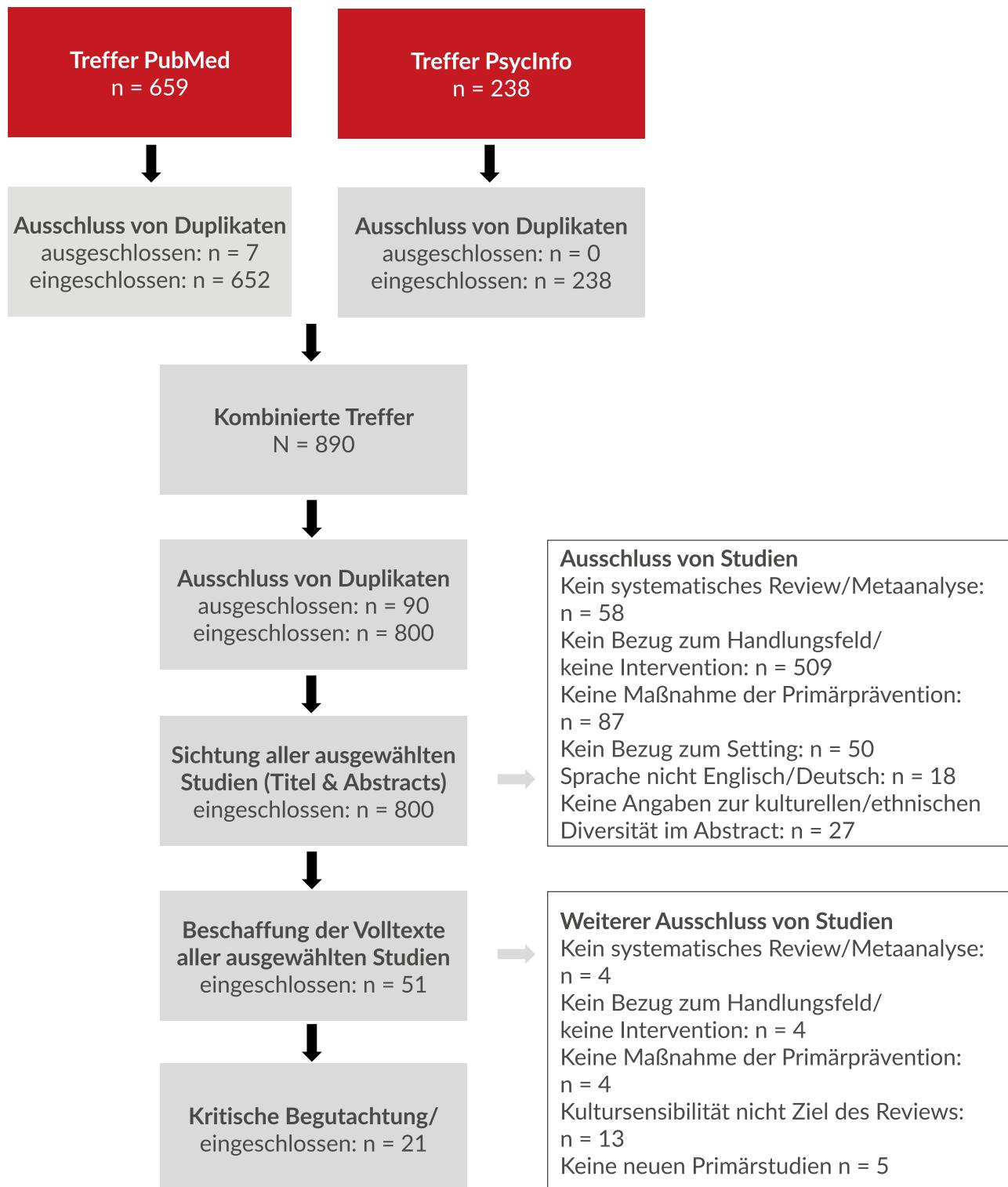
Ein Beispiel für eine soziokulturell sensible Ernährungsintervention im deutschen Kontext ist das Lale-Projekt (<http://www.lale-nrw.de>). In einer dreijährigen Planungsphase wurde ein partizipativer Planungsprozess durchlaufen und ein Trainings- und Kursprogramm für Eltern und Kinder mit türkischem Migrationshintergrund entwickelt. Erwachsene aus der Zielgruppe werden zu Kursleiterinnen und Kursleitern ausgebildet und bieten danach strukturierte, mehrsprachige Kurseinheiten zu den Themen Ernährung und Bewegung an. Anforderungen an zukünftige Kursleiterinnen und Kursleiter sind allerdings, dass diese bereits Ernährungs- oder Bewegungsfachkräfte sind (z.B. Diätassistent/

Diätassistentin, lizenzierte Übungsleiterinnen/Übungsleiter) und über Erfahrung in ähnlichen Arbeitskontexten verfügen. Kursleitermanuale sind für eine weitere Verbreitung des Programms vorhanden. Auf eine vorhandene Prozessevaluation wird hingewiesen, jedoch sind Details zum Studiendesign und zu den Ergebnissen nicht veröffentlicht [29].

3.4 Ergebnisse Bewegung

Die Datenbankrecherche identifizierte 897 Treffer, von denen nach Ausschluss von Duplikaten, Sichtung der Titel und Abstracts sowie Sichtung der Volltexte 21 Publikationen alle Einschlusskriterien erfüllen (Abb. 2). Die Qualität der 21 eingeschlossenen systematischen Reviews und Metaanalysen wurde mit der AMSTAR-Checkliste bewertet. Fast die Hälfte der Studien weist eine geringe methodische Qualität auf ($n = 10$). Sechs weisen eine moderate und fünf eine hohe methodische Qualität auf (Anhang A3).

Abbildung 2: Flussdiagramm Handlungsfeld Bewegung



Reviews

Die 21 eingeschlossenen Übersichtsarbeiten wurden zwischen 2003 und 2017 publiziert, 4 davon vor 2010. Alle 21 Übersichtsarbeiten sind narrative systematische Reviews, darunter ein Cochrane Review [17] und ein Health Technology Assessments (HTA) [18].

Mit Ausnahme von 2 Übersichtsarbeiten [21, 23] lag der Hauptfokus aller Arbeiten auf der kulturellen Anpassung von Interventionen. Hier wurde größtenteils das Fünf-Strategien-Konzept von Kreuter et al. benutzt (siehe Abschnitt 3.2), um kulturell angepasste Interventionskomponenten zu charakterisieren. Anlehnend an dieses Konzept, entwickelten Kong et al. einen theoretischen Rahmen für die Charakterisierung und Evaluierung kulturell angepasster Verhaltensinterventionen hinsichtlich Bewegung und Ernährung von Afroamerikanern [30].

In den meisten der in die Übersichtsarbeiten eingeschlossenen Publikationen ging es sowohl um Bewegung als auch um Ernährung und weitere verhaltensbezogenen Interventionen. In lediglich fünf Übersichtsarbeiten lag der Fokus ausschließlich auf Bewegung [31–35]. Alle eingeschlossenen Übersichtsarbeiten berichteten über verschiedene Formen der kulturellen Anpassung.

Studienpopulation

Sieben Übersichtsarbeiten richteten den Fokus auf Afroamerikaner, zwei auf indigene Gruppen, eine auf asiatische Amerikaner und eine auf Hispanics. Fast alle Einzelstudien der eingeschlossenen Übersichtsarbeiten wurden in Nordamerika durchgeführt. Die meisten Interventionen richteten sich an Erwachsene.

Settings

Die meisten Einzelstudien, die für die Recherche von Interesse sind, wurden in der Gemeinde durchgeführt, gefolgt von schulbasierten und aufsuchenden Interventionen. In einer Übersichtsarbeit wurden nur Studien eingeschlossen, die in religiösen Einrichtungen stattfanden [23].

Eingesetzte kultursensible Maßnahmen

Zu den wichtigsten kultursensiblen Interventionsmaßnahmen im Handlungsfeld Bewegung zählen:

- Die sprachliche und kulturelle Anpassung von Informationseinheiten und -materialien
- Personen- und familienzentrierte Interventionen sowie solche mit Einbezug des sozialen Umfelds
- Einbezug von bilingualen und bikulturellen Mediatorinnen und Mediatoren bei der Rekrutierung und Implementierung von Interventionen
- Die Berücksichtigung von kulturellen Werten, Normen und Verhalten sowie Spiritualität (insbesondere bei Afroamerikanern)

Effekte kultureller Anpassung

In ihrer Übersichtsarbeit zu bewegungsfördernden Interventionen bei Afroamerikanern fanden Jenkins et al. [31] heraus, dass 28 der 32 eingezogenen Einzelstudien positive Effekte in mindestens einem Ergebnisparameter berichteten. Häufig wurden zusätzlich zu den signifikanten Effekten auch nicht signifikante Ergebnisse gefunden, sodass Jenkins et al. insgesamt von gemischten Ergebnissen sprechen. Positive Effekte konnten beispielsweise für Ausdauer und Kraft (jeweils eine Studie), Schrittzahl (vier Studien), zeitlicher Umfang der körperlichen Aktivität (acht Studien) festgestellt werden, aber auch bezüglich der Gewichtsreduzierung (sieben Studien). Die Autorinnen und Autoren

kritisieren allerdings das Fehlen von Langzeit-Follow-ups, die kleinen Stichprobengrößen (14 Studien mit einem Stichprobenumfang < 50) und die geringe Nutzung von objektiven Maßen für körperliche Aktivität. Die meisten der Einzelstudien wurden in religiösen Einrichtungen, in der Gemeinde oder im häuslichen Umfeld durchgeführt. Zu den genannten kultursensiblen Interventionskomponenten gehörte die kulturelle Anpassung von Studienmaterialien und Sitzungen, die Wahl des Studienseettings, soziale Unterstützung, religiöse Interventionen und Interventionen in religiösen Einrichtungen sowie der Einbezug von afroamerikanischen Studienleiterinnen. Den Autorinnen und Autoren zufolge haben theoriegeleitete und kulturell angepasste Bewegungsinterventionen, die soziale Unterstützung beinhaltet und in religiösen Settings durchgeführt werden, das größte Potenzial, um eine Verhaltensänderung bei Afroamerikanerinnen herbeizuführen. Zudem schlussfolgerten sie, dass Interventionen, die sich sowohl mit Bewegung als auch mit Ernährung befassten, deutlichere Ergebnisse erzielten [31].

Sushames et al. [32] untersuchten Bewegungsinterventionen in indigenen Bevölkerungsgruppen, die in Australien und Neuseeland durchgeführt wurden. Die sieben Primärstudien, die von Interesse sind, wurden in Gemeindesettings durchgeführt und waren gruppengestützt. Interventionen bestanden aus angeleiteten Bewegungsübungen, Unterstützung zur Selbstregulation sowie informativen Maßnahmen. Kulturelle Anpassung beinhaltete die Konsultation von Gemeindemitgliedern in der Planungsphase von Interventionen, sprachliche Komponenten, das Verwenden von traditionellen Spielen oder historisch-relevanten Aktivitäten (wie Jagen) sowie die Berücksichtigung von unterschiedlichen Zeitkonzepten. Eine signifikante Erhöhung der körperlichen Aktivität der Teilnehmenden im Vergleich zur Kontrollgruppen konnte nur in einer Studie festgestellt werden.

In einer Übersichtsarbeit zu kulturell angepassten Verhaltensinterventionen für Afroamerikanerinnen (überwiegend RCTs) fanden Kong et al. [30] in 18 der 28 eingeschlossenen Studien signifikante Verbesserungen des Gewichtsstatus oder des Ernährungsverhaltens. Die eingesetzten Adaptierungsstrategien wurden nach den in Kapitel 3.2 beschriebenen Kategorien von Kreuter et al. [12] klassifiziert. Die am häufigsten genannten Strategien in den eingeschlossenen Primärstudien waren soziokulturelle (z. B. Berücksichtigung von familiären Verpflichtungen und finanziellem Status) sowie einbeziehende Maßnahmen (constituent-involving; z. B. Einbezug von Fokusgruppen in der Planung und Rekrutierung). Jedoch vermerken die Autorinnen und Autoren auch hier, dass sich nicht rückschließen ließ, wie Strategien kultureller Anpassung die Ergebnisparameter tatsächlich beeinflussen [30].

Insgesamt ergibt sich ein gemischtes Bild bezüglich der Wirksamkeit kultureller Anpassungen für bewegungsfördernde Interventionen in ethnischen Minderheiten. Viele der für diese Recherche relevanten Primärstudien berichten von kulturellen Anpassungen und die meisten davon beziehen sich auf tiefgreifende Strategien, wie die Berücksichtigung kultureller Werte, Normen, Spiritualität, den Einbezug von Mediatorinnen und Mediatoren aus dem Kulturkreis der Zielgruppe sowie die Wahl besonderer Interventionseinrichtungen (wie Kirchen). Die Ergebnisse der Übersichtsarbeiten ermöglichen jedoch keine Rückschlüsse darauf, in welchem Ausmaß kulturelle Anpassungen die Ergebnisse von Primärstudien beeinflussen.

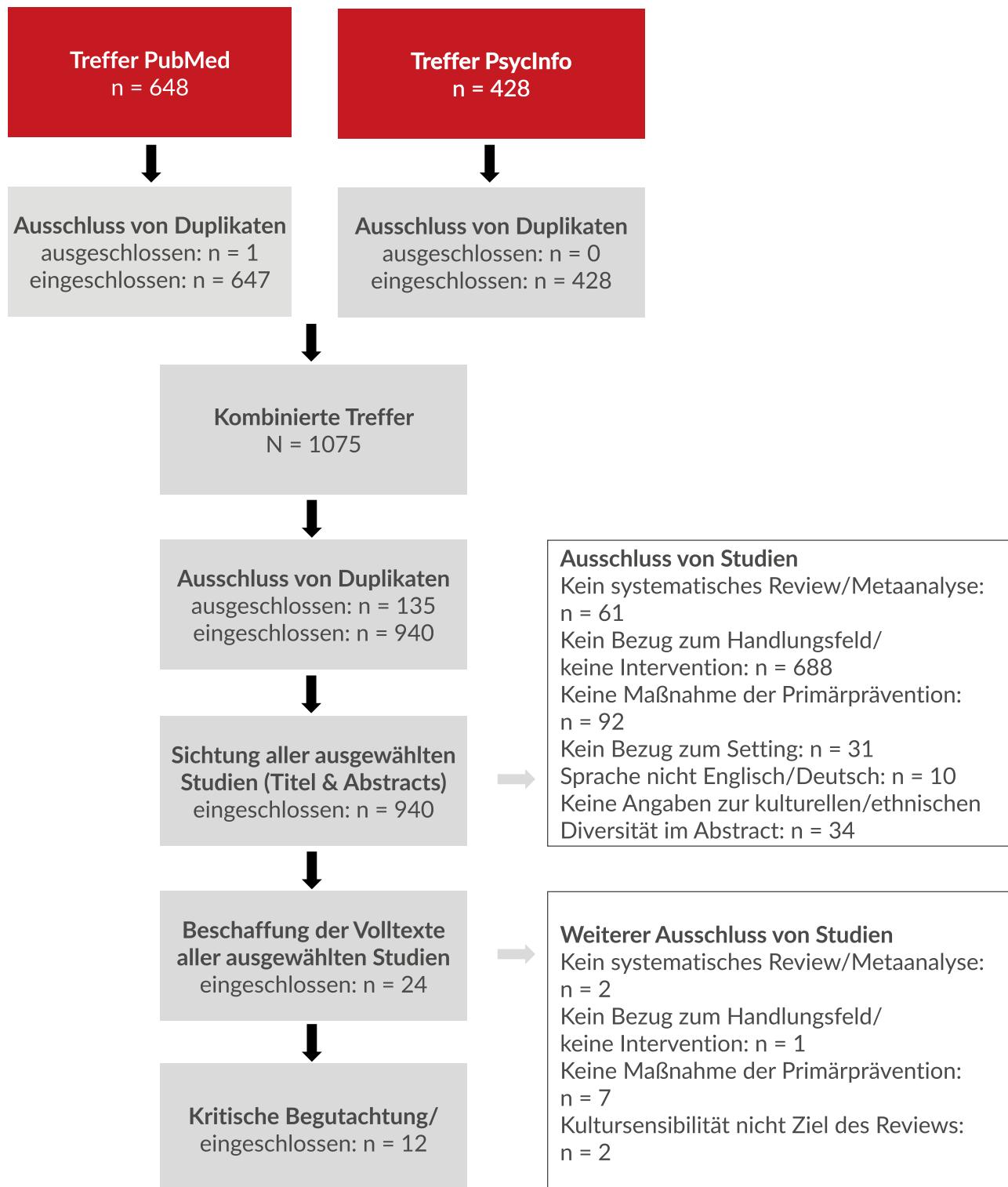
Ein Beispiel aus dem deutschen Sprachraum für soziokulturell sensible Bewegungsförderung ist das bereits in Kapitel 3.1 genannte BIG-Projekt (Bewegung als Investition in Gesundheit; www.big-projekt.de). Das Projekt hat sich intensiv mit der kooperativen Planung von lokalen Maßnahmen auseinandergesetzt und hierzu ein eigenes Modell für die Strukturierung des Prozesses

vorgelegt [9]. Die durchzuführenden Bewegungsangebote werden hier relativ offen gehalten, da sie sich an die lokalen Bedarfe und Möglichkeiten zu orientieren müssen. Während die Implementierungsprozesse für dieses Projekt bereits sehr gut analysiert wurden, fehlt auch hier bisher noch der Wirksamkeitsnachweis durch eine Outcome-Evaluation.

3.5 Ergebnisse psychosoziale Gesundheit

Die Datenbankrecherche identifizierte 1076 Treffer, von denen nach Ausschluss von Duplikaten, Sichtung der Titel und Abstracts sowie Sichtung der Volltexte 12 Publikationen alle Einschlusskriterien erfüllen (Abb. 2). Die Qualität der 12 eingeschlossenen systematischen Reviews und Metaanalysen wurde mit der AMSTAR-Checkliste bewertet. Die Mehrzahl der Studien wies eine geringe methodische Qualität auf ($n = 9$), während nur drei Studien eine moderate Qualitätsbewertung erhielten und keine eine hohe.

Abbildung 3: Flussdiagramm zum Handlungsfeld psychosoziale Gesundheit



Reviews

Die 12 eingeschlossenen Übersichtsarbeiten wurden zwischen 2007 und 2017 publiziert, nur zwei davon wurden vor 2010 publiziert. Unter den eingeschlossenen Publikationen befinden sich 11 narrative systematische Reviews und eine Metaanalyse [36].

Der Fokus lag überwiegend auf der Erhöhung des psychischen Wohlbefindens, der Stärkung der Resilienz sowie der Prävention von Depressionen. Vier Übersichtsarbeiten identifizierten zudem Studien zum Thema Selbstmordprävention [37–40]. Das Review von Acosta et al. beschäftigt sich ausschließlich mit diesem Thema [37]. Drei Übersichtsarbeiten berichten zusätzlich suchtmittel-[38, 41] und bewegungsbezogene Ergebnisse [36].

Eine Übersichtsarbeit befasste sich mit partizipativen Ansätzen der psychischen Gesundheitsförderung mit Einbezug der Eltern von Jugendlichen aus ethnokulturellen Gruppen [41]. Gegenstand anderer Übersichtsarbeiten waren religiös orientierte Interventionen, die auf Afroamerikaner ausgerichtet waren [42], sowie partizipative Musikprogramme für Jugendliche aus verschiedenen ethnischen Bevölkerungsgruppen mit dem Einsatz von kulturell angemessener Musik [43]. Eine weitere Übersichtsarbeit beschäftigte sich mit pädagogischen Strategien für den akademischen Erfolg und die Resilienz von indigenen Studierenden [44].

Bei sieben Übersichtsarbeiten lag der Fokus auf kulturelle Anpassung von Interventionen [36, 38–40, 42, 45–47]. Insgesamt berichteten alle Übersichtsarbeiten von verschiedenen kultursensibler Interventionsmaßnahmen im Bereich psychosoziale Gesundheit. Nur eine Übersichtsarbeit zog theoretische Konzepte zur Auswertung kultursensibler Maßnahmen heran [38].

Studienpopulation

Die Interventionen der eingeschlossenen Publikationen richten sich überwiegend an Erwachsene und Jugendliche. Einige Interventionen richteten sich an bestimmte ethnische Gruppen, wie indigene Menschen [38, 40, 44, 47] oder Afroamerikaner [42]. Die Mehrheit der insgesamt 59 Primärstudien, die für die Recherche von Interesse waren, berichteten von Interventionen, die in angelsächsischen Ländern wie den USA, Australien und Neuseeland durchgeführt wurden.

Settings

Die Interventionen von Einzelstudien wurden überwiegend in Bildungseinrichtungen ($n = 24$ Primärstudien), in der Gemeinde/Kommune ($n = 10$) oder einer Kombination aus verschiedenen Settings ($n = 13$) durchgeführt. Eine Intervention war internetbasiert, eine weitere wurde in einem Gesundheitszentrum durchgeführt.

Eingesetzte kultursensible Maßnahmen

Zu den wichtigsten kultursensiblen Interventionskomponenten zählen:

- Die sprachliche und kulturelle Anpassung von Informationseinheiten und -materialien
- Personen- und familienzentrierte Interventionen sowie solche mit Einbezug des sozialen Umfelds
- Partizipative Interventionen (Einbezug der Zielgruppe in die Planung und Durchführung von Interventionen)
- Einbezug von bilingualen Mediatorinnen und Mediatoren in die Planung und Durchführung von Interventionen

Effekte kultureller Anpassung

Antonio und Chung-Do untersuchten Interventionen für indigene Jugendliche hinsichtlich ihrer Nutzung von Elementen des Positive-Youth-Development(PYD)-Konzeptes sowie die Anpassung von kulturellen Programmbestandteilen [38]. Das PYD ist ein stärkenorientiertes Konzept, welches auf eine Förderung von Selbstwirksamkeit und Bewältigungskompetenzen unter Jugendlichen abzielt [48]. Insgesamt wurden 8 Studien in diese Übersichtsarbeit einbezogen, darunter Studien sowohl mit als auch ohne Kontrollgruppe. Sieben von acht Studien hatten einen relativ kleinen Stichprobenumfang ($n < 100$). Vier Studien konnten signifikante Effekte nachweisen (Verringerung depressiver Symptomatik, Verringerung des Substanzkonsums, Verbesserungen auf einer Resilienzskala). Die meisten Effektmessungen wurden direkt nach der Intervention durchgeführt. In einer Studie wurde ein Follow-up nach einem Jahr durchgeführt. Die Autorinnen und Autoren fanden Elemente des PYD-Konzeptes in jeder eingeschlossenen Studie, wenngleich sich keine Studie direkt auf dieses Konzept bezieht. Es wurden auch in jeder Studie Formen von kultureller Adaptierung identifiziert. Aussagen bezüglich der Wirksamkeit einzelner Strategien konnten auf dieser Studiengrundlage nicht getroffen werden.

Healey et al. identifizierten nur eine primärpräventive Studie zu psychosozialer Gesundheit, die ebenfalls in einer weiteren Übersichtsarbeit eingeschlossen ist [45, 46]. Baker et al. identifizieren lediglich drei Studien, die für die vorliegende Recherche von Interesse sind. Aufgrund der mangelnden Beschreibung der Kontrollgruppen der RCTs ($n = 2$) ließen sich keine Rückschlüsse auf die Effektivität kultureller Anpassung im Vergleich zu Standardinterventionen ziehen. Insgesamt identifizieren die Autorinnen und Autoren sechs Hauptthemen erfolgreicher kultursensibler Maßnahmen für Kinder und Jugendliche aus unterschiedlichen kulturellen Gruppen, unter welchen partizipative Ansätze besonders hervorgehoben werden [46].

Auch Ruiz-Casares et al. heben ebenfalls partizipative Ansätze kultursensibler Interventionen hervor. In diesem Review wurden ausschließlich qualitative Studien herangezogen. Den Autorinnen und Autoren zufolge stellen insbesondere familienzentrierte und gemeindebezogene Interventionen erfolgreiche Maßnahmen dar, da sie die kulturelle Relevanz des Stellenwertes der Familie und der Gemeinde für Individuen aus der Zielgruppe berücksichtigen [41]. Dieser Befund wird durch Milne et al. bestätigt. Basierend auf einer Analyse von ebenfalls überwiegend qualitativen Studien, kommen sie zu der Einschätzung, dass Maßnahmen, die soziale Unterstützung (durch die Familie oder die Gemeinde) fördern, besonders erfolgreich sind in Bezug auf den akademischen Erfolg und die Stärkung der Resilienz von indigenen Studierenden [44].

Spiritualität fand nur in einer Übersichtsarbeit Berücksichtigung. Hays und Aranda identifizierten psychosoziale Interventionen mit Afroamerikanern, die in religiösen Einrichtungen durchgeführt und für die Zielgruppe kultursensibel angepasst wurden [42]. Hier zeigte sich, dass Workshops und Veranstaltungen zu (mental) Gesundheitsthemen mit kultureller Anpassung der Sprache, Einbezug von Expertinnen und Experten derselben ethnischen Herkunft sowie der Gemeinde zielführend waren: in zwei Studien führten diese kultursensiblen Interventionen zu gewünschten Effekten im Vorher-nachher-Vergleich (z. B. das Bewusstsein für psychische Erkrankungen und das Wissen über vorhandene Unterstützungsmöglichkeiten wurde erhöht). Insgesamt ist die methodische Qualität der einbezogenen Einzelstudien allerdings gering (keine Kontrollgruppen, kein Follow-up).

Insgesamt gibt es relativ wenige Übersichtsarbeiten zu kultursensiblen Präventions- und Gesundheitsfördermaßnahmen im Bereich der psychosozialen Gesundheit. Auch wenn die wenigen Publi-

kationen nicht genügend Evidenz für die Effektivität kultursensibler Interventionskomponenten liefern, lassen sich Erfolg versprechende Ansätze, wie gemeinde-, familien- und sozialumfeldbezogene Maßnahmen identifizieren.

Für den deutschen Sprachraum lässt sich kein starkes Beispielprojekt finden, welches soziokulturell sensible Ansätze zur Förderung psychosozialer Ressourcen umsetzt. In vielen übergreifenden Projekten ist die Stärkung dieser Ressourcen durch Empowerment sicherlich mitgedacht, jedoch nicht das explizite Gesundheitsziel der Intervention (z. B. das Kicking-Girls-Projekt, siehe Anhang A5). Das „Fit für kulturelle Vielfalt“-Programm richtet sich an Jugendliche mit und ohne Migrationshintergrund und zielt auf die Förderung interkultureller Kompetenzen (Empathie, Abbau von Vorurteilen, Selbstreflexion) ab (<http://bipp-bremen.de/programm/fit-fuer-kulturelle-vielfalt/>). Dieses Training wird vor allem im Schulkontext angeboten. Abgesehen vom inhaltlichen Themenschwerpunkt sind jedoch keine soziokulturellen Anpassungen im Programm erkennbar.

3.6 Ergebnisse Suchtmittelkonsum

Die Datenbankrecherche identifizierte 479 Treffer, von denen nach Ausschluss von Duplikaten, Sichtung der Titel und Abstracts sowie Sichtung der Volltexte neun Publikationen alle Einschlusskriterien erfüllen (Abb. 4). Die Qualität der neun eingeschlossenen systematischen Reviews und Metaanalysen wurde mit der AMSTAR-Checkliste bewertet. Die Mehrheit der Studien wies eine hohe methodische Qualität ($n = 5$) auf. Drei Studien wurden bezüglich ihrer methodischen Qualität als moderat und eine als gering eingestuft.

Reviews

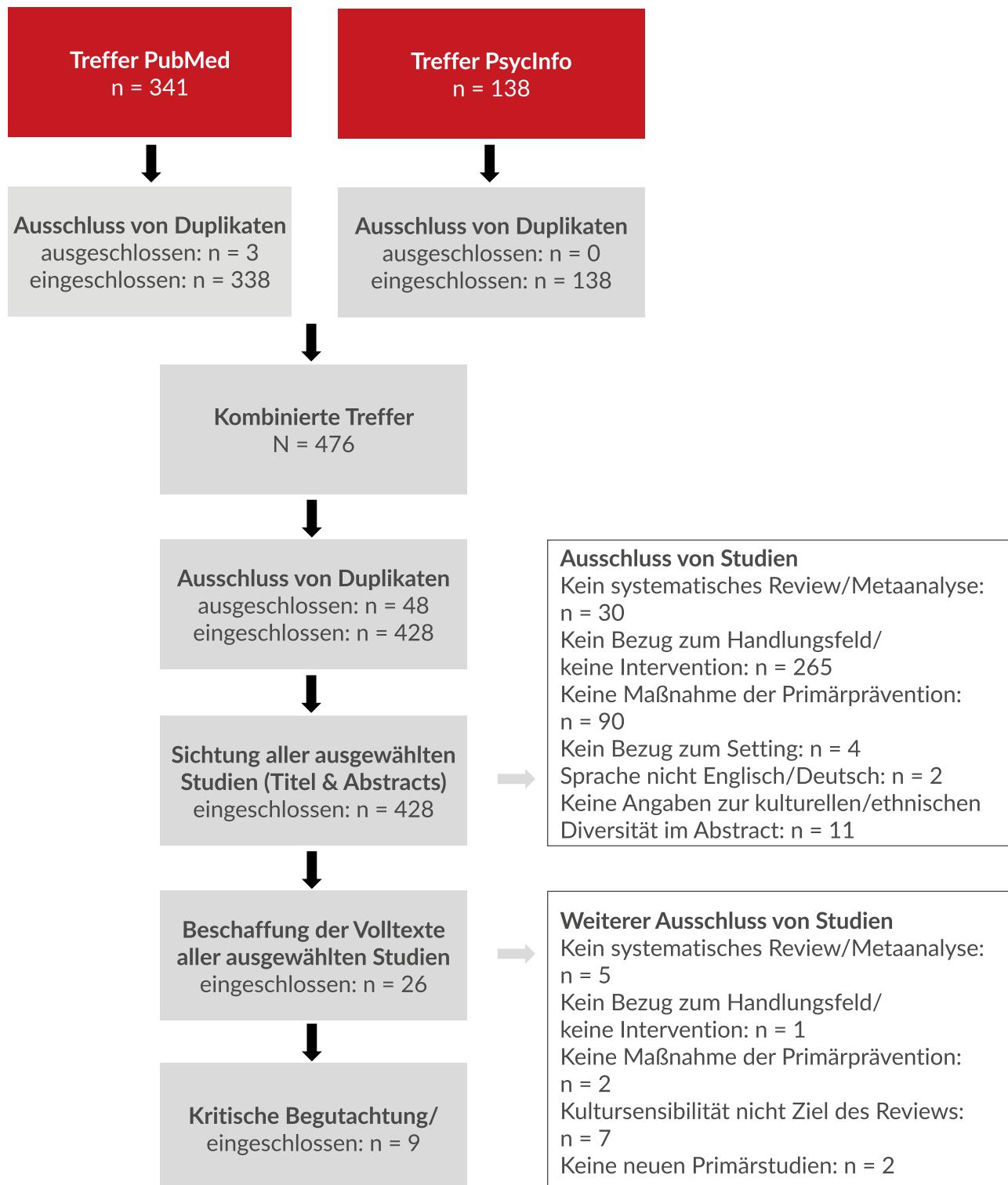
Alle neun eingeschlossenen Übersichtsarbeiten sind auf Tabakkonsum ausgerichtet. Alkoholkonsum wird in zwei Arbeiten mit erfasst [49, 50]. Unter den neun Übersichtsarbeiten befinden sich neun narrative systematische Reviews, darunter ein Cochrane Review [17] und zwei Health Technology Assessments (HTAs) [18, 51] sowie zwei Metaanalysen [50, 52].

Bei allen neun Übersichtsarbeiten lag der Fokus auf kultureller Anpassung von Interventionen. Zwei der neun Übersichtsarbeiten fokussierten ausschließlich auf mediengestützte Gesundheitskampagnen für ethnische Minderheiten/indigene Bevölkerungen [17, 51]. Die eingesetzten Maßnahmen variierten von kulturell angepassten TV-Kampagnen, Handy-Kurznachrichten und/oder Videos und Internetwebseiten bis zu gedruckten Materialien wie Broschüren, Flyern und Kalendern. Eine weitere Übersichtsarbeit hat die Effektivität soziokulturell sensibler Interventionen untersucht, die entwickelt worden sind, um Substanzkonsum bei Jugendlichen aus ethnischen Minderheiten zu reduzieren bzw. vorzubeugen [50].

Studienpopulation

Die Interventionen der eingeschlossenen Publikationen richteten sich zur Hälfte an Erwachsene und zur Hälfte an Kinder und/oder Jugendliche. Abgesehen von Sherman et al. [49] richteten sich alle Interventionen meistens an indigene oder bestimmte ethnische Minderheiten, wie Latinos, Chinesen oder Afroamerikaner. Die Mehrheit der insgesamt 154 Einzelstudien, die für diese Recherche von Interesse waren, berichtet von Interventionen, die in Nordamerika durchgeführt wurden, vor allem in den USA. Nur eine Übersichtsarbeit fokussierte auf Interventionen für ethnische Minderheiten aus Afrika, China und Südostasien in Großbritannien [49].

Abbildung 4: Flussdiagramm Handlungsfeld Suchtmittelkonsum



Settings

Die Interventionen von Einzelstudien mit Kindern und/oder Jugendlichen wurden überwiegend in Schulen durchgeführt und die mit Erwachsenen in der Gemeinde/Kommune. Insbesondere bei den medialen Interventionen wurden auch Informationen wie Broschüren und Flyer per Post nach Hause geschickt.

Eingesetzte kultursensible Maßnahmen

Zu den wichtigsten kultursensiblen Interventionsmaßnahmen zählen:

- Die kulturelle Anpassung von Interventionseinheiten und Materialien
- Personen- und familienzentrierte bzw. auf das soziale Umfeld bezogene/einbeziehende Maßnahmen
- Partizipative Interventionen (Einbezug der Zielgruppe und bilingualen und bikulturellen Mediatorinnen und Mediatoren in die Planung und Durchführung von Interventionen)
- Einbezug von bilingualen und bikulturellen Mediatorinnen und Mediatoren bei der Rekrutierung und Informationsdissemination

Effekte kultureller Anpassung

In der Übersichtsarbeit von Bledsoe [52] wurden explizit soziokulturell adaptierte mit nicht adaptierten Interventionen verglichen, wobei randomisierte und quasi-experimentelle Studien einbezogen wurden ($n = 31$ Einzelstudien). Insgesamt konnte keine höhere Effektivität der adaptierten Interventionen nachgewiesen werden. Allerdings gab es Effekte in spezifischen ethnischen Gruppen. Afroamerikanische Jugendliche profitierten am meisten von der Adaptation, insbesondere, wenn die Themen Spiritualität, Gewalt und Stress mit einbezogen wurden. Der Befund, dass soziokulturelle Strategien nicht unbedingt die Effektivität der Maßnahmen erhöhen, wird in anderen Arbeiten bestätigt [18, 50]. Auch hier finden sich jedoch Hinweise auf Effekte in einzelnen Studien oder Subgruppen.

Die beiden Übersichtsarbeiten, die sich nur auf mediale Kampagnen bezogen, berichten ebenfalls, dass nicht genügend Evidenz zur Effektivität kulturell gezielter Maßnahmen vorliegt [17, 51]. Während Gould et al. [51] nur Studien mit Fokus auf Aborigines einbezogen, konzentrierten sich alle drei Studien in Mosdol et al. [17] auf Afroamerikaner. Eine der drei Studien in Mosdol et al. [17] verglich die Effektivität soziokulturell angepasster Broschüren mit nicht angepassten Broschüren für die allgemeine Bevölkerung, während in den anderen zwei sowohl kulturell angepasste Radio- und TV-Werbung als auch Poster, Flyer, Broschüren und andere kleine Druckmedien eingesetzt wurden. In den beiden letztgenannten Studien wurde die Intervention in sieben Regionen in zwei Wellen von je 3–6 Wochen durchgeführt. Die Kontrollgemeinde bekam keine Intervention. Der Inhalt, die Sprache und das Format der Medien wurden an die vermuteten Präferenzen der Zielgruppe angepasst und die Intervention wurde zusammen mit der Zielgruppe getestet. Die Werbung lief über Kanäle, die bei der Zielgruppe beliebt waren, und wurde an relevanten Orten platziert. Die Hauptbotschaft der Intervention war, dass man mit dem Rauchen aufhören und sich Information oder Rat von gebührenfreien Raucherentwöhnungstelefonnummern holen sollte. In der ersten Studie mit den Broschüren wurden nur kleine oder keine Effektunterschiede in selbst berichtete Verhaltensänderungen in Bezug auf Rauchen nachgewiesen. Es wurden minimale Unterschiede in der Einstellung zur Beendigung des Rauchens beobachtet. In den beiden anderen Studien wurde eine signifikant höhere Anzahl an Anrufen aus den Interventionsregionen verzeichnet, insbesondere in der afroamerikanischen Bevölkerung. Insgesamt jedoch kamen die Autorinnen und Autoren dieses Review zu der Einschätzung, dass nur eine geringe Evidenz der Wirksamkeit dieser Interventionen vorliegt.

In einer anderen Übersichtsarbeit wurde ein Vergleich der eingesetzten Adaptierungsstrategien hinsichtlich ihrer Wirksamkeit beschrieben [24]. Dabei wurden nur Studien einbezogen, in denen adaptierte mit nicht adaptierten Interventionen verglichen wurden. Neben dem Handlungsfeld Tabakkonsum wurden auch Interventionsstudien aus den Bereichen Ernährung und Bewegung eingeschlossen. Die Unterscheidung zwischen Oberflächen- und Tiefenstruktur von Resnicow et al. [11] wurde benutzt, um die Adaptierungsstrategien zu klassifizieren. Insgesamt wurden 17 Studien einbezogen, von denen fünf eine größere Effektivität von soziokulturell adaptierten Interventionen nachweisen konnten. Drei der vier Studien, die sich auf die Reduzierung von Tabakkonsum bezogen, zeigten positive Effekte der Adaptierung. In allen Studien war Rauchabstinentz die Outcome-Variable. Der Follow-up-Zeitraum schwankte zwischen vier Wochen und zwölf Monaten. Die Gruppenunterschiede in der Rauchabstinentz lagen zwischen 3 und 9 Prozentpunkten. Der Vergleich zwischen der Adaptierung der Oberflächen- und einer angepassten Tiefenstruktur ergab kein eindeutiges Ergebnis. Es konnte also keine größere Wirksamkeit für einen der beiden Ansätze gezeigt werden. Die Autorinnen und Autoren stellten weitere Vergleiche von einzelnen Adaptierungsstrategien an, um Merkmale effektiver Interventionen zu identifizieren. Hier zeigte sich keine größere Effektivität für die Studien, die Gesundheitsmediatoren einsetzen. Hinweise für eine größere Effektivität ergeben sich bei Interventionen, die auf familienorientierte Werte Bezug nahmen oder das familiäre Umfeld involvierten. Dagegen wurde in keiner der fünf Studien, die religiöse Komponenten beinhaltete (z.B. religiöse Einrichtung als Durchführungsort, Bezugnahme auf religiöse Geschichten oder Gleichnisse, Glaube als Bewältigungsressource), signifikante Effekte gefunden. Insgesamt zeigte sich, dass alle effektiven Interventionen mehrere Anpassungsstrategien verwendeten, was dafür spricht, dass eine intensivere Adaptierung zu einer größeren Effektivität führt.

Zusammengefasst zeigen die ausgewerteten Daten, dass der Nachweis der Wirksamkeit von soziokulturellen Anpassungen in der Suchtmittelprävention gegenüber nicht adaptierten Ansätzen noch nicht zweifelsfrei erbracht ist. Die gefundenen Effekte sind uneinheitlich und methodische Schwächen (geringe Zahl an Einzelstudien, kleiner Stichprobenumfang, kurze Follow-up-Zeiträume) schmälern die Evidenz. Dennoch sind Hinweise auf Wirksamkeit in einzelnen Subgruppen festzuhalten. Ebenso festzuhalten bleibt, dass der Einsatz mehrerer soziokultureller Strategien häufiger zu einer Wirksamkeit führt als der singuläre Einsatz.

Ein Beispiel aus dem deutschen Sprachraum für ein soziokulturell sensibles Vorgehen im Bereich Suchtmittelkonsum ist das Projekt Primärprävention alkoholbezogener Störungen bei älteren Migrantinnen und Migranten (PRÄALMI). Hier wurde ein Konzept für eine Informationsveranstaltung zum Thema Alkohol kultursensibel erstellt. In einer kontrollierten Interventionsstudie wurde die Wirkung der soziokulturell angepassten Veranstaltung mit denen nicht adaptierter Informationsveranstaltungen verglichen. Die Ergebnisse zeigen vorteilhafte Effekte in den Einstellungen gegenüber Alkohol und in der Absicht, den Alkoholkonsum zu reduzieren, sowie in der Teilnahmezufriedenheit zugunsten des soziokulturell adaptierten Konzepts im Vorher-nachher-Vergleich. Eine Follow-up-Befragung der Teilnehmenden nach 6 Monaten ergab eine stärkere Reduktion im selbst berichteten Alkoholkonsum in der Interventionsgruppe. Ein ausgearbeiteter Leitfaden für die Durchführung liegt ebenfalls vor (https://www.uniklinik-freiburg.de/fileadmin/mediapool/07_kliniken/psy_psychiatrie/pdf/forschung/Praxismanual.pdf). Eine Schwäche kann darin gesehen werden, dass es sich für eine settingbasierte Intervention um einen wenig komplexen Ansatz handelt. Der verhältnispräventive Anteil ist relativ gering und besteht im Aufbau eines lokalen Netzwerkes, um den Zugang zur Zielgruppe zu verbessern. Für nachhaltige Effekte erscheint die Ergänzung von weiteren Komponenten sinnvoll.

4 Zusammenfassende Betrachtung und Handlungsempfehlungen

Ziel dieser Recherche war es, die Evidenzbasis von migrationssensiblen bzw. soziokulturell sensiblen Maßnahmen in der Prävention und Gesundheitsförderung zu untersuchen. Die unterschiedlichen Datenquellen (Expertenbefragung, wissenschaftliche Datenbanken, deutschsprachige Projektdatenbanken) brachten dabei vielzählige, teilweise sehr heterogene Befunde hervor. Zusammenfassend lassen sich aus unserer Sicht folgende übergreifende Aussagen treffen:

- Basierend auf den Einschätzungen der Expertinnen und Experten sowie im Rückgriff auf existierende Rahmenmodelle lässt sich ein Katalog von Strategien für eine soziokulturell sensible Prävention und Gesundheitsförderung definieren.
- Aus der umfangreichen internationalen Forschungsliteratur lässt sich ableiten, dass soziokulturelle Adaptierungen zu einer verbesserten Erreichbarkeit und Akzeptanz der Präventionsprogramme führen. Eine verbesserte Wirksamkeit von Interventionen ist noch nicht zweifelsfrei erwiesen. Jedoch gibt es Hinweise darauf, dass eine umfangreichere Adaptierung die Effektivität verbessert.
- Es gibt in Deutschland mehrere Beispiele für erfolgreich implementierte Projekte in der migrationssensiblen Prävention und Gesundheitsförderung (beispielsweise BIG, MiMi, Lale, Integration durch Sport, PRÄALMI). Effektivitätsnachweise fehlen jedoch noch weitgehend.

Im Folgenden werden diese Punkte näher erläutert. Aus der Expertenbefragung wurden Merkmale guter Ansätze in der soziokulturellen Prävention und Gesundheitsförderung gewonnen. Diese lassen sich mit den identifizierten Rahmenmodellen in der wissenschaftlichen Literatur verbinden. Am häufigsten wird in der Literatur auf die fünf Strategien von Kreuter et al. [12] rekurriert. Deshalb werden diese in Tabelle 4 als Ausgangspunkt für die Beschreibung von Leitprinzipien soziokulturell sensibler Prävention genommen. Ergänzend werden Maßnahmen aus anderen konzeptionellen Beiträgen [13, 16, 22] und aus der Expertenbefragung berücksichtigt.

Tabelle 4: Strategien und Maßnahmen der soziokulturell sensiblen Prävention und Gesundheitsförderung

STRATEGIEN	MASSNAHMEN	BESCHREIBUNG
Peripheral (Äußerliche Anpassung)	Anpassung des Erscheinungsbilds der Interventionsmaterialien	Nutzung von zielgruppenadäquaten Bildern, Logos, Symbolen, Farben oder Schrifttypen, um die Aufmerksamkeit für die Materialien zu erhöhen
Evidential (Evidenzbezogene Anpassung)	Zielgruppenspezifische Risikokommunikation	Darstellung von epidemiologischen oder anderen Daten für einzelne Migrantengruppen, um die Zielgruppe für die gesundheitliche Problematik zu sensibilisieren
	Bedarfsanalyse	Durchführung einer eigenen Erhebung und/oder Auswertungen der Gesundheitsrisiken und -ressourcen der Zielgruppe für die Interventionsplanung
Linguistic (Sprachliche Anpassung)	Übersetzung	Übersetzung der Programminhalte durch schriftliches Übersetzen, Einsatz von Dolmetscherinnen/Dolmetschern
	Anpassung des Sprachniveaus	Anpassung des Sprachniveaus durch die Verwendung von leichter Sprache, Verwendung von audiovisuellen Methoden (z. B. Videos) zur Informationsvermittlung

Constituent-involving (Einbeziehende Anpassung)	Einbezug der Zielgruppe	Einbezug der Zielgruppe in die Planung und Implementierung der Intervention
	Einbezug lokaler Akteure	Aufbau eines lokalen Netzwerkes und Einbeziehung des Netzwerkes in die Planung und Implementierung der Intervention
	Einsatz von Gesundheitsmediatoren	Ausbildung und Einsatz von Personen mit Migrationshintergrund zu Gesundheitsmediatoren
Sociocultural (Soziolkulturelle Anpassung)	Vertraute Durchführungsorte	Wohnortnahe Durchführung der Angebote, Nutzung vertrauter Orte (z.B. religiöse Einrichtungen)
	Handlungsfeldübergreifende Maßnahmen	Offene Angebote zu alltagsrelevanten Themen für die Kontaktaufnahme
	Berücksichtigung der sozioökonomischen Verhältnisse	Geringe Teilnahmekosten, Berücksichtigung von Geschlechterrollenverpflichtungen (z.B. hinsichtlich der Terminierung von Maßnahmen)
	Einbezug der Familie und des sozialen Umfeldes	Erweiterung der Interventionen auf die Familien und das soziale Umfeld (z.B. Peers, Nachbarschaften) der Zielgruppe zur Adressierung von hinderlichen und förderlichen Faktoren in der sozialen Umwelt
	Berücksichtigung kulturell geprägter Überzeugungen und Verhaltensweisen	Thematisierung von kulturell geprägten Überzeugungen und Verhaltensweisen, die sich positiv oder negativ auf das gewünschte Gesundheitsverhalten auswirken
	Berücksichtigung von Spiritualität	Einbindung von Präventionsbotschaften in religiöse Gleichnisse und Erzählungen, Glaube als Bewältigungsressource
	Berücksichtigung der sozialen und kulturellen Heterogenität der Zielgruppe	Berücksichtigung von Unterschieden in der ethnischen Identifikation/Akkulturation, Umständen der Migration, sozialer Schichtzugehörigkeit, Geschlecht und sozialer Einbindung

Zum Einbezug der Zielgruppe in die Planung und Durchführung der Intervention sei angemerkt, dass das Ausmaß der Partizipation sehr unterschiedlich sein kann. In den eingeschlossenen Reviews wurde beispielsweise auf Fokusgruppen mit Personen aus der Zielgruppe verwiesen, in denen die Akzeptanz der Interventionskomponenten diskutiert wurde. Es gibt aber auch Ansätze, in denen die Teilnehmenden stärker mitbestimmend in die thematische Ausrichtung der Intervention einbezogen werden. Insbesondere in Übersichtsarbeiten zu qualitativen Studien wurde die Partizipation der Zielgruppen als ein zentrales Element der kulturellen Anpassung hervorgehoben. Die befragten Expertinnen und Experten hoben in diesem Zusammenhang hervor, dass der Personenkreis in die Planung einzogen werden sollte, für den die Intervention entwickelt wird, und nicht Repräsentanten von Interessensvertretungen. Der Einbezug der Zielgruppe in die Planung lässt sich mit dem Aspekt der handlungsfeldübergreifenden Maßnahmen in Verbindung bringen. Ein Umsetzungsbeispiel bietet die Initiative „Frauengesundheit in Tenever“. Hier wurden offene Angebote, wie gemeinsame Frühstücksrunden oder Gesprächskreise, als ein Mittel verwendet, um Vertrauen aufzubauen und mehr über die Bedürfnisse der Zielgruppe zu erfahren. Diese offenen Angebote waren daraufhin der Ausgangspunkt für gezieltere Gesundheitsförderungsprogramme. Die Selbstbestimmungstheorie

(Self-Determination Theory) legt in diesem Zusammenhang nahe, dass übergeordnete Lebensziele, aber auch alltägliche Prioritäten als wichtige Quelle der Motivation für die Gesundheitsförderung genutzt werden können [53]. Insbesondere bei sozial benachteiligten Bevölkerungsgruppen ist davon auszugehen, dass ein gesundheitsförderliches Verhalten im Alltag oft nicht an erster Stelle steht, weil andere psychosoziale Belastungen vorrangig sind. Es ist daher sinnvoll, offene Angebote vorzusehen, welche an den konkreten Alltagsprioritäten der Zielgruppe anknüpfen (z.B. Fragen zu Anträgen, Möglichkeiten zur Kinderbetreuung, Wunsch nach sozialem Austausch), um diese zum Ausgangspunkt für gezieltere Maßnahmen zur Gesundheitsförderung zu machen.

Hervorzuheben sind ferner die Ausbildung und der Einsatz von Gesundheitsmediatoren mit einem ähnlichen soziokulturellen Hintergrund sowie die Einbeziehung der lokalen Akteure in die Planung und Umsetzung. Beides sind neben einer langfristigen Finanzierung wichtige Elemente für die Absicherung der Nachhaltigkeit einer Intervention. Die Gesundheitsmediatoren können darüber hinaus einen wichtigen Beitrag zur kulturellen Anpassung der Interventionsinhalte liefern. Durch den Einsatz von Gesundheitsmediatoren kann also eine weitreichendere soziokulturelle Adaption erreicht werden als durch das Übersetzen der Programmaterialien oder durch Dolmetschen.

Die Berücksichtigung der Heterogenität der Zielgruppe kann zum einem durch sehr gezielte Programme für einzelne Untergruppen erreicht werden. In der Literatur fanden sich beispielsweise spezielle Programme für übergewichtige afroamerikanische Kinder und Jugendliche. Zum anderen kann auch innerhalb eines größeren Portfolios an Interventionsmaßnahmen zwischen kulturell zugeschnittenen (z.B. geschlechtergetrennte Bewegungsangebote) und kulturell unspezifischen Angeboten (z.B. offene Laufgruppen) differenziert werden. Gerade bei Nachfahren von Migranten kann und sollte nicht von einer hohen Identifizierung mit der Herkunftskultur oder geringen Deutschkenntnissen ausgegangen werden. Die Bezugnahme auf kulturell geprägte Überzeugungen und Verhaltensweisen sollte daher mit Vorsicht erfolgen, da diese auch als unangemessene Stereotypisierungen wahrgenommen werden können. Für einen Zuschnitt der Präventionsbotschaften auf den Grad der Identifizierung mit der eigenen Herkunftskultur und anderer Faktoren bieten sich mittlerweile weitreichende IT-gestützte Möglichkeiten [54, 55]. Zu der Wirksamkeit dieser Verfahren ist allerdings noch wenig bekannt.

Dem Rapid Review vorliegender Übersichtsarbeiten zufolge liegen international einige Studien vor, in denen in kontrollierten Studiendesigns die Effekte von soziokulturell adaptierten Maßnahmen untersucht wurden. Die meisten der eingeschlossenen Treffer beziehen sich auf das Handlungsfeld Ernährung. Dies liegt vermutlich daran, dass Ernährung im Vergleich zu anderen Gesundheitsverhaltensweisen am deutlichsten eine kulturelle Komponente enthält. Weniger Reviews liegen für die Bereiche Sucht und psychische Gesundheit vor. Die meisten Interventionen wurden im Setting Kommune/Stadtteil/Quartier oder in spezifischen Settings in der Kommune (z.B. religiöse Einrichtungen) durchgeführt. Im Setting Kita oder Schule sind soziokulturell adaptierte Interventionen seltener zu finden. In einigen Fällen haben Reviews auf Migrantinnen und Migranten oder ethnische Minoritäten Bezug genommen. Dies beschränkte sich dann allerdings darauf, dass gezielt Stadtteile oder Regionen mit einem hohen Migrantenanteil angesteuert wurden. Darüber hinausgehende Maßnahmen zur soziokulturellen Adaptierung wurden in der Regel nicht beschrieben, weshalb die Reviews aus dem weiteren Bewertungsprozess ausgeschlossen wurden. Dies sollte nicht darüber hinwegtäuschen, dass Kitas und Schulen wichtige Settings für die Erreichbarkeit von Kindern, Jugendlichen und Eltern mit Migrationshintergrund sind, die aber offensichtlich weiterer Präventions- und Implementationsforschung bedürfen.

In der Gesamtbetrachtung zeigt sich eine große Heterogenität der Ergebnisse. Als belegt kann die bessere Erreichbarkeit der Zielgruppe und die bessere Akzeptanz der Inhalte von soziokulturell adaptierten Interventionen gelten [18]. Es finden sich einzelne soziokulturell adaptierte Interventionen, die positive Effekte auf das Gesundheitsverhalten berichten. Die qualitativ hochwertige Arbeit von Nierkens und Kollegen berichtet beispielsweise positive Effekte in fünf von 17 Studien [24]. Reviews, die adaptierte versus nicht adaptierte Interventionen untersuchen, können allerdings keine generelle Überlegenheit adaptierter Ansätze nachweisen. Die Untersuchung der unterschiedlichen Adaptierungsstrategien zeigte keine Überlegenheit einer einzelnen Strategie gegenüber den anderen. Vielmehr scheint die Kombination mehrerer Strategien als erfolgsversprechend. Das soziale Umfeld (Familie) und die Anbindung an religiöse Einrichtungen werden als wirksame Faktoren erzielter Gesundheitseffekte genannt. Für all diese Befunde besteht allerdings die Einschränkung, dass die Zahl der für diesen Bericht relevanten Studien in den meisten Reviews gering war. Die Stichprobengröße in den Einzelstudien war ebenfalls zum Teil sehr gering. Die Heterogenität in der Interventionsdurchführung und im Studiendesign hat bisher verhindert, dass nennenswerte metaanalytische Schätzer vorliegen. Ebenfalls wenig bekannt ist bisher die Qualität der soziokulturellen Adaptierung, insbesondere hinsichtlich der Tiefenstruktur. Diskutiert wird in den Reviews ebenfalls, ob nicht allein schon die intensivere Auseinandersetzung mit der Zielgruppe im Sinne eines Bewusstseins für deren Diversität zu einer Verbesserung der Intervention führt. Dies ist allerdings nur schwerlich quantifizierbar.

Hinsichtlich der deutschen Projektlandschaft ist festzustellen, dass sich bereits einige erfolgreich implementierte Projekte benennen lassen (siehe Anhang A5). Die meisten sind kommunal angelegt, um wohnortnahe Angebote realisieren zu können. Sie sind überwiegend themenübergreifend angelegt und bedienen sich des Einsatzes von Gesundheitsmediatoren. Die vorhandenen formativen oder prozessorientierten Evaluationen zeigen, dass gute Zugänge zur Zielgruppe geschaffen werden konnten. Es liegen auch bereits einige schriftliche Konzepte und Implementationsmanuale vor, so dass eine weitere Ausbreitung der Ansätze durchaus machbar erscheint (siehe beispielsweise MiMi, BIG, PRÄALMI). Auffällig ist jedoch das Fehlen von Outcome-Evaluationen, die zeigen, dass die Projekte tatsächlich zu Verbesserungen in relevanten Ergebnisparametern geführt haben. Die wenigen Projekte, in denen eine Outcome-Evaluation vorgenommen wurde, zeichnen sich dabei durch eine relativ geringe Komplexität der Maßnahmen aus.

Mit der Durchführung der Expertenbefragung, des Rapid Reviews und der Durchsuchung der Projektdatenbanken konnte ein umfassendes Bild über den Stand der Forschung zum Thema soziokulturell sensible Prävention und Gesundheitsförderung gewonnen werden. Die zentralen Prinzipien soziokultureller Adaptierung finden sich in allen drei Datenquellen. Die bisherige Evidenzlage erlaubt es noch nicht, die größere Effektivität von adaptierten gegenüber nicht adaptierten Interventionen als gegeben anzunehmen. Auch ist Wirksamkeit oder Unwirksamkeit einzelner Strategien noch nicht erwiesen. Mehrere Übersichtsarbeiten sprechen allerdings dafür, dass die Nutzung von mehreren Strategien zu einer besseren Wirksamkeit führt.

Zusammenfassend ergeben sich folgende Handlungsempfehlungen:

- Die in Tabelle 4 aufgeführten Strategien sollten zukünftige Projekte zur Planung der soziokulturellen Anpassung verwenden. Eine vollständige Umsetzung aller Maßnahmen ist in einzelnen Projekten sicherlich nicht zu erwarten. Jedoch ist davon auszugehen, dass bei einer Umsetzung von mehreren Strategien eine größere Wirksamkeit zu erzielen ist.

- In Abwesenheit einer eindeutigen Evidenzlage zur Wirksamkeit einzelner Strategien empfehlen sich für die Entwicklung von neuen Konzepten der soziokulturell sensiblen Gesundheitsförderung Pilotstudien, in denen die Wirksamkeit einzelner Komponenten untersucht wird. Ein mögliches Evaluationsmodell für diese Identifizierung von aktiven Interventionskomponenten ist die Multiphase Optimization Strategy (MOST) [56].
- Zu empfehlen ist auch eine vermehrte Durchführung von Outcome-Evaluationen zu den soziokulturell sensiblen Programmen in Deutschland. Bisher fehlen diese weitgehend. Durch diese Wirksamkeitsnachweise könnte zum einen die Übertragbarkeit der internationalen, vornehmlich US-amerikanischen Ergebnisse auf den deutschen Kontext sichergestellt und zum anderen eine Legitimation für die langfristige Implementierung jenseits von Projektzyklen erbracht werden.

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Anhang

A1 Suchstrategie in PubMed

BLOCK A: POPULATION		
Suchwörter	Suchart	Ergebnisse
"Population Groups"[Mesh] OR "Cultural Diversity"[Mesh] OR "Emigrants and Immigrants"[Mesh] OR "Minority Groups"[Mesh] OR "Transients and Migrants"[Mesh] OR "Refugees"[Mesh]	MeSH	284575
race* OR racial OR sociocultural OR socio-cultural OR ethnic OR ethnicity OR diverse OR diversity OR immigrant* OR immigration OR migrant* OR migration* OR emigrant* OR emigration* OR "culture-specific" OR "culture specific" OR minority OR minorities OR indigenous	Title/abstract	818624
	MeSH OR TA	1001590

BLOCK B: INTERVENTION		
Suchwörter	Suchart	Ergebnisse
"Health Promotion"[Mesh] OR "Health Education"[Mesh] OR "Primary Prevention"[Mesh]	MeSH	329026
prevention* OR ((promotion* OR initiative* OR tailor* OR intervention* OR education* OR campaign* OR action* OR adapt* OR target*) AND health)	Title/abstract	849204
	MeSH OR TA	1089434

BLOCK C: POPULATION AND INTERVENTION		
Suche	Ergebnisse	
A AND B	91630	

BLOCK D: PHYSICAL ACTIVITY		
Suchwörter	Suchart	Ergebnisse
"Exercise"[Mesh] OR "Sports"[Mesh] OR "Physical Education and Training"[Mesh]	MeSH	229876
sport OR sports OR sporting OR exercis* OR "physical fitness" OR "physical activity" OR "physical activities" OR aerobic* OR training*	Title/abstract	665456
	MeSH OR TA	757636

BLOCK E: SUBSTANCE ABUSE

Suchwörter	Suchart	Ergebnisse
"Alcohol-Related Disorders"[Mesh] OR "Drinking Behavior"[Mesh] OR "Tobacco use"[MeSH Terms] OR "Tobacco Use Cessation"[MeSH Terms]	MeSH	421189
smoke* OR smoking OR alcohol* OR cigarette* OR tobacco*	Title/abstract	665980
	MeSH OR TA	585434

BLOCK F: DIET

Suchwörter	Suchart	Ergebnisse
"Malnutrition"[Mesh] OR "Body Weight"[Mesh] OR "Diet, Food, and Nutrition"[Mesh]	MeSH	614582
nutrition* OR diet OR dieting OR dietary OR diets OR dieter OR dieters OR weight* OR overweight* OR obese* OR obesity OR "healthy eating" OR BMI OR "body mass index" OR eat*	Title/abstract	1557881
	MeSH OR TA	2247614

BLOCK G: MENTAL HEALTH STRESS

Suchwörter	Suchart	Ergebnisse
"Mental Health"[Mesh] OR "Stress, Psychological"[Mesh] OR "Social Support"[Mesh]	MeSH	181730
"sense of coherence" OR stress* OR coping OR "mental health" OR "well-being" OR "well being" OR resilience	Title/abstract	1042566
	MeSH OR TA	915067

Suche	Ergebnisse
C AND D	11690
C AND D AND date filter	10114
C AND D AND date filter AND review filter	659
C AND E	10583
C AND E AND date filter	8814
C AND E AND date filter AND review filter	341
C AND F	19692
C AND F AND date filter	16932
C AND F AND date filter AND review filter	781
C AND G	13578
C AND G AND date filter	11858
C AND G AND date filter AND review filter	648

A2 Suchstrategie in PubMed

BLOCK A: POPULATION		
Suchwörter	Suchart	Ergebnisse
diversity or immigration or minority groups or human migration or racial and ethnic groups or refugees	PsycInfo subject headings (SH)	144793
race* OR racial OR sociocultural OR socio-cultural OR ethnic OR ethnicity OR diverse OR diversity OR immigrant* OR immigration OR migrant* OR migration* OR emigrant* OR emigration* OR "culture-specific" OR "culture specific" OR minority OR minorities OR indigenous	Title/abstract (TA)	284394
	SH OR TA	346930

BLOCK B: INTERVENTION		
Suchwörter	Suchart	Ergebnisse
health education or health promotion or prevention or intervention	PsycInfo subject headings (SH)	151159
prevention* OR ((promotion* OR initiative* OR tailor* OR intervention* OR education* OR campaign* OR action* OR adapt* OR target*) AND health)	Title/abstract (TA)	256209
	SH OR TA	331891

BLOCK C: POPULATION AND INTERVENTION		
Suche	Ergebnisse	
A AND B	47492	

BLOCK D: PHYSICAL ACTIVITY		
Suchwörter	Suchart	Ergebnisse
exercise or sports or physical education	PsycInfo subject headings (SH)	46056
sport OR sports OR sporting OR exercis* OR "physical fitness" OR "physical activity" OR "physical activities" OR aerobic* OR training*	Title/abstract (TA)	311291
	SH OR TA	321036

BLOCK E: SUBSTANCE ABUSE		
Suchwörter	Suchart	Ergebnisse
drinking behavior or tobacco smoking or smoking cessation	PsycInfo subject headings (SH)	93829
(smoke* or smoking or alcohol* or cigarette* or tobacco*)	Title/abstract (TA)	152724
	SH OR TA	161343

BLOCK F: DIET

Suchwörter	Suchart	Ergebnisse
diets or body weight or nutrition or nutritional deficiencies	PsycInfo subject headings (SH)	62602
nutrition* OR diet OR dieting OR dietary OR diets OR dieter OR dieters OR weight* OR overweight* OR obese* OR obesity OR "healthy eating" OR BMI OR "body mass index" OR eat*	Title/abstract (TA)	173426
	SH OR TA	180930

BLOCK G: MENTAL HEALTH/STRESS

Suchwörter	Suchart	Ergebnisse
mental health or stress or social support	PsycInfo subject headings (SH)	169416
"sense of coherence" or stress* or coping or "mental health" or "well-being" or "well being" or resilience	Title/abstract (TA)	432593
	SH OR TA	470933

Suche	Ergebnisse
C AND D	6491
C AND D AND date filter	5842
C AND D AND date filter AND review filter A	238
C AND E	5355
C AND E AND date filter	4563
C AND E AND date filter AND review filter A	138
C AND F	5653
C AND F AND date filter	5280
C AND F AND date filter AND review filter A	208
C AND G	14872
C AND G AND date filter	12841
C AND G AND date filter AND review filter A	428

Alle Ergebnisse von 10.04.2017

A3 AMSTAR-Checklist

1. Was an 'a priori' design provided?

The research question and inclusion criteria should be established before the conduct of the review.

Note: Need to refer to a protocol, ethics approval, or pre-determined/a priori published research objectives to score a "yes."

2. Was there duplicate study selection and data extraction?

There should be at least two independent data extractors and a consensus procedure for disagreements should be in place.

Note: 2 people do study selection, 2 people do data extraction, consensus process or one person checks the other's work.

3. Was a comprehensive literature search performed?

At least two electronic sources should be searched. The report must include years and databases used (e.g., Central, EMBASE, and MEDLINE). Keywords and/or MESH terms must be stated and where feasible the search strategy should be provided. All searches should be supplemented by consulting current contents, reviews, textbooks, specialized registers, or experts in the particular field of study, and by reviewing the references in the studies found.

Note: If at least 2 sources + one supplementary strategy used, select "yes" (Cochrane register/Central counts as 2 sources; a grey literature search counts as supplementary).

4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?

The authors should state that they searched for reports regardless of their publication type. The authors should state whether or not they excluded any reports (from the systematic review), based on their publication status, language etc.

Note: If review indicates that there was a search for "grey literature" or "unpublished literature," indicate "yes." SINGLE database, dissertations, conference proceedings, and trial registries are all considered grey for this purpose. If searching a source that contains both grey and non-grey, must specify that they were searching for grey/unpublished lit.

5. Was a list of studies (included and excluded) provided?

A list of included and excluded studies should be provided.

Note: Acceptable if the excluded studies are referenced. If there is an electronic link to the list but the link is dead, select "no."

6. Were the characteristics of the included studies provided?

In an aggregated form such as a table, data from the original studies should be provided on the participants, interventions and outcomes. The ranges of characteristics in all the studies analyzed e.g., age, race, sex, relevant socioeconomic data, disease status, duration, severity, or other diseases should be reported.

Note: Acceptable if not in table format as long as they are described as above.

7. Was the scientific quality of the included studies assessed and documented?

'A priori' methods of assessment should be provided (e.g., for effectiveness studies if the author(s) chose to include only randomized, double-blind, placebo controlled studies, or allocation concealment as inclusion criteria); for other types of studies alternative items will be relevant.

Note: Can include use of a quality scoring tool or checklist, e.g., Jadad scale, risk of bias, sensitivity

analysis, etc., or a description of quality items, with some kind of result for EACH study ("low" or "high" is fine, as long as it is clear which studies scored "low" and which scored "high"; a summary score/range for all studies is not acceptable).

8. Was the scientific quality of the included studies used appropriately in formulating conclusions?

The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations.

Note: Might say something such as "the results should be interpreted with caution due to poor quality of included studies." Cannot score "yes" for this question if scored "no" for question 7.

9. Were the methods used to combine the findings of studies appropriate?

For the pooled results, a test should be done to ensure the studies were combinable, to assess their homogeneity (i.e., Chi-squared test for homogeneity, I²). If heterogeneity exists a random effects model should be used and/or the clinical appropriateness of combining should be taken into consideration (i.e., is it sensible to combine?).

Note: Indicate "yes" if they mention or describe heterogeneity, i.e., if they explain that they cannot pool because of heterogeneity/variability between interventions.

10. Was the likelihood of publication bias assessed?

An assessment of publication bias should include a combination of graphical aids (e.g., funnel plot, other available tests) and/or statistical tests (e.g., Egger regression test, Hedges-Olken).

Note: If no test values or funnel plot included, score "no". Score "yes" if mentions that publication bias could not be assessed because there were fewer than 10 included studies.

11. Was the conflict of interest included?

Potential sources of support should be clearly acknowledged in both the systematic review and the included studies.

Note: To get a "yes," must indicate source of funding or support for the systematic review AND for each of the included studies.

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A4 Ergebnisse der Qualitätsbewertung

QUALITÄTSBEWERTUNG ERNÄHRUNG		Author Year	#1 a priori design	#2 duplicate selection	#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics assessed	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriate combined	#10 pub bias assessed	#11 conflict of interests	Summe
Lagisetty 2017	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	7
Mosdol 2017	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	10
Lofton 2016	Yes	Can't answer	Yes	No	Yes	No	No	No	No	No	No	No	No	4
Sampilio 2016	Yes	No	Yes	No	Yes	No	No	No	No	No	No	No	No	3
Barr-Anderson 2014	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	7
Bender 2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	6
Lancaster 2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	5
Laws 2014	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	9
Newton 2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	6
Tovar 2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Can't answer	No	5
Towns 2014	Can't answer	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Can't answer	No	4
Walker 2014	Can't answer	Can't answer	Can't answer	No	Yes	No	No	No	Yes	No	No	No	No	2

QUALITÄTSBEWERTUNG ERNÄHRUNG		Summe										
Author	Year	#1 a priori design	#2 duplicate selection	#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics provided	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriately combined	#10 pub bias assessed	#11 conflict of interests
Barr-Anderson 2013	Yes	Can't answer	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	7
Knowlden 2013	Can't answer	Yes	No	No	Yes	Can't answer	Can't answer	Yes	No	No	No	4
Nierkens 2013	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	8
Liu 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	10
Thomson 2011	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Can't answer	No	6
Mier 2010	Can't answer	Can't answer	No	No	Yes	Can't answer	Can't answer	Yes	Yes	No	No	3
Renzaho 2010	Can't answer	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	6
Perez-Escamilla 2008	Can't answer	Can't answer	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	6
Flynn 2006	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	9
Yancey 2004	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	6

QUALITÄTSBEWERTUNG BEWEGUNG

QUALITÄTSBEWERTUNG BEWEGUNG										
Author	Year	Summe								
		#1 a priori design	#2 duplicate selection	#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics assessed	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriately combined
Barr-Anderson	2013	Yes	Can't answer	Yes	No	Yes	Yes	Yes	Yes	#11 conflict of interests
Barr-Anderson	2014	Yes	Yes	No	No	Yes	Yes	Yes	Yes	#10 pub bias assessed
Bender	2014	Can't answer	Yes	Yes	No	Yes	Yes	Yes	Yes	
Flynn	2006	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	
Ickes	2012	No	Yes	Yes	No	Yes	No	No	Not applicable	
Jenkins	2017	No	Can't answer	No	Can't answer	No	Yes	Yes	Not applicable	
Knowlden	2013	Can't answer	Yes	Yes	No	Yes	Can't answer	Yes	No	
Kong	2014	No	No	Yes	Can't answer	No	Yes	Yes	Not applicable	
Lancaster	2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Can't answer	
Laws	2014	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	
Liu	2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Mier	2010	Can't answer	Yes	No	No	Yes	Can't answer	Yes	No	

Author Year	#1 a priori design	#2 duplicate selection	#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics provided	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriately combined	#10 pub bias assessed	#11 conflict of interests	Summe
												10
Mosdol 2017	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	10
Nierkens 2013	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	8
Renzaho 2010	Can't answer	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	6
Satterfield 2003	No	Can't answer	No	Can't answer	No	Yes	No	No	Not ap- plicable	Not ap- plicable	No	1
Susharnes 2016	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Not ap- plicable	Not ap- plicable	No	7
Teufel-Shone 2009	No	Can't answer	Yes	Yes	No	Yes	No	No	Not ap- plicable	Not ap- plicable	No	3
Towns 2014	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	Can't answer	No	No	4
Whitt-Glover 2014	No	Yes	No	Can't answer	No	Yes	Yes	Yes	Not ap- plicable	Not ap- plicable	No	4
Whitt-Glover 2009	No	No	Yes	No	No	Yes	Yes	Yes	Not ap- plicable	Not ap- plicable	No	4
Yancey 2004	Can't answer	Yes	Yes	No	No	Yes	Yes	Yes	No	No	No	6

QUALITÄTSBEWERTUNG BEWEGUNG

Author	Year	#1 a priori design	#2 duplicate selection	#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics assessed	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriately combined	#10 pub bias assessed	#11 conflict of interests	Summe
Lood 2015	No	No	Yes	No	No	Yes	Yes	Yes	No	Not applicable	No	No	6
Healey 2017	No	Yes	Yes	Yes	No	Yes	Yes	No	Not applicable	Not applicable	No	No	5
Hays 2016	Yes	No	Yes	No	No	Yes	Yes	Yes	Not applicable	Not applicable	No	No	5
Ruiz-Casares 2017	No	Can't answer	Yes	No	No	Yes	Yes	Yes	Not applicable	Not applicable	No	No	4
Baker 2016	No	Can't answer	Yes	No	No	Yes	Yes	Yes	Not applicable	Not applicable	No	No	4
Clelland 2007	No	Can't answer	Yes	Can't answer	No	Yes	Yes	No	Not applicable	Not applicable	No	No	3
Cain 2016	No	Can't answer	Yes	No	No	Yes	No	No	Not applicable	Not applicable	No	No	2
Milne 2016	No	Can't answer	Yes	No	No	Yes	No	No	Not applicable	Not applicable	No	No	2
Antonio, Mapuana 2015	No	Can't answer	No	No	Yes	No	No	No	Not applicable	Not applicable	No	No	1
Acosta, 2013	No	Can't answer	Yes	Can't answer	No	No	No	No	Not applicable	Not applicable	No	No	1
Day 2013	No	Can't answer	No	No	No	Yes	No	No	Not applicable	Not applicable	No	No	1
Williams 2008	No	Can't answer	No	Yes	No	No	No	No	Not applicable	Not applicable	No	No	1

Author Year	#1 a priori design	#2 duplicate selection							#3 comprehensive search	#4 grey literature	#5 list of studies provided	#6 study characteristics provided	#7 quality critically assessed	#8 enough quality for conclusion	#9 results appropriately combined	#10 pub bias assessed	#11 conflict of interests	Summe
		Yes	No	No	No	No	No	Yes										
Bledsoe 2003	Can't answer	Yes	Yes	No	No	No	No	Yes	Can't answer	Can't answer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4
Hodge 2012	Can't answer	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8
Minichiello 2016	Can't answer	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
Sherman 2009	Yes	N/A	Can't answer	No	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes	5
Liu 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Nierkens 2013	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8
Mosdol 2017	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Gould 2013	Can't answer	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	6
Carr 2011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10

A5 Ergebnisse der Handsuche

Suchstrategien

Gesundheitliche Chancengleichheit

- Lebenswelt: Kindertageseinrichtung/Kindertagespflege ODER Schule ODER Stadt/Stadtteil/Quartier/Kommune
- Zielgruppen: Asylbewerber/-innen /Flüchtlinge/Menschen ohne Aufenthaltsgenehmigung, ODER Migrant/-innen in schwieriger sozialer Lage
- Thema: Ernährung ODER Bewegung- oder Mobilitätsförderung ODER Psychische Gesundheit ODER Stressbewältigung ODER Stärkung der individuellen Bewältigungsressourcen (z.B. Life Skills, Resilienz) ODER Stärkung sozialer Kompetenzen ODER Sucht

Anzahl der Treffer: 294

Kooperation für nachhaltige Präventionsforschung (KNP)

- Freitextsuche: Migrant/ Migration

Anzahl der Treffer: 49

Grüne Liste Prävention

- Freitextsuche: Migrant/Migration/Interkultur

Anzahl der Treffer: 18

Eingeschlossene Projekt: 17

Zusätzliche Treffer durch Expertenbefragung: 3

Gesamt: 20

Projektname	Handlungsfeld	Setting	Maßnahmen	Ergebnisse/weitere Informationen
Früh übt sich. MINIFT. Von klein auf gesund.	Übergreifend	Kita	<ul style="list-style-type: none"> ● Einzelne Module zu Bewegung, Ernährung, Stress und Elternarbeit ● Vernetzung mit Angeboten (z.B. Sportvereinen) im Stadtteil ● Einsatz von Dolmetschern zur Reduzierung von Sprachbarrieren 	<p>Keine Evaluation verfügbar Mehr Informationen unter: www.mhplus-krankenkasse.de/minift/</p>
Frauengesundheit in Tenever	Übergreifend	Kommune	<ul style="list-style-type: none"> ● Offene Treffen und Gesprächsrunden zu Gesundheitsthemen Bewegungskurse ● Psychosoziale Beratung ● Spezifische Angebote für Migrantinnen: Frauenschwimmkurse, Deutsch- und Alphabetisierungskurse, Forum junger Muslima, türkischsprachige Mädchengruppen 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: www.frauengesundheitin-tenever.de</p>
Gesundheits- treffpunkt West	Übergreifend	Kommune	<ul style="list-style-type: none"> ● Frauengesundheitstage, bestehend aus 3 Modulen (Bewegung/Entspannung, Gesundheitsinformation, psychosoziale Gesundheitsberatung) für Migrantinnen und Nicht-Migrantinnen ● Gesund durch Bewegung – Hareket ile saglik: geschlechtergetrennte Kursangebote, mehrsprachige Übungsleiterinnen und Übungsleiter, leicht verständlich aufbereitete Gesundheitsthemen, Ansprache über Einrichtungen im Stadtteil (z.B. Moschee), Kooperation mit Physiotherapie- und Hausarztpraxis ● Kicken – Sport auf der Straße: offenes Gruppenangebot für Kinder und Jugendliche, arabisch und russisch sprechende Gruppenleiter 	<p>Hinweis zu Evaluation von Kursangebot (Gesund durch Bewegung), jedoch nicht auffindbar. Mehr Informationen unter: http://www.gtp-west.de/</p>

Mit Migranten für Migranten (MiMi)	Übergreifend	Kommune	<ul style="list-style-type: none"> Ausbildung von interkulturellen Gesundheitsmediatoren Angebot von Gesundheitskursen zu verschiedenen Themen (Ernährung, Bewegung, psychische Gesundheit, Sucht) Strukturiertes Ausbildungsprogramm und standardisierte Kursmaterialien vorhanden 	Bereits in vielen verschiedenen Standorten etabliert. Prozessevaluation verfügbar (http://www.euro.who.int/_data/assets/pdf_file/0006/115485/E94018.pdf) Bisher keine Outcome-Evaluation
Bewegung als Investition in Gesundheit (BIG-Projekt)	Bewegung	Kommune	<ul style="list-style-type: none"> Partizipative Entwicklung von Bewegungsangeboten für Frauen in schwierigen Lebenslagen (mit und ohne Migrationshintergrund) Kooperativer Planungsprozess mit lokalen Akteuren Ausbildung „Sportassistentin interkulturell“ im Zusammenhang mit dem Projekt „Integration durch Sport“ 	Formative Evaluation vorhanden. Bisher keine Outcome-Evaluation Implementationsmanual verfügbar: www.big-projekt.de
Gesund essen mit Freude	Ernährung	Kommune	<ul style="list-style-type: none"> Partizipative Entwicklung von Kochkursen mit türkischstämmigen Frauen aus sozial benachteiligten Stadtteilen Zweisprachige (deutsch/türkisch) Kursmaterialien 	Keine Evaluation verfügbar. Materialien, Flyer und Leitfaden stehen auf der Website bereit: www.saglik-berlin.de
Aktionsbündnis „Gesund leben und älter werden in Eving“	Übergreifend	Kommune	<ul style="list-style-type: none"> Ausbildung von Frauen und Männern z. T. mit türkischem und arabischem Migrationshintergrund zu Gesundheitsmentor_innen (Übergewichtsprävention im Kindesalter) 	Keine Evaluation verfügbar. Mehr Informationen unter: http://www.zagg.de/gesund-sind-wir-stark/de/start/

Projektname	Handlungsfeld	Setting	Maßnahmen	Ergebnisse/weitere Informationen
Donna Mobile Gesundheits- förderung, Prävention und Qualifizierung für MigrantInnen	Übergreifend	Kommune	<ul style="list-style-type: none"> • Mehrsprachige Gesundheitsveran- staltungen, Frauencafés, Bewe- gungsangebote, Fahrradkurse, Beratungsangebote für Frauen mit Migrationshintergrund 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: www.donnamobile.org</p>
Altern in der zweiten Heimat	Bewegung	Kommune	<ul style="list-style-type: none"> • Muttersprachliche Seniorengymnastik 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: http://www.drk-darmstadt.de</p>
Transkulturelles Training AMIKO- Institut	Übergreifend	Kommune	<ul style="list-style-type: none"> • Fortbildungsangebot für Fachkräften im Gesundheitswesen und in der Sozialen Arbeit zu transkulturellen Kompetenzen 	<p>Mehrere wissenschaftliche Beiträge zum Thema Transkulturalität. Keine Evaluation des Trainings verfügbar Mehr Informationen unter: http://www.amiko-institut.de</p>
Sport integriert Niedersachsen	Bewegung	Kommune	<ul style="list-style-type: none"> • Angebote in einzelnen niedersächsi- schen Kommunen: Schwimmkurse für Menschen mit Migrationshintergrund und sozial Benachteiligte • Fahrradkurse für Flüchtlinge • Familien Sommerfest • Ausbildung Übungsleiter/innen Lizenz Breitensport für Menschen mit Migrationshintergrund 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: www.sport-integriert-niedersachsen.de/</p>
Kicking Girls	Bewegung	Kommune	<ul style="list-style-type: none"> • Fußball für Mädchen aus soziale benachteiligten Stadtteilen • Einrichtung von Fußballtrainings- gruppen für Mädchen an Schulen Vermittlung der Mädchen in Fußballvereine • Ausbildung der Mädchen zu Übungsleiterinnen • Selbstständiges Anbieten von Trainingsgruppen 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: http://www.kicking-girls.info</p>

Projektname	Handlungsfeld	Setting	Maßnahmen	Ergebnisse/weitere Informationen
Aktiv, engagiert und vernetzt im Kiez	Übergreifend	Kommune	<ul style="list-style-type: none"> • Angebote für ältere Migrant_innen und Flüchtlinge aus Südosteuropa: Informationsveranstaltungen zu altersspezifischen Themen • Freizeitangebote, Workshops, Exkursionen zu altersspezifischen Einrichtungen im Sozialraum • Muttersprachliche Informationsmaterialien • Vernetzung mit Angeboten im Stadtteil 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: http://www.suedost-ev.de/</p>
Integration durch Sport	Bewegung	Kommune	<ul style="list-style-type: none"> • Verschiedene Unterprojekte: • Zugewandert und geblieben: Ausbau der Sportangebote für ältere Migrantinnen und Migranten • ASPIRE – Integration von Geflüchteten in Europa (Entwicklung von speziellen Trainingsmodulen) • Willkommen im Sport (für Geflüchtete): Sportangebote in Flüchtlingsunterkünften, Zugänge zu Sportvereinen schaffen, interkulturelle Schulung von Übungsleiter und -leiterinnen • Starke Netze gegen Gewalt: interkulturell (Judo)kurse für Mädchen und Frauen mit Migrationshintergrund) 	<p>Projektbroschüren vorhanden. Ergebnisse der formativen Begleitforschung bisher nicht veröffentlicht.</p> <p>Keine Outcome-Evaluation. Mehr Informationen unter: www.integration.dosb.de</p>
Interkulturelles Beratungs- und Bildungszentrum für Frauen, Mädchen, Seniorinnen	Übergreifend	Kommune	<ul style="list-style-type: none"> • Schwimm- und Radfahrkurse für Frauen mit Migrationshintergrund • Gesundheitsbildung zum Thema Frauengesundheit im Rahmen von Integrationskursen 	<p>Keine Evaluation verfügbar. Mehr Informationen unter: http://www.infrau.de</p>
Fit für kulturelle Vielfalt	Psychosoziale Ressourcen	Schule	<ul style="list-style-type: none"> • Training interkultureller und sozialer Kompetenzen von Jugendlichen 	<p>Kontrollierte Studie zur Outcome-Evaluation durchgeführt, jedoch keine sign. Effekte nachweisbar</p> <p>Mehr Informationen unter: http://www.bipp-bremen.de/fileadmin/user_upload/Evaluationsstudien/FFD_Evaluation.pdf</p>

Projektname	Handlungsfeld	Setting	Maßnahmen	Ergebnisse/weitere Informationen
Primärprävention alkoholbezogener Störungen bei älteren Migrantinnen und Migranten (PRÄALM))	Sucht	Kommune	<ul style="list-style-type: none"> • Mehrsprachige, inhaltlich adaptierte Informationsveranstaltungen zum Thema Alkoholkonsum 	<p>Kontrollierte Studie (kulturell adaptierte Infoveranstaltung (n=129) vs. nicht adaptiert (n=47): positive Effekte auf Einstellungen, Verhalten und Teilnahmezufriedenheit</p> <p>Mehr Informationen unter: https://www.uniklinik-freiburg.de/fileadmin/_mediapool/07_kliniken/psy_psychiatrie/pdf/forschung/Praxis-manual.pdf</p>
Lale - iss bewusst & sei aktiv!	Ernährung und Bewegung	Kommune	<ul style="list-style-type: none"> • Ausbildung von Menschen mit Migrationshintergrund zu Gesundheitslots_innen • Kursangebote für Eltern und Kinder zu Bewegung und Ernährung 	<p>Formative Evaluation liegt vor. Bisher keine Outcome-Evaluation.</p> <p>Mehr Informationen unter: http://www.lale-nrw.de</p>
Stadtteilmütter	Übergreifend	Kommune	<ul style="list-style-type: none"> • Ausbildung von Menschen mit Migrationshintergrund zu Mittler_innen • Aufsuchende Beratung für Familien im Stadtteil 	<p>Prozessevaluation liegt vor. Bisher keine Outcome-Evaluation.</p>

A6 Extrahierte Reviews Ernährung

Author Year: Lagisetty 2017
Full Citation: Lagisetty PA, et al. (2017) Culturally targeted strategies for diabetes prevention in minority population: A systematic review and framework. <i>The Diabetes Educator</i> 43(1):54–77 doi: http://dx.doi.org/10.1177/0145721716683811
Cultural adaptation is the main focus of the review: Yes
Included studies: N=34
Settings: 32 in community centers, 2 in healthcare clinics
Population: Ranged from Surinamese in Netherlands, to African-Americans, Asian Indians in rural India, American Indians to Indian & Pakistani in Scotland and Hispanics in the USA and others. Study population sizes ranged from as low as 10 to 1638.
Designs of the included studies: 22 quasi-experimental trials, 12 RCTs
Intervention components: Lifestyle interventions – diet change/modification and PA, educational interventions to improve diabetes knowledge, family-based interventions, behavioral faith-based diabetes prevention program, peer-led diabetes interventions.
Cultural adaptation: Facilitators were community health workers (CHWs)/10 studies, CHA (Church Health Advisors) in 4 studies, dietitians in 1 study, peer resp. female educators in 3 studies, (native) lifestyle coaches in 2 studies, promotores de Salude/bicultural promotora in 2 studies, community members in 5 studies and N/A in 7; Language/linguistic concordance and/or literacy done in 22 studies and N/A in 12; 22/34 studies used community-based centers such as senior centers, social service agencies, cultural centers, and schools to culturally target their intervention. 9 used faith-based centres/churches. More than half of the studies (27/34) targeted the content of the message of their intervention, with three studies targeting the mode of delivery. Twenty studies tailored their intervention message content to the diet of the participants.
Main Outcomes: <i>Facilitators:</i> All but eight (N=27) of the interventions that used culturally targeted facilitators were successful. Faridi et al., one unsuccessful study, used CHWs yet found no significant difference in weight loss, BMI, physical activity, or dietary habits between intervention and control. Although this study used CHWs as facilitators, the authors noted that the CHWs designed their own curricula and subsequently had varied approaches with participants, an inconsistency that may explain the negative results observed. Ho et al., the second unsuccessful study, noted that their facilitators did engage the community members while planning culturally appropriate activities however they often had limited time to work with the community as they were only employed part-time. <i>Language:</i> Almost all interventions that used language as a cultural targeting strategy were successful with a statistically significant change in HgbA1C, fasting glucose, or weight loss (19/22; p<0.05). <i>Location:</i> Seven of the 30 studies using location as a means of cultural targeting were unsuccessful. Four out of the seven unsuccessful studies used community centers, such as schools and stores, and found no significant change in BMI or weight loss and three studies were conducted in faith-based centers. <i>Message:</i> Seven studies that culturally tailored the messaging were unsuccessful. Two of these studies only tailored the mode of delivery and did not tailor the content of the message.
Secondary Outcomes: Eleven studies that used all four strategies were successful. Of the 25 successful studies, 21 (84%) incorporated at least three culturally targeted domains in their study. In contrast, only one of the nine unsuccessful studies tailored to all four domains. The majority of studies culturally tailored to location of intervention, but fewer tailored to language, message and program facilitators. Of the messaging domain, however, a very small minority (4/34) tailored the mode of the delivery.

Review's conclusion: According to reviewers their findings reinforce the fact that cultural tailoring is a necessary means to adapt interventions to specific ethnic minority populations. In addition, they expand on prior work by better identifying how the effectiveness of an intervention might vary according to the number and type of culturally specific domains included. For example, within the facilitators domain, they found that the majority of studies employed CHWS or program facilitators similar to the target population in language and ethnicity. Their results apparently are in line with a prior review that found that interventions delivered through CHWs are an especially promising strategy for improving diabetes outcomes specifically in low-income and racial and ethnic minority populations.

Methodological Problems:

- Due to variability in outcomes and a limited number of randomized trials no formalized meta-analysis conducted.

Author Year: Mosdol 2017

Full Citation: Mosdol A, Lidal IB, Straumann GH, Vist GE (2017) Targeted mass-media interventions promoting healthy behaviours to reduce risk of non-communicable diseases in adult, ethnic minorities. The Cochrane database of systematic reviews 2: Cd011683 doi:10.1002/14651858.CD011683.pub2

Cultural adaptation is the main focus of the review: Yes

Included studies: Total n= 6; of interest n=3

Settings: community

Population: Spanish-speaking Latino immigrants or Latino Americans aged 18–65 (n=357)/ Chinese-American immigrants aged 15–70 years (n=725)/ African-American women aged 18–70 years (n=210)

Designs of the included studies: 2 RCTs, one cluster RCT

Intervention components: Weekly newsletters, weekly home visits or telephone calls from health promoters over the 12-week period; small group education sessions delivered by lay health workers (LHW) with follow-up calls; 60–90 min lectures, printed lecture handouts and a nutrition brochure about 2 months apart, delivered by an instructor. LHW called about 1 month after each lecture to ask them recall the lecture and remind to attend the next lecture or final assessment. Practical cooking demonstration or physical activity breaks. 20 min of each show devoted to a live 'sharing' between social worker, featured guest, and live callers

Cultural adaptation: Study 1: Targeting approach: „material presented in participants' first language (Spanish). Some cultural adaptation of targeted print condition may be assumed (off-the-shelf materials targeted to a Latino population by national health organisations), but is not described by authors. Recruitment of Spanish-speaking Latino participants only“. Study 2: Targeting approach: „the lectures were presented in the participants' preferred language (Cantonese, Mandarin, or English). Lectures and material were developed with culturally appropriate examples of common foods, relevant physical activities, and familiar portion size models for target group. A community-advisory board reviewed the material for cultural and linguistic appropriateness, with subsequent testing in focus groups.“ Study 3: Targeting approach: designed to be culturally appropriate based on formative research with 500 people from the target population. All African American female cast in the TV shows, including all experts; recruited only target population.“

Main Outcomes: Comparison 1: targeted mass-media intervention versus general population mass-media intervention – none of the 3 studies assessed this. Comparison 2: targeted mass-media intervention versus no intervention – only study 3 reported on primary outcomes: Changes in BM I were comparable in the two groups 12 months after baseline (longest follow-up, mean difference in change 0.1 kg/m², 95 % CI -0.4 to 0.6). Fat behaviour scores (no unit described, high scores reflecting high fat intake) were lower in participants who received the targeted mass-media intervention compared to the no intervention control group at 12 months (longest follow-up, mean difference in change -0.2, 95 % CI -0.3 to -0.1), while total leisure activity score (no unit described, high scores reflecting more activity) was higher in the intervention group (longest follow-up, mean difference in change 12.0, 95 % CI 1.0 to 23.0)

Secondary Outcomes: –

Review's conclusion: The evidence is insufficient to determine whether targeted mass-media interventions are more effective than mass-media interventions intended for the general population for changing health behaviours in ethnic minority populations (based on very low quality evidence; summary of findings for the main comparison). It is uncertain whether, compared to no intervention, targeted mass-media interventions may slightly improve physical activity and dietary patterns and BMI in the short term (based on the low quality evidence of a small effect for this outcome). The studies in this comparison could not distinguish between the impacts of exposure to an intervention, cultural adaptation to an ethnic minority group, and choice of mass-media channels to increase reach to the target group.

Methodological Problems: Most of the outcomes had either small effects or inconclusive confidence intervals, and the evidence of effect was low to very low quality.

- Small number of studies
- Only studies from USA considered, therefore transferability limited

Author Year: Lofton 2016

Full Citation: Lofton S, Julion WA, McNaughton DB, Bergren MD, Keim KS (2016) A systematic review of literature on culturally adapted obesity prevention interventions for African American youth. *The Journal of School Nursing* 32(1):32–46 doi:<http://dx.doi.org/10.1177/1059840515605508>

Cultural adaptation is the main focus of the review: Yes

Included studies: Total n=11, all of interest

Settings: 2 interventions were based in the home, 5 in the community, 2 after school, and 2 at summer camps.

Population: 8–17 year old African American boys and girls mostly from low-income communities; sample sizes ranged from 35 to 303

Designs of the included studies: 10 RCTs, 2 of which were trials, and 1 controlled non-RCT

Intervention components: *Study 1:* Intervention: four-week summer day camp (dance, educational games, problem solving); 8-week home-based Internet intervention (weekly log in with challenges to do at home with parents) Control: Non-GEMS 4-week summer day camp then monthly home-based Internet intervention; *Study 2:* Intervention: Twelve session GEMS Jamboree – weekly 90-min group sessions afterschool with either girls – Movin' It (PA), Munchin' It (nutrition), Taking it Home (review) – or parents – Eating and Activity Skills for Youth – Easy Moves (PA), EASY Tips (nutrition), EASY Fun (nutrition games) Control: Sessions based on global self-esteem. *Study 3:* Treatment: Twelve session home- and community-based program; delivered by AA college mentors; an interactive process between mentor and adolescent and goal setting skills Control: longitudinal investigation of growth and development *Study 4:* Intervention: 16 weeks – 45/min – weekly nutrition education; PA – 2/week for 45 min; received nutrition and PA training; CST 8 cognitive skills training) in addition Follow-up: 12 months. Control: nutrition and PA training. *Study 5:* Intervention: weekly group behavior sessions with girls and parents; met weekly in small groups of 8–15 girls for 14 weeks and then monthly 20 months for 90 min; counseling; 34 sessions total; monthly field trips Control: sessions based on global self-esteem and self-efficacy. *Study 6:* Intervention: 12-week summer day camp with nutrition (hands-on), self-esteem, and PA (warm up, group games, cool-down) daily with team building, instructional delivery, and family engagement; 12-month follow-up post YMCA; nutrition education and skills building, and self-esteem; parents invited monthly Control: basic 2-week summer camp (no intervention) content and, theme varied weekly; families invited 3/year for nutrition information. *Study 7:* Intervention: high intensity weekly behavioral group sessions conducted at churches (24–26 sessions) over 6 months behavior sessions; 1-day retreat in beginning of intervention; given two way pagers to get healthy messages; 4–6 MI phone calls Control: Moderate-intensity 1x/month (6 sessions)

Study 8: Intervention: dance/television reduction (1) Dance class at three community centers – offered 5 days/week for 2.5 hr after-school (healthy snack; homework time; dance; GEMS talk); (2) five lessons delivered in the home designed to reduce television, videotape and video game use Length: 12 weeks. Control: community health education. **Study 9:** intervention: dance/television reduction; GEMS Jewels 5 days/week for 2.5 hr (healthy snack; homework time; dance; GEMS talk); 24 home-based lessons – designed to reduce television, videotape and video game use; GEMS Jamboree – dance performances – Kwanzaa based. Control: community health education with African centered curriculum. **Study 10:** Intervention: "Girlfriends" for "KEEPS" – 2x/week for 12 weeks. Focused on increasing MVPA, decrease sedentary activity, decrease high fat foods, increase F&V, decrease sweetened beverages. Included family component—reinforcement with weekly family packets sent home; family night events; phone calls by GEMS staff; organized neighborhood walks. Control: Program unrelated to nutrition and PA. **Study 11:** Intervention: 24 months interactive behavioral education; website nutrition. Education; four F2F counseling sessions; asynchronous weekly counseling sessions. Control: passive health education

Cultural adaptation: African Americans targeted in all interventions; parents included in all; community members, stakeholders, youth peers, and parents involved in the development of the intervention in studies; beliefs and perceptions of the youth incorporated into the study in 6 cases; 2 studies (GEMS studies) incorporated the use of dance from previous pilot studies and focus groups with AA youth; formative assessment also used to gain insight into the perceptions of youth, e.g. one intervention (the Go Girls) was partially developed based on perceptions about obesity described by AA girls; cultural, societal, systemic, or structural influencers used – here text messaging was one strategy used to help youth acquire access to the Go Girls intervention and to engage peers in the study. Other structural enablers included delivering interventions in the home with AA mentors and interventionists as well as after school. The majority of the studies integrated positive behavior into the interventions. One referenced culturally diverse foods and provided nutrition education based on foods most common within the youth's cultural context. Several studies utilized surface adaptation, i.e. they included depictions of AAs or depictions of foods that are well known by members of the targeted cultural group. One other intervention also demonstrated positive behaviors by having the advisory board create a rap video about healthy eating prior to the intervention. Historical reverence and spirituality also included in some studies - e.g. the Stanford GEMS intervention integrated African and AA history and values lessons into the home-based portion of the intervention. Elements of AA culture, such as family-centered approach, collectivism, and social support, were also integrated in 3 interventions. One study also implemented tenets of Nguzi Saba, which are seven principles of Kwanzaa, a celebration honoring AA culture, during group discussions in the Taking Action Together intervention.

Main Outcomes: Of the studies in this review, only one of the studies found a significant decrease in BMI in obese to overweight children. Four studies showed no significance. Three studies demonstrated trends of BMI going up, and three demonstrated trends of BMI going down.

Secondary Outcomes: Reviewers evaluated interventions based on PEN-3 model that has 3 domains with corresponding concepts: 1. Cultural identity (person/extended family/neighborhood); 2. Relationships & expectations (perceptions/enablers/nurtures; 3. Cultural empowerment (positive/existential/negative). All 3 concepts were implemented by one trial (study 9); 3 studies (the Stanford GEMS pilot (study 8), the Memphis GEMS pilot (study 2) & trial interventions (study 5)) integrated 8/9 model concepts; a further trial (study 7) also integrated 8/9 but two (extended family and nurtures) were only partly integrated. All studies integrated nurturers to some degree, but one (study 1) addressed concepts within two of the three domains (Cultural identity and Relationships and Expectations), omitting the Cultural empowerment domain. The existential (3 of the 11 studies) and negative behavior (7 of the 11 studies) concepts within the relationships and expectations domain were the least likely to be implemented.

Review's conclusion: According to reviewers the efficacy of these interventions based on cultural adaptation was difficult to determine.

Methodological Problems: Small sample sizes in the primary studies

Author Year: Sampilo 2016
Full Citation: Sampilo ML (2016) Enhancing interventions for pediatric obesity among young latino children: A mixed methods study. Dissertation Abstracts International: Section B: The Sciences and Engineering 76(7-B(E)):No Pagination Specified
Cultural adaptation is the main focus of the review: Yes
Included studies: Total n=9, 1 on PA
Settings: 4 school-based, 3 family based, 2 community based
Population: Children from preschool to 7th grade; sample size 54–808; 3 studies targeted low-income Latino children and their families, total of 6 targeted children and their parents/families
Designs of the included studies: 6 RCTs, 2 quasi-experimental, 1 non experiment with no description of control or intervention group
Intervention components: From review not possible to define the intervention components used by studies included. However, based on description of cultural adaptations done components included nutrition, i.e. information/education (written as well as oral) regarding healthy eating while incorporating cultural aspects/preferences and physical activity.
Cultural adaptation: Curriculum/intervention material delivered bilingually; use of home and community health promoters; use of focus groups, bicultural staff; stakeholder input; pre-program focus groups addressing concerns of developing overweight since immigration; traditions of cooking; exercise that can be done at home and walking groups to address safety concerns; childcare; modifications to school, home environment facilitated by health promoters; modifying traditional favorite foods; involvement of extended family members; community gardening; provision of transportation; including culturally relevant food such as "cilantro, nopales, beans, corn, and squash" in nutrition lessons and related educational materials; using a "Latino Stoplight" guide with photos of culturally relevant foods to facilitate instruction on food categorization; using a food list to help increase parents' knowledge of "yes and no foods" based on dietary guidelines; giving program Spanish name so it's clear that directed at Latinos
Main Outcomes: Four studies reported no significant differences between intervention and comparison groups in primary outcomes, 5 demonstrated some effectiveness in producing positive health gains. Of the latter one found a significant decrease in children's BMI z-score at 1-year follow up compared to the wait-list control group, a 2nd found that change in physical fitness scores (PFS) was significantly different between intervention and control groups, with PFS increasing significantly in the intervention group and decreasing in the control group, a 3rd found a reduction in children's screen time at 1-year with a diminished intervention effect after this time, a 4th found a significant difference in dietary fiber intake between the intervention and control groups but no other differences in diet, and the 5th a significant decrease in children's BMI z-score at 12 month follow up but no significant difference in parent BMI at 12-month follow-up. In 5th, increased fitness among parents as measured by a walking test, significant improvement across all domains of children's quality of life, and a decrease in time spent engaged in sedentary behavior among parents and children (tv time, p < .05) at 12 month follow up was also found.
Secondary Outcomes: Overall, the majority of studies employed both "surface" and "deep structure" components in the cultural tailoring of the interventions. However, despite efforts at cultural tailoring, only approximately half of the interventions were somewhat effective in improving health status or improving health behavior among Latino participants with only two of six studies (33%) demonstrating changes in anthropometric measures, one which targeted preschool aged children. One interpretation of this finding is that there may still be cultural barriers in the forms of beliefs, values, or behaviors that are not being addressed and interfere with program success. It would be important to identify these potential barriers in order to proactively address them.

Review's conclusion: All studies identified described (in some fashion) including socio-cultural strategies. In some instances, these sociocultural strategies were described in depth but the underlying cultural beliefs, values, or behaviors they were intending to address were not clearly articulated. In other cases, the implementation of sociocultural strategies was described more superficially without adequate detail or explanation of what these strategies involved or looked like. This is an important observation as the interventions that fail to provide this information cannot be replicated and the strategies, without sufficient detail, cannot be employed in other programs despite their helpfulness or utility. For example, it would be important to articulate more clearly what cultural beliefs, values, or behaviors, program content and materials are consistent and not consistent with in order to facilitate participant success.

Methodological Problems: -

Author Year: Nava 2015

Full Citation: Nava LT, Zambrano JM, Arviso KP, Brochetti D, Becker KL (2015) Nutrition-based interventions to address metabolic syndrome in the Navajo: A systematic review. Journal of Clinical Nursing 24(21–22):3024–3045 doi: <http://dx.doi.org/10.1111/jocn.12921>

Cultural adaptation is the main focus of the review: Yes

Included studies: Total n=19, of interest n=16

Settings: community

Population: Navajo adults >18 yrs, Aboriginal Canadians between 5–80, Urban Aboriginal & Torres Strait Islander women aged 18–64 yrs, Pacific Islander adults ≥18 years, Pima Native Americans age 25–54, Pima Native Americans age 25–54, Native Alaskan/Native American women aged 40–64, Maori Adults, Canadian aboriginal population >18, Native Hawaiian, Filipino, or Pacific Islander adults >18 years – some explicitly included overweight persons. Sample sizes ranged from 20–1891

Designs of the included studies: 7 experimental, 9 quasi-experimental

Intervention components: *Study 1:* Store-based intervention featuring shelf labels, posters, educational displays, and radio announcements. In-store interactive sessions with cooking demonstrations, taste testing, promotional giveaways, and answering of customers' questions; *Study 2:* Regular home visits by Aboriginal health counsellors trained to assess and set goals for diet and physical activity for household members. Emphasis on decrease fat and sugared beverage consumption, increased fruit and vegetable consumption and increased physical activity. *Study 3:* Biweekly group exercise sessions, four 1-hour nutrition workshops, self-recorded exercise, and fortnightly newsletters. *Study 4:* Intervention: PILI Lifestyle Program (PLP): Six monthly 90 minute peer educator led sessions delivered in native language building on diet, exercise, stress, and behavioral weight loss strategies learnt in three-month weight-loss program. Included handouts, action plans, homework assignments, and family activities. Control: Six monthly 15–30 minute phone calls by peer educator following up on strategies learnt during three month weight loss program. *Study 5:* (1) Pima Action (intervention): Weekly group meetings with modelling and role-playing, group problem-solving, cooking demonstrations, taste testing, and grocery store tours; reinforced with home visits; increased physical activity; recommendations following ADA diet. (2) Pima Pride (control): Monthly meetings to discuss understanding and attitudes about current lifestyles of the community and to listen to local speakers on Pima culture and history. *Study 6:* Five monthly classes based on 'Strong in Body and Spirit' curriculum. *Study 7:* A culturally adapted holistic wellness program based on the 'New Leaf' and 'Native Nutrition Circles' program. 12 weekly two-hours sessions on nutrition, physical activity, tobacco use, and stress management. Recipe testing, goal setting, a program calendar, and emphasis of traditional foods and activities. *Study 8:* Community intervention involving classes on nutrition, cooking skills, label reading, recipe swapping, exercise, and smoking cessation. Also newspaper articles, advertisements, jingle and interviews on the radio, posters, and recommendations to schools on lunch policies.

Study 9: 24 month population level prevention and control program including exercise classes, walking groups, a '100 Mile club', health events, cooking demonstrations, smoking cessation groups, supermarket and restaurant tours, forums on diabetes, a DM support group and targeted education. Mass-media campaign included educational articles in local newspaper; newsletters with tips for exercise, diet and weight loss; and briefs on project events. *Study 10:* Two hours weekly interactive education sessions for 12 weeks (with a shared meal and prayer) and formation of exercise groups with aerobic exercise classes. Program used a buddy system. *Study 11:* 16 lesson DPP curriculum, monthly individual coaching sessions, diet/activity diaries, cultural adaptation allowed but core information had to be the same. *Study 12:* Eight 1.5 hour educational sessions using peer educators based on culturally adapted DPP curriculum. *Study 13:* Fortnightly three hour education/support meetings for six months involving health care providers, tribal elders, and community members. Meeting involved health check in, shared meal, nutrition education, and culturally appropriate interactive educational activities. *Study 14:* 21 day culturally appropriate community-based intervention strategy using the traditional Hawaiian diet. Evening cultural/health-education sessions. *Study 15:* 21 day dietary and lifestyle change program based on traditional Hawaiian diet. *Study 16:* 16 lesson DPP curriculum, monthly individual coaching sessions, diet/activity diaries.

Cultural adaptation: In store interactive sessions with cooking demonstrations, taste testing, promotional giveaways, and answering of customers' questions; regular home visits by native health counsellors; peer educator led sessions delivered in native language; group meetings with modelling and role-playing, group problem-solving, cooking demonstrations, taste testing, and grocery store tours, reinforced with home visits; monthly meetings to discuss understanding and attitudes about current lifestyles of the community and to listen to local speakers on Pima culture and history; culturally adapted interventions based on existing programs e.g. 'Strong in Body and Spirit', 'New Leaf' and 'Native Nutrition Circles', 'DPP'; health events; exercise classes, walking groups; interactive education sessions with a shared meal and prayer; culturally appropriate interactive educational activities ; using the traditional diet

Main Outcomes: Cultural adaptation was done in 10 of the 16 studies of interest. Statistically significant improvements regarding reduction in weight/BMI observed in 9/16 studies of interest. 2 studies demonstrated an association between intervention efficacy and participant exposure to the intervention. Case management appeared to be highly efficacious as 49% of participants met the study goal of $\geq 7\%$ weight loss post intervention.

Secondary Outcomes: –

Review's conclusion: Cultural adaptations included translation of educational material, targeting culturally important individuals and social units, and designing curriculums based on cultural concepts. Due to varying methods of cultural adaptation among these interventions, it is difficult to quantify the degree to which each method was associated with a favorable outcome, although 66% of these interventions were associated with a significant improvement in some measure of metabolic syndrome. Development of effective nutrition-based interventions to prevent and treat metabolic syndrome in the Navajo population may benefit from the incorporation of elements from several successful interventions. Level of intervention exposure, frequency of intervention activities, family and social support, cultural adaptation, and case management should be considered in the development of an intervention to address metabolic syndrome in any population. However, strategies to maximize intrinsic and extrinsic motivation are likely to vary between populations, and efforts to translate evidence into practice should acknowledge and account for these variations.

Methodological Problems: According to reviewers the low number of studies demonstrating long-term effectiveness is one limitation of this review. Only five of the studies included had outcomes measured beyond one year and only one study measured outcomes beyond three years. A good number of the studies also didn't have control groups.

Author Year: Barr-Anderson 2014
Full Citation: Barr-Anderson DJ, Singleton C, Cotwright CJ, Floyd MF, Affuso O (2014) Outside-of-school time obesity prevention and treatment interventions in African American youth. <i>Obesity reviews: an official journal of the International Association for the Study of Obesity</i> 15 Suppl 4:26–45 doi:10.1111/obr.12204
Cultural adaptation is the main focus of the review: yes
Included studies: n=28, of interest n=16, 12 described as 'treatment' interventions and not prevention
Settings: 4 in schools, 1 in school and participants' home, 1 in YMCA, 1 at summer camp and participants' home, 3 in community centres and participants' home, 1 in community clinic and participants' home, 1 in participants' home, 1 in tutoring centre, 1 in church, 1 in unspecified community location & 1 in community centre
Population: Of 16 on primary prevention 9 focused on AA girls only & a further 3 only on AA. Participants were 5–18 years old, sample sizes were 35–1563
Designs of the included studies: cluster RCT, RCT
Intervention components: <i>Study 1 (YMCA):</i> A 3 d/week PA curriculum that included cardiovascular activities, resistance exercises and behavioural skills training; behavioural skills training included interactive lessons on goal setting, progress monitoring, facilitative self-talk and identifying appealing physical activities. <i>Study 2 (elementary schools):</i> After-school program that included homework, healthy snack time and physical activity (25-min PA skill instruction, 35-min aerobic PA such as basketball, tag, softball, relay races and 20-min strengthening/stretching); incentives for attendance. <i>Study 3 (unspecific community):</i> Physical activity (hip hop aerobics) sessions; healthy eating session with taste tests of healthy foods and food preparation/games; Culturally relevant take-home material. <i>Study 4 (middle school):</i> 60–75 min sessions 4 d/week; dance, sport games and other fitness activities; pedometers provided; targeted educational handouts on nutrition and fitness; recording of fruit and vegetable intake and step counts; Poster board displays in school. <i>Study 5 (community centre & home):</i> After-school dance classes with healthy snack, homework period and discussion of increased physical activity (dance) and reduced TV screen time (TV watching, videotape use and video game use); family intervention which included role modeling for girls by African American interventionist and behaviour change; discussions about reducing screen time; newsletter. <i>Study 6 (school & home):</i> Physical activity and healthy eating, behavioural skills program based upon youth development and resiliency approach to build on family and personal strengths; family night events with interactive games and goal setting that they would continue throughout the program; phone calls by staff to check in on goals and provide support. <i>Study 7 (community clinic & home):</i> Incentive structure based upon weight loss and attendance; take-home assignments; various levels of parental involvement based on treatment condition (parents received homework assignments, participated in program with girl, or talking with daughter or attended separate similar session). <i>Study 8 (Middle school):</i> Nutrition and PA education sessions; video created that focused on positive coping strategies to increase healthy lifestyle behaviours. <i>Study 9 (school):</i> Snack and homework help; non-competitive play (five-pass basketball) for 1 h of MVPA; 3 d/week; sessions 3 d/week on behavioural skills and motivation for increasing PA at home; Practice at home – 1 d/week. <i>Study 10 (community centre):</i> after-school program with nutritious snacks and homework help; health lessons (nutrition, increasing physical activity, and relationship between nutrition intake and physical activity); 'Active activities' – dancing; team building activities. <i>Study 11 (summer camps & home):</i> Camp program to increase behavioural and psychosocial factors related to healthy foods (i.e. fruit and vegetable intake, water consumption) and physical activity; self-monitoring using pedometers; goal-setting website. <i>Study 12 (home):</i> Role modelling and support from AA college mentors; goal setting related to PA and diet; healthy snack preparation (taste tests, recipe sharing). <i>Study 13 (tutoring centre):</i> Nutrition education sessions; cooking demonstration; music and dance incorporated into nutrition and physical activities. <i>Study 14 (church):</i> Physical activity log; Aerobic dance class; physical activity education (knowledge about PA, goal setting, benefits and barriers, body image, role models, social support, hair maintenance, health statistics, solicit feedback from girls about changing environments).

Study 15 (community centers & home): Monthly field trips; nutrition and physical activity sessions (goal setting, provided feedback, encouragement to participants, skill building, self-monitoring, problem solving, and social support); parents/guardians were encouraged to make changes in the home food environment. **Study 16 (community centres & home):** After-school program with dance, healthy snack, and homework; public performances; START (Sisters Taking Action to Reduce Television) home-based screen time reduction program (self-monitoring, a 2-week TV-turnoff, budgeting viewing hours, 'intelligent' viewing); newsletters

Cultural adaptation: not specified in 5 articles; culturally sensitive programming and tailored take-home materials/Culturally tailored PA activities (use of African dance)/AA only interventionists and data collectors. Attempted to account for unique elements associated with AA culture/AA only instructors. Culturally tailored activities and programming/AA-adapted curriculum content/formative focus groups with AA sample/Culturally tailored diet and PA activities. Formative assessment assisted by advisory board of AA adolescents/culturally tailored content and programming/AA only interventionists. Incorporated AA cultural values in intervention/culturally sensitive programming and tailored take-home materials/AA culture infused in intervention activities

Main Outcomes: There was no consistent pattern of cultural adaptation or community engagement for these programs. However, regardless of the study design, after-school studies tended to positively impact physical activity, fruit/vegetable consumption and caloric intake and body composition. These interventions also reported more educational or academic activities than interventions that took place during a different time frame.

Secondary Outcomes: –

Review's conclusion: The lack of scientific rigor evident by low methodological quality scores, dearth of full trials powered to detect differences compared to the excess of pilot studies, and heterogeneity of study designs contribute to inconsistent findings that limit a clear understanding of the specific intervention strategies that are most effective. Nonetheless, we are able to conclude that some interventions in this review have shown promise to positively influence weight, physical activity, healthy eating and/or sedentary behaviours during OST: both after-school and summer programs, perhaps in combination. This is an important area to further investigate with the potential to produce a sizable public health impact on weight-related health outcomes. However, more high-quality, full-length trials with consistent methodologies are needed to truly advance understanding of the ways to maximize effectiveness.

Methodological Problems: Low quality of primary studies, Small sample sizes

Author Year: Bender 2014

Full Citation: Bender MS, Choi J, Won GY, Fukuoka Y (2014) Randomized controlled trial lifestyle interventions for Asian Americans: A systematic review. Preventive Medicine: An International Journal Devoted to Practice and Theory 67:171-181 doi: <http://dx.doi.org/10.1016/j.ypmed.2014.07.034>

Cultural adaptation is the main focus of the review: Yes

Included studies: n=7, of interest n=4

Settings: Community

Population: Japanese Americans with impaired glucose intolerance; Koreans; Filipino and Chinese pre-diabetic. Mean age for all participants 40-70 yrs. Sample sizes 48 - 673

Designs of the included studies: all RCTs, 1 pilots, 1 clustered, 1 adaptive, 1 parallel

Intervention components: **Study 1:** Goal – to improve adiposity and body fat distribution through diet and PA to reduce diabetes risk in Japanese Americans. I: AHA Step 2 diet + endurance exercise+ meetings with supervised PA and diet support first 6 months 6 month intervention. C: AHA Step 1 diet + stretching + meetings 3x/wk for supervised PA and diet support first 6 months. Maintenance for both groups: after 6 months told to maintain diet and exercise unsupervised for next 18 months Dose: 3 meetings/week × 6 months.

Study 2: Sigling Buhay Goal: to improve healthy behaviors and stages of change for Filipino Americans. IG: Curriculum: 1) intake of 5 or more servings of fruits and vegetables/day, 2) eat a low fat-diet, 3) engage in MVPA for 30 min/day × 5days/wk or more. Curriculum: monthly group education on behavior change skills needed to adopt and maintain healthy eating and regular PA practices + workshops and activities (e.g., healthy cooking, recipe contests, dancing, basketball tournaments). 18 month intervention. CG: Monthly cancer education workshops. Dose: 5 monthly group education activities/workshops × 18 months. **Study 3:** Project RICE = Reaching Immigrants through Community Empowerment Goal: improve health behaviors and clinical measures for diabetes prevention. IG: Curricula: 2hr group topical sessions × 6 on nutrition, PA, diabetes, cardiovascular disease, stress, family support, and access to health care + FU phone calls × 10 6 month intervention. CG: No details provided. Dose: Monthly 2-hour group sessions × 6, follow-up phone calls × 10. **Study 4:** Goal – determine brown rice diet effects to improve insulin resistance in pre-diabetic Chinese Americans. All participants' total energy requirements estimated to maintain body weight. 12-weeks intervention. IG: brown rice food supplies to maintain body weight were provided every 4 weeks for 3 months. Encouraged to prepare rice for daily meals with supplies provided and not to change usual patterns of cooking and eating. Dose: every 4 weeks × 3 months received brown rice food supply CG: white rice and food supplies to maintain body weight were provided every 4 weeks for 3 months. Encouraged to prepare rice for daily meals with supplies provided and not to change usual patterns of cooking and eating. Dose: every 4 weeks × 3 months received white rice food supply

Cultural adaptation: *Study 1:* Branching treadmill tests performed under physician supervision. Same investigator used standard methods for BMI measurements, Japanese American dieticians consulted on Japanese foods. *Study 2:* Intervention delivered by 2–3 health committee members per social organization. Committee member initially attended 14 weekly training sessions and monthly education session with researchers during the 18-month intervention. *Study 3:* Intervention led by a trained, bilingual Korean American CHW and several program staff. CHW and staff attended 60-hour core-competency-based training + 30 hours of additional training on mental health, motivational interviewing, and other topics. Curriculum adapted from existing materials validated in minority communities. Formative study findings used to add culturally relevant topics/strategies. All materials translated into Korean and reviewed by bilingual staff. *Study 4:* Nutrient composition of rice measured at Certified Laboratories, Inc. (Plainfield, NY) according to standardized analytical method. No formal report as to who delivered the intervention education and information

Main Outcomes: Primary outcomes of interest for review included change in PA, diet, and/or weight loss/management, (not necessarily those of studies included). Only studies 1 & 3 measured outcomes of interest for review. *Study 1:* PA: At 24 months, intervention group improved VO₂max more compared to control group ($p= .0002$). Diet: Intervention group – 79 to 88% met dietary goals of <30% calories from fat and 55–70% consumed <7% from saturated fat. Control group 59 to 79% met goals of <30% calories from fat and 77 to 88% consumed <10% from saturated fat. Weight: BMI: intervention group reduced weight and BMI more than control (all $p< .005$). *Study 2:* PA: At 18 months, the intervention group was more likely to engage in PA than control group ($p=0.02$). Diet: At 18 months, no difference between groups for fruit and vegetable intake ($p=0.16$), but intervention group was more likely to eat a low-fat diet than control ($p<0.01$). *Study 3:* PA: No significant change in either group ($p>.05$). Diet: No significant change in either group ($p>0.05$), except intervention group increased brown rice intake ($p<0.02$). Weight: No significant change in weight, BMI or hip-to-waist ratio in either group ($p>0.05$). Intervention group (23.8%) lost more than 3 pounds, but control group (47.1%) had no change in weight. *Study 4:* Diet: A brown rice diet was associated with substantial improvements in metabolic risk factors compared to white rice diet for pre-diabetic Chinese Americans (all $p< .05$). Weight: At 12 weeks only intervention group decreased weight, waist circ., BMI compared to control (all $p< .005$).

Secondary Outcomes: Cultural Adaptation Strategies & Cultural Appropriateness Total Score: From a possible total of 6 points Study 1 got 2 points; study 2, 4 points; study 3, 6 points and study 4, 1 point. Following categories under which strategies used were classified were used for the rating: a) Peripheral – meet at community sites. b) Evidential c) Constituent-involving – CBPR, community partnerships d) Socio-cultural – community members trained to facilitate intervention e) Linguistic f) Tailoring – group PA preferences

Review's conclusion: Review found evidence of efficacy for lifestyle interventions among Asian Americans promoting PA, diet, and/or weight loss was mixed, influenced by multiple design factors. Seven factors were identified that may have significantly impacted the outcomes of interest in terms of RCT quality, cultural appropriateness, and other intervention design elements. Recommendations to improve lifestyle interventions for Asian Americans include incorporating: 1) more rigorous RCT designs, 2) more objective measures in place of self-report, 3) larger Asian American sample sizes employing individual Asian groups versus aggregated samples, 4) culturally sensitive intervention designs to avoid cross contamination (as well as improving retention and efficacy), 5) individual tailoring, 6) a maintenance phase with support to improve adherence, and 7) an emphasis on modeling and PA behavior versus knowledge and didactics alone. More RCT lifestyle interventions focused in Asian Americans are needed to identify effective interventions to reduce health disparities in this at-risk population.

Methodological Problems: Overall, study outcomes and intervention design were inconsistent making comparisons and statistically valid conclusions difficult.

Author Year: Lancaster 2014

Full Citation: Lancaster KJ, Carter-Edwards L, Grilo S, Shen C, Schoenthaler AM (2014) Obesity interventions in African American faith-based organizations: a systematic review. *Obesity reviews : an official journal of the International Association for the Study of Obesity* 15 Suppl. 4:159-76 doi:10.1111/obr.12207

Cultural adaptation is the main focus of the review: yes

Included studies: n=27, of interest n=15

Settings: all in churches: 7 faith-based, 8 faith-placed

Population: Almost all were comprised solely of African American; 10 studies targeted exclusively women or girls; ages ranged from 12–87 yrs, mean 53. Only one targeted school children. Sample size ranged from 8–2 519; 10 studies had <50 participants

Designs of the included studies: 7 RCTs, 2 quasi-experimental studies, 1 non RCT (single group study), 5 pilot studies

Intervention components: S1: Intervention: church-wide program without researcher/agency involvement, Control: delayed intervention – Pastoral involvement, educational activities, church environmental changes and peer counselling (MI). S2: Intervention: self-help and church-wide activities, Control: delayed intervention – Tailored bulletins/printed materials, educational sessions, serving more F&V at church functions, gardening, community coalitions, pastor and social support, local grocer involvement. S3: Interventions: culturally sensitive self-help, 1 cue call; or culturally sensitive, 1 cue call and 3 MI calls, Control: nutrition education materials – Culturally sensitive 5 A Day self-help materials included a video, cookbook, print materials, quarterly newsletter; 3 MI counselling calls. S4: Intervention: church-wide and self-help with 2 MI counselling calls. Control: no intervention – Church-wide 5 A Day events included Eat for Life materials, education sessions, and cooking classes. Churches agreed to make at least one policy change. 2 MI calls. S5: Control: standard nutrition and PA intervention materials, Group 2: culturally targeted self-help diet and PA materials, Group 3: group 2 materials plus 4 MI calls – Groups 2 and 3: Eat for Life materials, exercise guide, exercise video, gospel music for PA; 4 MI calls (group 3). S6: Interventions: High intensity: 24 weekly group sessions; MI calls. Moderate-intensity: 6 monthly sessions – High intensity: ≥30 min of PA, meal preparation, health messages, 4–6 MI calls. Moderate-intensity: 6 monthly sessions with diet and PA information. Both: parents were invited to attend every other session. S7: Control: self-help group (Group 1), interventions. Group 2: standard behavioural intervention with weekly group sessions. Group 3: spiritual intervention with weekly group sessions – Group 1: print materials on diet and PA, health screening feedback. Group 2: diet and PA education and 30 min of PA. Group 3: group 2 components plus health messages for the pastor and church bulletins, prayer, scripture, PA to gospel music and at least one health-related event. S8: Intervention: 8 weekly group sessions, Control: no intervention – 20–30 min of PA; discussions on spirituality and health, PA and healthy eating; self-monitoring and goal setting; reinforcement, social support and stress reduction.

S9: Intervention: DPP, Control: delayed intervention – LHAs trained in DPP lifestyle strategies decided how to deliver the intervention to their church members. S10: Initial individual counselling session, then 8 weekly group sessions – Meeting with a dietitian, 30–45 min of PA, discussions about diet and PA, goal setting, and self-monitoring and reinforcement. S11 (pilot study): 3 group sessions – Skill-building to reach Five-A-Day F&V recommendations, goal setting, problem solving, tastings. S12 (pilot study): 16 group sessions – Adaptation of DPP lifestyle sessions: improving diet and fat intake and PA; social support. S13 (pilot study): Interventions, 6 group sessions, 16 group sessions – Adaptation of DPP lifestyle sessions. S14: 6 group sessions – Adaptation of DPP lifestyle sessions plus: self-monitoring, goal setting, guided discussion. [S12-14 built on each other] S15 (pilot study): 12 group sessions and weekly individual counselling sessions - Adaptation of DPP with focus on diet, using a pedometer, pastor involvement (health msg in sermons), self-monitoring, and goal setting

Cultural adaptation: Pastoral involvement, educational activities, church environmental changes and peer counselling (MI – motivational interviewing); serving more F&V at church functions, gardening, community coalitions, pastor and social support, local grocer involvement; culturally sensitive 5 A Day self-help materials included a video, cookbook, print materials, quarterly newsletter; 3 MI counselling calls; Church-wide 5 A Day events including culturally targeted self-help diet and PA materials; spiritual intervention; dance classes; adaptation of DPP by connecting faith and health; adaptation of DPP lifestyle sessions, including pastor involvement

Main Outcomes: 4/7 RCTs (studies 2, 4, 5 & 7) had statistically significant improvement in at least one outcome. Only 1 of them measured BMI, the rest measured dietary intake. Diet improved in all 4 t. 2 of the 7 mentioned a theoretical framework (S2 & S7) and S2 incorporated more than one theory. Of the 4 RCTs of interest that included group sessions or church-level activities, 2 (S2 & S4) reported positive changes in at least one outcome. Of the 6 interventions that provided print materials, videos, etc. (self-help), all but one reported improved behaviour. Studies 3–5 included MI (motivational interviewing) with other methods, diet and PA improved in the intervention group. One of 2 quasi-experimental studies (S8) had a statistically significant reduction in weight. In the second (S9), the PREDICT study, participants in the intervention group reported significantly decreased total calories and trans, mono- and polyunsaturated fat intake, but not saturated fat intake. All 4 pilot studies that measured weight and/or BMI (S12–15) reported statistically significant weight loss. Only one (S11) assessed diet and observed an increase in vegetables only.

Secondary Outcomes: All studies lasted at least 6 months. There was little difference in the results of interventions with duration of less than a year compared with longer interventions. In studies 3, 5 & 7 in which comparison groups received print materials – the intervention groups had a statistically significant improvement in outcomes. However, both the intervention and comparison groups in Project Joy (S7) had a significant improvement in fruit and vegetable intake. Multi-level interventions did not have more success than those targeting only one level. In the studies that measured weight, more faith-placed than faith-based interventions had a statistically significant reduction in weight and improving diet. However, participants in faith-based interventions were more successful at increasing PA. Lay health advisors (LHA) used in 6 of the 15 studies of interest and at least one outcome improved in 4. Only 1 of the 6 studies measured weight and had a significant reduction. Challenges encountered in these interventions included keeping the interest of participants and retaining them in studies. Participants who attended more classes/activities were more successful in achieving outcomes than those who attended fewer classes/activities.

Review's conclusion: The literature did not support our first expectation, which was that interventions with multi-level approaches would have a greater impact on weight-related outcomes than those with single-level approaches. Only six of all 27 studies included in review implemented strategies on more than one level. Only four studies implemented church-level, i.e. organizational strategies, and the extent of use of the strategies varied, so we cannot draw clear conclusions about the success of church-level strategies. The intervention strategies at the interpersonal level were very diverse and it is not clear if one strategy or combination of strategies was most useful across interventions.

No differences observed between studies that included only group sessions and those that had individual counselling, self-help and/or church-level activities, although few studies identified in this review focused solely on individual-level approaches. Expectation that studies led by LHAs would have greater impact, and peer leadership in familiar faith settings would promote sustainably optimal health behaviours and outcome was not met – instead studies without LHAs were more likely to report weight loss, compared with studies where LHAs led the entire intervention. Programs in which LHAs had the most independence (S1 & S9), resulted in limited implementation and little behaviour change, suggesting that more examination of training methods and approaches to increase sustainability is needed. Regarding whether faith-based or faith placed interventions are better, reviewers say, considering the data available, the variety of methods used and the ability of participants to add their own spiritual elements, it is difficult to tease out the true effect of faith-based curricula and their components on weight-loss interventions. The desire of church leaders and LHAs involved in these interventions to incorporate faith-based elements into secular interventions underscores the role of faith as a deep structure element in African American communities. Study 4 provided some insight about success of faith-based strategies. It incorporated successful elements from two interventions that had church-level components: Eat for Life (S3) and Black Churches United for Better Health (BCUBH) (S2). Participants in BCUBH reported that serving fruits and vegetables in church, messages from the pastor and printed materials had the most influence on increasing their fruit and vegetable intake. The investigators chose not to include community coalitions and educational sessions in this intervention, either because they were not feasible for a 'real-world' setting or were not well-received previously (S4). Some churches did continue the program or some of the healthy church-level behaviours (S10, S14), but in others, LHAs may not have adequately implemented interventions (S1, S9).

Methodological Problems: According to reviewers: In general, it is difficult to draw overarching conclusions about the effectiveness of each type of intervention because studies had multiple components that were tested as one approach. However, the possibility that intervention 'packages', i.e. components that work together rather than separately, may be relevant should be considered. Another issue is that studies that assessed obesity-related behaviours (PA and diet) reported changes in outcomes across study conditions in various ways, which limited the ability to draw conclusions about effectiveness and made comparisons across studies difficult. Generalizability of these findings is somewhat limited because most of the studies occurred in the southern United States; few were conducted in suburban areas.

Author Year: Laws 2014

Full Citation: Laws R, et al. (2014) The impact of interventions to prevent obesity or improve obesity related behaviours in children (0–5 years) from socio-economically disadvantaged and/or indigenous families: a systematic review. BMC public health 14:779 doi:10.1186/1471-2458-14-779

Cultural adaptation is the main focus of the review: yes

Included studies: n=32, of interest n=18

Settings: 8 x home-based, 7 x preschools, 3 x primary health care, 6 x community

Population: toddlers, preschoolers and their parents, in some with focus on disadvantaged and/or 1st time, low income mothers

Designs of the included studies: RCTs, quasi-experimental, cluster RCT, before and after trials

Intervention components: Studies 1–3: Aim – improved child development/diet: intensive home visiting interventions delivered antenatally from early infancy with 8–12 home visits in the first 12 to 24 months of the child's life – all use trained volunteers.

Study 4: Aim – to prevent toddler obesity and tooth decay: compared the feasibility and effectiveness of a community wide intervention, alone or in combination with intensive home visiting from birth among three distinct tribes of American Indian/Alaskan native families. The home visiting consisted of seven to 21 visits delivered by community health workers over first two years of the child's life with half of all visits occurring in the first three months, with a strong focus on supporting breastfeeding. Community wide strategies include social marketing media campaigns and changes to public health practices (e.g. hospitals becoming more 'baby friendly', eliminating free formula packs) and policy changes (e.g. replacing sugar sweetened beverages with water at events where children were present). *Study 5:* aim – obesity prevention – 16-week home visiting program (1 hour per week) delivered by an Indigenous peer educator. Intervention focused on role modelling healthy behaviours, parental feeding practices and general parenting skills to set rules and routines around food, physical activity and TV watching. *Study 6:* aim – promotion of four household routines (family meals, adequate sleep, limiting TV time, no TV in the bedroom) among racial minority families (33% Black, 52% Hispanic): intervention was delivered by bilingual health educators through four home visits and phone calls and one to two reinforcing text messages per week over six months. *Study 7:* weight loss program for overweight and obese mothers of one to three year olds. *Studies 8–11:* Aim – obesity prevention – The Hip Hop to Health Jr intervention that comprised a 40 minute educational intervention at preschool (20 minutes of physical activity and a 20 minute lesson focusing on nutrition messages) delivered three times a week for 14 weeks, supplemented with newsletters and homework assignments for parents who received a small monetary incentive for completing them. *Study 8* consisted of the standard Hip Hop intervention combined with a more intensive parental component consisting of six 90 minute group education and physical activity sessions for parents. *Study 12:* aim – obesity prevention and school readiness – The intensive six-month intervention consisted of activities for children at preschool and at home as well as monthly training sessions for parents and 20 hours of training for preschool teachers. The intervention integrated nutrition and physical activity messages into activities to promote literacy (e.g. story telling) as well as focusing on physical activity sessions and gross motor development. The parental component focused on motivating parents to engage in health promoting behaviours and modelled how to implement child activities at home. *Studies 13:* aim – obesity prevention: used community-based participatory research to engage parents in developing and testing an intervention for Head Start families with children aged two to five years. The multi-component intervention included letters to parents reporting child BMI, a health communication campaign, informal nutrition counselling integrated into Head Start family events, six-weekly two-hour education program for parents and child recreational activities. *Studies 14 & 15:* aim – improve child diet – (both based on Nutrition Education Aimed at Toddlers (NEAT) program) – program consisted of group education sessions for parents focused on knowledge and skill acquisition. *Studies 16–18* (all HEAD Start programs): aim – obesity prevention/improve child diet and maternal PA: all used group education sessions for parents (ranging from four to 12 sessions over a two to three month period). Common features of the sessions were a focus on skill building (e.g., cooking and parenting), behaviour change strategies (including goal setting and self-monitoring), building social networks and accessing local community resources.

Cultural adaptation: 1 x use of indigenous peer educators, 3 x bilingual educators/social workers, 1 x CHWs, 2 x health promoters, 2 x trained facilitators.

Main Outcomes: Delayed solid food introduction in studies 1 & 2. All 3 had positive impact on child diet at 12–24 months of age and reported longer term positive dietary outcomes. However no impact on BMI with follow-up at four years [study 1], and seven to eight years [study 3]. Study 2 did not report on BMI. Study 4: The impact on breastfeeding was mixed, with increased initiation and six month breastfeeding rates (compared to national average) in Tribe A (community alone) and Tribe B (community + home visiting) but not in Tribe C (community + home visiting). Compared to a pre-test sample of children of a similar age two years before the study began, BMI-Z scores increased in all tribes. However, the increase was less in Tribes B and C (community + home visiting) compared to Tribe A (community alone).

Study 5: intervention was effective in improving parental feeding practices (less use of restrictive feeding), reducing child energy intake and a weak trend of decreases in weight-for height z scores compared to general parenting support alone. *Study 6:* intervention improved sleep duration and decreased TV viewing and BMI at six months follow up (mean BMI difference between intervention and control groups of -0.40 kg/m² 95% CI: -0.79-0.00 kg/m²). *Studies 8–11:* intervention had a positive impact on BMI amongst Black preschool children at one and two years follow up [study 9] when delivered by trained child educators (moderate quality, mean difference in BMI between intervention and control groups at two years of -0.54 kg/m², 95% CI: -0.98 to -0.10). An effectiveness trial (low quality) using classroom teachers to deliver the intervention also showed a positive short term impact at 14 weeks on child physical activity and sedentary behaviour, but not on diet or BMI among Black preschool children [study 11]. Interestingly, when the intervention was delivered to Latino preschool children it was not effective and the authors posited that the parental component of the intervention may not have been intensive enough for the sample of low-acculturated Latinos. In response to this, 'family-based Hip Hop to Health' for Latino families was tested [study 8]. However, attendance at the parental sessions was low (only 38% parents attended at least one session) and the intervention had no impact on child diet, physical activity, sedentary behaviours or BMI at one year compared to a general health intervention. *Study 12:* intervention had a positive impact on gross motor skills, physical activity, and receptive language development (an important indicator of school readiness) but not BMI at six months follow up. *Study 14 – six month follow up* of the intervention comprising three 90 minute group education sessions revealed there was no difference between intervention and control groups in caregivers knowledge, attitudes or feeding practices or toddler diet. *Study 15 –* the addition of an extra group session (four in total) and home visiting by a peer educator over six months had no impact on parental self-efficacy or meal time behaviours despite demonstrated improvements in knowledge. *Study 13:* pilot study showed that compared with preintervention, children post-intervention had significant improvements in diet quality, physical activity, TV viewing and rates of obesity decreased by 3.9%. *Studies 16–18:* Two of the larger studies (n = 106 and n = 160) with moderate quality ratings had a positive impact on BMI at three months (mean BMI difference between intervention and control of -0.54 kg/m²) [study 16] and one year [study 18] (decrease of 9.1% in prevalence of overweight and obesity in the intervention group compared to a 16.3% increase in the control group), with the smaller low quality study demonstrating positive changes in diet following the intervention [study 17].

Secondary Outcomes: *Studies 8–11:* parental engagement in preschool-based interventions is critical to their success and that capacity to engage may differ by cultural group or be influenced by the cultural appropriateness of the program. *Studies 16–18:* programs successfully engaged parents as evidenced by high rates of attendance at the group sessions. None of the 5 studies of interest that recruited children before age two and measured anthropometric outcomes had any effect on BMI. Lack of impact of studies recruiting children before two years on anthropometric outcomes may be explained e.g. by fact that obesity prevention was not the primary aim of four out of five of the negative studies, these studies largely focused on parental feeding practices and child diet, none focused on PA and only one focused on sedentary behaviour. Impact of interventions amongst two to five year olds was greater than those in children under two years. Almost all of the studies included in review reported a positive effect on at least one obesity-related behaviour such as child diet, physical activity, sedentary behaviour and/or parental feeding practices (e.g. breastfeeding or timing of introduction of solids). The few studies that reported no impact of the intervention on obesity related behaviours or practices focused largely on knowledge acquisition [studies 17 & 18] or had minimal parental component [study 10] or low levels of parental engagement [study 11].

Review's conclusion: Common features of successful interventions for preschoolers (aged three to five years) include a dual focus on obesity prevention and school readiness, weight screening and referral, focus on household routines and an educational component for parents. Studies with positive outcomes successfully engaged parents had a strong focus on skill building (e.g. cooking skills, media literacy, communication, problem solving, conflict resolution and parenting skills), use of behaviour change strategies (such as self-monitoring and goal setting), social networking, progressive rewards systems and links to community resources. Developing culturally appropriate programs appear to be critical to engaging parents from racial minority groups. Successful interventions also engaged children in educational activities related to nutrition, physical activity, and sedentary behaviours as well as physical activity sessions focusing on development of gross motor skills. The setting used for studies targeting socioeconomically disadvantaged parents in this review reflected the age of the child. For example, the home appears to be an effective setting to deliver interventions to infants under two years of age with all of these studies having positive effects on obesity related behaviours. The findings from preschool-based interventions were mixed, with parental engagement being a critical factor to the success of interventions delivered in the preschool setting.

Methodological Problems: –

Author Year: Newton 2014

Full Citation: Newton RL, Jr., Griffith DM, Kearney WB, Bennett GG (2014) A systematic review of weight loss, physical activity and dietary interventions involving African American men. *Obesity reviews: an official journal of the International Association for the Study of Obesity* 15 Suppl 4:93–106 doi:10.1111/obr.12209

Cultural adaptation is the main focus of the review: yes

Included studies: n=17, of interest n=4

Settings: 3 x community, 1 health care union

Population: 3 focused only on AA men, one mixed males; age 40–70; sample sizes 42/182/330/479

Designs of the included studies: 2 x RCT, 2 x uncontrolled, pre-post study design

Intervention components: S1: Group 1: intensive – nutrition counselling every 4 months, monthly nutrition classes, all CARDES nutrition education materials (food cards, nutrition guide, videos/audiotapes, worksheets); focus on reducing intake of fat, cholesterol, sodium. Group 2: minimal nutrition counselling every 4 months, CARDES food cards and nutrition guide. S2: All: community-based CVD risk reduction/anger management program to decrease CVD risk factors and comorbid disorders. S3: Community-based intervention with six culturally tailored obesity and diabetes education sessions, workout activities, healthy eating/lifestyle demonstrations, pairing with primary healthcare providers and community resources. S4: Group 1: brochure plus tailored telephone education on prostate cancer. Group 2: brochure plus tailored telephone education on F&V (recommended amounts, serving size, variety, potential health benefits; focus on education, positive reinforcement, social support, overcoming barriers, eliciting commitment)

Cultural adaptation: Explicitly documented for only one study (S3): culturally tailored obesity and diabetes education sessions, workout activities, healthy eating/lifestyle demonstrations, pairing with primary healthcare providers and community resources

Main Outcomes: S1: 5% of men in the Cardiovascular Dietary Education System counselling intervention lost >5% of their body weight, although weight reduction was not targeted in this study (no details on diet-related results). S2: Positive dietary behaviour practices regarding increased consumption of fruit juices ($P < 0.003$), eating more fresh fruits and vegetables ($P < 0.001$) and less consumption of fried potatoes, French fries, and potato chips ($P < 0.005$). S3: 98% ≥ 150 min of physical activity per week; overweight/obese status decreased 7%; mean weight loss 2.5 kg. S4: Group 2 consumed fewer daily servings of F&V ($P < 0.001$), fruit alone ($P < 0.001$), and vegetables alone ($P < 0.01$) than Group 1, F&V intakes increased significantly from baseline to follow-up for Group 2 ($P < 0.001$), but not Group 1.

Secondary Outcomes: –

Review's conclusion: According to reviewers, it is difficult to determine the effectiveness of weight loss, physical activity and/or dietary interventions for African American men, largely because of the lack of publications providing data for this population. Further, although community-based studies targeted the intervention content to African American men, could recruit exclusively African American men, had an outreach and dissemination strategy, and were conducted in the participants' environment, studies included in this review lacked randomized designs and control groups, and had smaller sample sizes and shorter durations.

Methodological Problems: Often, details were lacking concerning the amount of change that occurred during the intervention, e.g. S2 reported statistically significant changes in fruit and vegetable intake, but did not give data in terms of grams or calories. Similarly, the physical activity data derived from most studies relied on self-report.

Author Year: Tovar 2014

Full Citation: Tovar A, Renzaho AM, Guerrero AD, Mena N, Ayala GX (2014) A Systematic Review of Obesity Prevention Intervention Studies among Immigrant Populations in the US. Current obesity reports 3:206–22 doi:10.1007/s13679-014-0101-3

Cultural adaptation is the main focus of the review: yes

Included studies: n=20, of interest n=16

Settings: communities including women's wellness center & ESL classes, preschools, home-based

Population: 4 x adults only, 5 x children only, 7 x pilot studies with adults and children. Ages from pre-schoolers to adults mean age 40

Designs of the included studies: 10 RCTs, 2 quasi-experimental, 4 pretest-posttest

Intervention components: Studies on adults only: S1: Intervention: Nutrition/heart health education integrated into ESL classes. Control: Attention control on stress management. S2: Intervention: traditional EFNEP classes plus six videos, weekly goal setting and review, and intervention materials including recipes. Control: traditional EFNEP classes. S3: Intervention: We Can! curriculum (parents and children separately), PA sessions (together), and a family dinner. No control group. S4: Intervention: Weekly group sessions that included a general family activity, PA, healthy meal or snack, discussion and wrap-up. Weekly family home visit. Review of baseline and post-assessment labs with clinicians. No control group. Studies on children only: S1 – 2 components delivered to children (with a parent component including newsletters): Intervention: PA (20 min of aerobic activity)+Nutrition education (20 min of nutrition activity based on hand puppets reflecting food pyramid). Control: General health. S2 – 4 components delivered to parents: Intervention: Group skill building sessions around nutrition, PA, sedentary behaviors, and building social networks. Control: school readiness activities. S3 – 3 components delivered to children, centre staff, and parents. Intervention: PA (gross motor program + outdoor play), nutrition (healthy eating using Sesame Street characters), health literacy and capacity building. Control: Delayed intervention. S4 – 2 components delivered to children: Intervention: PA (focused on group of skills from one of the three gross motor skill categories) + nutrition (Food Friends program to increase willingness to try new foods). Control: nutrition only. S5 – 3 components delivered to parents. Intervention: Coaching, mail-based education, and text-based prompt targeting family functioning, nutrition and meal patterns, and PA and sedentary behaviours. Control: Focused on healthful development. Pilot studies adults/children: S1 – 2 components: Intervention: PA (aerobics and stretching), chronic disease education. Control: No intervention. S2 – 2 components: Nutrition education (healthy food choices, portion sizes) and PA (dance and strength training). S3 – 3 components delivered to mothers and daughters: Intervention: Nutrition education, PA and behavioral counseling. Control: Educational material on nutrition and counseling plus light intensity PA. Control: Weekly meetings with instructor for 45 min + 45 min of light intensity aerobic or sports session.

S4 – 3 components delivered to mothers: Intervention: Parenting, nutrition (“Bright Futures in Practice Nutrition”) and physical activity (“Bright Futures in Practice PA”). Control: Wait list control (offered classes 1 yr. post). S5 – 3 components delivered to families: Intervention: Gardening, cooking and nutrition, social events. No control group. S6 – 3 components delivered to mothers: Intervention: Beverage consumption, physical activity, parental role modeling. No control group. S7 – 2 components delivered to children: Intervention: PA and Nutrition education. Control: General health. 3 components delivered to parents: Intervention: PA and Nutrition education, parenting.

Cultural adaptation: Bilingual paraprofessionals/promotores, monolingual Spanish speaking trained promotores, parent peer-educators

Main Outcomes: Studies on adults: 3/4 had significant effect on obesity related outcomes (BMI), one of which found a significant decrease in BMI at immediate post intervention (2 months), although this was not maintained at the 4-month follow-up. 4th study showed improvements in intermediate outcomes such as high-density lipoprotein cholesterol (HDL-C), total cholesterol (TC), and blood pressure (BP) at 3 months, but no improvements in primary obesity-related outcomes. There was actually increase in weight in both IG & CG. Studies on children: The three studies that showed improvements in BMI, (2 RCTs and 1 quasi-experimental) targeted the primary caregiver in order to influence the child's health behaviors. Pilot studies on adults (n=2) and children (n=5). One adult study showed positive effects on BMI and the other showed significant improvements in BMI at 9 months. Of those on children, two showed significant improvements in BMI: one among children with a BMI percentile > 50 and one among a subset of children who were overweight and obese.

Secondary Outcomes: Studies on children: In one of the 2 that did not find significant changes the main focus was on improving gross motor skills and a nutrition component was also included. In the 2nd (Hip Hop Health Jr. for Latino preschool children also included in Laws et al. as S8), although parents were engaged through weekly newsletters and homework assignments, their engagement was minimal. In addition, there was no evidence of community engagement to inform the cultural appropriateness of the intervention. Degree of acculturation measured only in 4/16 studies of interest (2 RCTs on children and 1 pilot study each on adults and children), either through proxy measures or acculturation scales. However, none of them reported on whether they tested acculturation as a possible moderator of the results.

Review's conclusion: Most of the interventions for adults addressed several behaviors, including nutrition and physical activity. Those that were successful among children also targeted multiple behaviors associated with obesity, including diet, physical activity, sleep, and screen time, in addition to parenting skills related to these behaviors. In addition, among children, interventions that showed stronger effects focused primarily on the caregiver and those that were preschool or child care based did not have an effect. Targeting caregivers among immigrant populations appears to be sufficient and beneficial in obesity prevention interventions, similar to what has been observed with other populations. Interventions which showed positive effects for obesity in both adults and children had a cultural focus. This focus was accomplished by incorporating an engagement component and/or participatory approach to the interventions that included integrating within community structures and settings, and leveraging community resources such as bilingual workers during project implementation. In general, interventions that did not have an engagement component, a community structure or a participatory approach did not work.

Methodological Problems: –

Author Year: Towns 2014
Full Citation: Towns C, Cooke M, Rysdale L, Wilk P (2014) Healthy Weights Interventions in Aboriginal Children and Youth: A Review of the Literature. Canadian journal of dietetic practice and research: a publication of Dietitians of Canada = Revue canadienne de la pratique et de la recherche en dietétique: une publication des Dietétistes du Canada 75(3):125-31 doi:10.3148/cjdpr-2014-006
Cultural adaptation is the main focus of the review: yes
Included studies: n=17, reporting on 7 interventions
Settings: 2 x home-based, 1 strictly school-based, 1 after-school program, and 3 mainly school-based, but with community components
Population: school children, parents/families
Designs of the included studies: S1, S2 & S9 RCTs; S3 quasi experimental using a school in another community as control. Rest are after-school programs that used single-sample pretest/posttest designs without control groups.
Intervention components: S1: 16 week high risk maternal home visiting program (Obesity Plus Parenting Support – OPPS), in which overweight or obese mothers of preschool children received obesity prevention education and parenting support, while CG received only parenting support. Intervention targeted primary care givers with focus on changing screen time behaviours through education and tips to limit screen time. S2: The Study of Health Assessment and Risk Evaluation in Aborigines Peoples (SHARE - AP) aimed to reduce energy intake and increase PA: LHWS visited intervention households regularly and assisted families in assessing and setting dietary and PA goals. Intervention also provided filtered or bottles water to IG and CG. S3: Kahnawake Schools Diabetes Prevention Project (KSDPP). First Nation Canadian primary school and community health education and behaviour modification (diet and exercise) program. 3-year program. Intervention included classroom activities and teacher training as well as community activities. S4: The Sandy lake Health & Diabetes Project (SLHDP) adopted some elements of KSDPP curriculum, then also included family component to reinforce healthy eating & PA messages with the home. S5: Pathways – primary school-based program aimed to improve diets & PA through classroom curriculum components and training of teachers and food service staff to increase PA in schools and to reduce fat and sugar in school lunches. Programme also provided activity kits for families and engaged parents in family activities. S6: An unnamed after-school program in Minneapolis provided nutrition curriculum and more nutritious dinners over a period of 7 months, as a modification of an existing after-school program. S7: Action Schools! BC aimed to improve ability of schools and educators to include diet and PA components in school curricula. Intervention encouraged production of 'action plans' by teachers and administrators as well as additional PA.
Cultural adaptation: Most interventions included some Aboriginal cultural element or other adaptation to make them more appropriate, but reviewers say these are not specified in primary studies. Elements included material about importance of traditional foods, using families as intervention sites, including activities that were adapted by local teachers to be more relevant to community.
Main Outcomes: Outcome measures varied: the 6 that measured PA/SB used some self-reporting or parent-reporting, but 3 (Pathways, OPPS and Action Schools! BC – S1, S5 & S7) also used accelerometers. Diet was mostly measured using 24-h recall, but Pathways also included nutritional analysis of school meals. None of the programs reported significant changes for PA/SB, while one of two that measured fitness as an outcome (Action Schools! BC) observed a significant change. Regarding nutrition, 4 programs reported significant positive changes: Pathways, KSDPP, SHARE-AP & SLHDP. In SHARE-AP consumption of bottled water, which was provided by the intervention, increased and seems to have led to decreased consumption of soda among all participants. However, there was no significant change in total energy intake. SLHDP observed a significant reduction in % of energy from fat among boys only and increased fibre consumption among both boys and girls. Cross-sectional component of KSDPP found a significant decrease in consumption of high fat and high sugar items between baseline and year 8, but there was also a reduction in F/V consumption.

In Pathways both 24-h recall and school menu analyses found significant reductions in total % of calories from fat and saturated fat in IG. IG also had reduced energy intake and higher carbohydrate intakes. Action Schools! BC found an increase in variety of F/V consumed per day, but no significant change in number of servings. None of the 6 interventions with obesity and overweight reduction as outcomes had a clearly significant effect. KSDPP found that average body fat in intervention school had increased less than in control school at year 2 follow-up, but cross-sectional measures found that the percentage of intervention school children with high BMI or fat had increased by year 8. SLDPP found a significant increase in both BMI and body fat among children. Results of interventions on knowledge and attitudes were mixed – SHARE-App found no significant changes in dietary knowledge or attitudes after 6 mths. SLHDP found improvements in both knowledge and dietary self-efficacy after 1 year, and that girls were more likely to intend to change their diets as a result of the intervention. The Minneapolis after-school program found a significant improvement in self-efficacy among younger children (5–10 yrs), but no change in adolescents. Pathways also found that both boys and girls experienced improvement in food choice, PA intentions and curriculum knowledge.

Secondary Outcomes: Although cross-sectional components of the KSDPP found that PA increased in some years, these had returned to baseline levels by year 8. Similarly, improvements in TV viewing seen early in the intervention had disappeared by last year of follow-up. The Action Schools! BC did not observe a significant change in minutes per day of MVPA by students, although a process evaluation indicated that teachers planned more PA. Two interventions also included significant environmental or policy components that supported behaviour change and that were expected to contribute to sustainability. SLHDP included a school-wide policy of reduced fat and sugar in school meals as well as a labelling policy in the privately owned grocery store in the community. KDSPP strengthened an existing school nutrition policy and implemented new cycling and walking paths in the community.

PLAUSIBILITY AND FIT: COMMUNITY PARTICIPATION AND CULTURAL CONTENT: Community control and involvement of community members in implementation and evaluation was an important aspect of all interventions. Intervention descriptions and process evaluations of Pathways, SHARE-AP, KDSPP, and SLHDP indicated the importance of community control over the intervention and of having Aboriginal researchers and staff. Action Schools! BC was done in ‘partnership’ with the communities concerned. Descriptions provided in all but two of the interventions (OPPS and Action Schools! BC), regarding cultural content were judged by reviewers as fitting to the populations addressed, and for 4 interventions it was deemed plausible that they had used a participatory approach. The 3 without plausibility are the Minneapolis after-school program and the OPPS, both of which the reviewers say did not describe the relationship between researchers and local communities, and the Action Schools! BC.

Review's conclusion: None of the programmes reviewed showed clear evidence of effectiveness. This applies even for SHARE-AP and KDSPP, programmes that combined participatory, community-based approaches and environmental supports for behaviour change with strong evaluation and measurement designs. Only KDSPP found some evidence of improvement in obesity, but this was not sustained. According to reviewers, this lack of demonstrated effectiveness has been observed in obesity interventions in the general population (here they cite Waters et al 2011, the update of Campbell). They say one explanation may be that aspects of the broader social and economic environment may limit the potential effectiveness of local interventions. This they say may be even more important in the case of Aboriginal children, who are more likely than others to live in social, economic and physical environments that may make change more difficult.

Methodological Problems: –

Author Year: Walker 2014
Full Citation: Walker RE, Gordon M. The Use of Lifestyle and Behavioral Modification Approaches in Obesity Interventions for Black Women: A Literature Review. <i>Health Educ Behav.</i> 2014 Jun;41(3):242–58. doi: 10.1177/1090198113492768. Epub 2013 Jul 2.
Cultural adaptation is the main focus of the review: yes
Included studies: n=28, of interest n=7
Settings: 4 x community center, 1 x church, 1 x cooperative extension store, 1 x commercial gym
Population: AA adult women
Designs of the included studies: S1: Grounded theory (intervention development); 2 × 2 factorial design (intervention evaluation), S2: Quasi-experimental, S3: 6 RCTs, S7: Prospective pilot study
Intervention components: S1: Nutritional counselling – Encourages healthy habits and behaviors, physical activity counseling, promotes social support, identifies barriers to weight loss, assess individual readiness to change (study outcomes were recruitment and intervention development). S2: Nutrition counseling – encourages healthy habits and behaviors, motivational interviewing (outcome – diet quality). S3: Nutrition counseling – encourages healthy habits and behaviors, develops an action plan, identifies barriers to weight loss, improves self-efficacy (outcome – body weight change, diet quality). S4: Nutrition counseling – goal setting, encourages healthy habits and behaviors, physical activity counseling, develops an action plan, identifies barriers to weight loss, post-intervention maintenance (outcome – body weight change, health outcomes). S5: Nutrition counseling – encourages healthy habits and behaviors, physical activity counseling, promotes social support (outcome – diet quality), S6: Nutrition counseling – goal setting, encourages healthy habits and behaviors, physical activity counseling, promotes social support, assess individual readiness to change (outcome – recruitment and intervention development). S7: Nutrition counseling, goal setting, encourages healthy habits and behaviors, physical activity counseling (outcome – body weight change)
Cultural adaptation: Intervention components (e.g. motivational interviewing, nutrition counselling, goal setting, developing an action plan or identifying barriers to weight loss) were personalized for each participant in a culturally appropriate manner. For example, a culturally relevant, personalized nutrition counseling session would begin with assessing the participant's knowledge, attitudes, and beliefs about diet/nutrition. The intervention staff member would then describe ways to prepare cultural foods using healthier methods.
Main Outcomes: S1: Lifestyle and behavioral modification components were used to successfully develop a culturally appropriate weight control intervention for Black women. Best practices were identified in this cable-TV delivered weight control intervention. S2: Compared with pre-intervention consumption, there was an increase in fruit and vegetable consumption postintervention. S3: Women in the intervention group had an average weight loss of 2.0 kg compared with an average weight gain of 1.1 kg among women in the control group. An increase in fruit and vegetable consumption was associated with greater weight loss among women enrolled in the intervention compared with women in the control group. S4: Mean weight loss was six pounds in the intervention and control groups. Systolic/diastolic blood pressure decreased by 10/6 mmHg in the intervention group compared with 5/3 mmHg in the control group. S5: Fruit and vegetable consumption significantly increased in the intervention group (9.5 servings/week) compared with the control group (1.5 servings/week) at 12-month follow-up. Dietary fiber intake significantly increased among the intervention group at 12-month follow-up by 1.7 g/day. Both groups modestly decreased consumption of fat and saturated fat calories at 12-month follow-up. S6: The Heart Healthy and Ethnically Relevant lifestyle intervention provides a framework to successfully recruit financially disadvantaged Black women in a behavioral modification program geared toward improving diet and physical activity. S7: Although showing modest improvements, Black women had less change in BMI, weight and waist circumference compared with White women when comparing pre- and post-intervention measures. All these associations were statistically significant.
Secondary Outcomes: –

Review's conclusion: Overall, findings support the use of lifestyle and behavioral modification obesity interventions for Black women as a viable and essential approach for this population rather than a focus on losing weight by itself. The benefit of proximal goal attainment has been shown to increase adherence to a physical activity regimen in Black women opposed to an outcome goal attainment. For instance, exercise adherence is more likely in Black women when there is a gradual increase in time or intensity of an exercise rather than a focus on amount of weight lost. Realistic short-term goals can serve to assist in adherence. Given this finding, interventionists may consider a refocus from "how much weight have I lost" to "how much activity have I done." In other words, more attention to promoting a healthier lifestyle and improved health behaviors can ultimately result in weight change and long-term maintenance of weight loss. Nutritional counseling was the most frequently used intervention component. Nearly 86% of the studies ($n = 24$) used this technique to encourage healthier food choices. Interventionists and health care providers must balance healthier food recommendations with the social and environmental context in which the women live, work, and play, as conditions to promote healthier food choices may be challenging.

Methodological Problems: -

Author Year: Barr-Anderson 2013

Full Citation: Barr-Anderson DJ, Adams-Wynn AW, DiSantis KI, Kumanyika S (2013) Family-focused physical activity, diet and obesity interventions in African-American girls: a systematic review. *Obesity reviews: an official journal of the International Association for the Study of Obesity* 14(1):29–51
doi:10.1111/j.1467-789X.2012.01043.x

Cultural adaptation is the main focus of the review: yes

Included studies: n=27, of interest n=25

Settings: 10 x community, 1 x home, 7 x combination of community and home

Population: 15 x AA girls only, 6 x AA girls and boys, 5 x multiethnic girls and boys, 1 x multiethnic girls only.
Age range 8–18 yrs, sample size 15–618

Designs of the included studies: 17 x RCTs (of which 15 were pilot), 8 x uncontrolled (i.e. before and after), 2 x non-randomized controlled. One was a randomized trial of three active interventions (based on intervention GO GIRLS!). Interventions ranged from 6 weeks to 2 years. 22 focussed on diet and PA, 4 on PA alone and 1 on diet alone

Intervention components: Healthy eating and PA sessions that utilized puppets and active games, Weekly newsletters and homework, monthly family events, nutrition and physical activities/contests, modifications in intervention school's food service, nutrition and PA education sessions, knowledge and skill-based education sessions, food and pedometer logs, group support meetings (separate parent/child meetings for learning component, and together for goal-setting, taste testing and snack prep for children, exercise or games for children to be active, cooking demonstration, music and dance incorporated into nutrition and physical activities, camp program to increase behavioral and psychosocial factors related to healthy foods (i.e., fruit & vegetable intake, water consumption) and PA, self-monitoring using pedometers, goal-setting website, PA (hip hop aerobics) sessions, culturally relevant take-home materials, parents/guardians were encouraged to make changes in the home food environment, field trips, after-school dance classes with healthy snack, homework period and discussion of increased PA (dance) and reduced TV screen time (TV watching, videotape use, and video game use), family intervention which included role modeling for girls by African American interventionist and behavior change discussions about reducing screen time, newsletters, public performances, START (Sisters Taking Action to Reduce Television) home-based screen time reduction program (self-monitoring, a 2-week TV-turnoff, budgeting viewing hours, "intelligent" viewing), family night events with interactive games and goal setting that they would continue throughout the program, phone calls by staff to check in on goals and provide support, skills training (problem solving, decision making, goal setting),

Interactive, computer-based nutrition education (goal-setting, problem solving), behavior counseling (art projects, poetry, journaling, behavioral contracts, and home challenges), parent programming (taught how to adapt family meals, completed activities to support daughter's healthy food choices and enhance their PA and self-esteem), incentive structure based on weight loss and attendance, PA log, aerobic dance class, PA education (knowledge about PA, goal setting, benefits and barriers, body image, role models, social support, hair maintenance, health statistics, solicit feedback from girls about changing environments), nutrition sessions (topics focused on reducing sweetened beverages, drinking low-fat milk, increasing fiber intake and fruits and vegetables), PA sessions (topics included cardio, strength, and flexibility training; utilized PA gaming video software), field trips to farmers' markets or grocery store

Cultural adaptation: not mentioned in 3 studies; 4 x limited to recruiting AA only sample; 7 x AA only sample plus tailoring/adapting programme content and messages/Focus group with AA/AAs only interventionists and data collectors/AA culture infused through matched models, music, intervention activities, language, values, social, and historical influences; incorporated AA cultural values (spirituality, expressive communication and, interconnectedness or commonality), for those not focussing on AA only – culturally relevant foods and traditional recipes, newsletters created for the family, culturally relevant music and dances, acknowledgement of community environmental, barriers to regular PA, healthful eating, social roles, and social support

Main Outcomes: *Level and Type of Family Member Involvement* – 3/18 interventions termed as prevention studies involved whole families, 3 involved multiple family members and 12 parent-child dyads only. Among the 9 termed as treatment studies, none included the whole family, four included multiple family members and five incorporated parent-child dyads only. In studies involving multiple family members, focus was mostly on children, family members were included only to provide support and there was a greater expectation for the child to attend the intervention sessions than the family members. One study found that children engaged in a family-based intervention who attended intervention sessions alone did not lose as much weight as participants whose family members were involved in some type of face-to-face contact (with or without their children). *Behavioral and Weight Outcomes* – weight-related outcomes were not considered for short-term or pilot prevention studies or any before and after (uncontrolled) studies. Among the nine treatment studies, three of the seven studies that assessed physical activity positively impacted this behavior. However, no clear pattern related to family member involvement, goal of the family member, format of the intervention delivery, and age of child emerged. Treatment studies that reported an increase in physical activity expected for all face-to-face sessions to be attended, but who attended (child vs. family member vs. both) or how the sessions were attended (separately vs. jointly) did not seem to influence physical activity changes.

Three of the four studies that assessed dietary intake reported null or opposite to expected results. Similarly, null or opposite to expected findings were reported for the three full-length treatment RCTs. The only full-length treatment study of obesity treatment in black adolescent girls identified that designed to isolate effects of different types of parent-child involvement (child or parent alone or together). No statistically significant differences were found between either group that involved parents compared to the child alone. However, weight losses were least in the child alone group (1.6, 3.7, and 3.1 kg for child alone, mother-child together, or mother-child separately, respectively). In general, both physical activity and dietary intake were positively affected in the prevention studies, regardless of study design. All fourteen of the 18 prevention studies that assessed some form of physical activity behavior and all 15 of the prevention studies that assessed some form of dietary intake were able to positively influence the behaviors. Most of the studies assessed physical activity and dietary intake using several measures; four and eight of the prevention studies also reported null or opposite to expected results for physical activity and dietary intake, respectively. Seven full-length RCTs were prevention studies. Of those, six assessed a weight-related outcome with four reporting positive effects on weight. The two RCTs reporting negative or null effects on weight had the highest methodological quality ranking of the prevention studies. The five studies that mentioned limited or no intervention cultural adaptation, reported generally favorable outcomes, although they also ranked low on methodological quality. No studies were designed to isolate effects of culturally vs. not culturally adapted interventions.

Secondary Outcomes: According to reviewers: Some patterns that surfaced are worthy of further comment. Of the nine treatment studies targeting overweight participants, five of them engaged the family members to change their own behavior and not just support the targeted child. One found that a change in parental behavior resulting in weight loss was predictive of their overweight child's weight loss in three family-based RCT studies. Although some of the findings for the five studies were non-significant (possibly due to the pilot nature of most of the studies), the outcomes tended to be more positive for weight-related behaviors and outcomes than the treatment studies that did not try to change the family member's behavior. This suggests that encouraging participating family members to change their own behavior and lose weight may be an effective strategy for overweight children to either successfully lose excess weight or prevent additional weight gain. All but two of the ten studies included in this review that engaged family members to change their own behavior expected the child and participating family member(s) to attend at least some, if not all, of the sessions together. The outcomes of the studies do not definitively ascertain that this is an effective strategy to change African American girls' behavior, but there is promise in exploring the effect of face-to-face interaction with children and their familial support network. This face-to-face contact may provide opportunity to discuss and complete activities, share knowledge, or set supportive goals that may be key for successful change. Conducting rigorous interventions to test the effect of family member attendance is a logical next step in this area of research. Findings of another study, the Wadden et al. that children engaged in a family-based intervention who attended intervention sessions alone did not lose as much weight as participants whose family members were involved in some type of face-to-face contact (with or without their children) lends possible support to this conclusion.

Review's conclusion: Overall, we were unable to draw clear inferences with respect to the most promising or effective ways of involving family members in weight interventions with African American girls. The studies reviewed here reflect the variety of approaches that can be used for cultural adaptation, including recruitment of only African American samples and instructors, emphasizing cultural norms and traditions, preparing foods and planning activities with which African Americans may be familiar, placing African American images on materials, incorporating focus group feedback of African Americans, and utilizing locations for intervention activities in primarily African American communities. Most of the studies included in this review addressed African American culture through direct targeting, cultural tailoring or a combination of these approaches. The cultural tailoring may confer familiarity and greater acceptance of the intervention but may not directly impact effectiveness. For this reason, studies that compare culturally tailored with non-tailored interventions may be difficult to implement.

While the overall quality of the available evidence was low from a study design perspective, several studies included in this review developed and implemented innovative intervention strategies (i.e., computer technology, internet delivery, theater-based education program, and active video games). The use of computer technology and internet intervention delivery attempts to lessen the burden for families to meet outside the home. Utilizing digital media to increase physical activity capitalizes on the higher than average digital media use in African American youth. Theater-based education programs have been used in overweight and obesity prevention in many studies, but this review highlights their use with African American children and families.

Methodological Problems: Assessments of patterns related to intervention approaches and effectiveness were limited to qualitative assessments of similarities or patterns based on various groupings of studies. Studies reported diverse patterns of family involvement and cultural adaptation with no use of theoretical perspectives specific to African American family dynamics incorporated. Only one pilot and one full-length study permitted a direct comparison of more than one type of family involvement and no studies permitted direct comparison of culturally-adapted vs. non-adapted approaches. Effects on behavioral outcomes and, in some cases, on weight outcomes were in the expected direction, but statistically significant results were limited.

Author Year: Knowlden 2013
Full Citation: Knowlden AP, Sharma M (2013) Systematic review of school-based obesity interventions targeting African American and Hispanic children. <i>Journal of Health Care for the Poor and Underserved</i> 24(3):1194-1214 doi: http://dx.doi.org/10.1353/hpu.2013.0129
Cultural adaptation is the main focus of the review: yes
Included studies: n=10
Settings: schools, community
Population: 4 targeted Hispanic students, 3 African American students & 3 equally towards both. Sample size varied from 60 persons to 36 schools
Designs of the included studies: 7 x RCTs, 1 x randomized control, 2 x quasi-experimental designs
Intervention components: Treatment groups: S1 (El Paso CATCH) - Children followed from third through sixth grade • Physical education and activity • Cafeteria meal quality. S2 (Hip Hop Jr) – 14-week intervention measured at postintervention with follow-up at 1 and 2 years • 40 sessions held 3 times per week • 20 minutes of education and 20 minutes of physical activity in each session • Newsletters and weekly homework for parents. S3 – 12-week intervention measured at baseline, postintervention, and 6 months • 12 weeks of daily sessions followed by 12 weeks of bi-weekly sessions • Nutrition instruction and physical activity training • Biweekly quizzes • Goal setting reinforced with point system • Monthly parent training. S4 (Get Moving!) – Five-to-seven-consecutive-school-day intervention measured 3 months prior and 3 months postintervention • Education curriculum regarding physical activity and sedentary behavior • Students participated in group activities. S5 (TAAG): 3- year intervention with baseline measures taken in sixth grade and follow-up measures taken in eighth grade • Health education • Physical education • Training for program maintenance after program terminated • SOFIT system for observing fitness instruction time. S6 – 16-week intervention measured at baseline, and 1 year • Nutrition education with emphasis on culturally specific foods • Exercise education • Coping skills training • Health counseling. S7 (HOPS/OWG) – Two-year intervention measured at baseline, year 1 and year 2 • Inclusion of healthy foods in school- provided meals • Healthy lifestyle curriculum delivered to children, parents, teachers, and school staff • Fruit and vegetable gardens at schools • Increased physical activity, opportunities during school day. S8 (New Moves!) – 16-week intervention measured at baseline and 9 month follow-up (1 academic year) • New Moves physical education class • Educational workbooks • Motivational interviewing • Lunch socials with group discussions • Parent outreach activities. S9 (TEAM Mississippi) – 9-month intervention (1 academic year) measured at baseline and postintervention • Family- and school-based nutritional and physical activity events • Health education • Replaced school lunch deep frying equipment with baking ovens. S10 (ACT) – 17-week after-school intervention (1 academic year) measured at baseline, 9 weeks (mid-intervention), postintervention, and 2 weeks follow-up • Physical activity component • Homework/snack • Behavioral skills and motivational strategies to increase physical activity in participants' social and home environment
Cultural adaptation: culturally relevant games, songs, and dancing (Hip Hop Jr); promotional animated characters used to deliver the nutritional curriculum converted from Hearty-Heart and Friends to the CATCH Amigos; monthly parent training; nutrition education with emphasis on culturally specific foods; healthy lifestyle curriculum delivered to children, parents, teachers, and school staff; motivational interviewing • lunch socials with group discussions • parent-outreach activities; Family- and school- based nutritional and physical activity events, monthly nutritional and physical activity events that coincided with popular community activities (TEAM Mississippi). Behavioral skills and motivational strategies to increase physical activity in participants' social and home environment (ACT)

Main Outcomes: Nine of the interventions measured body composition at baseline and follow-up, with five of these reporting positive effects on one or more adiposity indexes. Programs that affected body composition all included physical activity and nutritional components while three of these programs modified school meals. In addition, parents were involved in achieving intervention objectives to some capacity. Cultural tailoring was critical to those interventions that were able to improve body composition: The El Paso CATCH program highlighted the importance of cultural tailoring for nutritional components of an intervention, The Hip Hop to Health Jr. program highlighted some important cultural implications pertinent to interventions targeting African American and Hispanic children & The TEAM Mississippi intervention included monthly nutritional and physical activity events that coincided with popular community activities. Integration of intervention activities with pre-established community undertakings assisted with improving participation rates and reduced costs associated with program promotion. For example, the interventionists designed a healthy eating initiative in which schoolchildren and parents created healthy meals for a tailgating party for the local high-school football game. The researchers also designed a parent-child-soft-ball throw contest for the beginning of the baseball season. Prizes for the various community competitions included cooking and physical activity equipment. Socio-ecological and multi-level models: Evidence of the limitation of the school environment for addressing childhood obesity was demonstrated through the Healthier Options for Public Schoolchildren (HOPS)/Organ Wise Guys (OWG) intervention. Although the program produced positive outcomes on body composition, diastolic blood pressure increased in the children over the summer.

Secondary Outcomes: A majority of the programs (n=8) were rooted in theoretical frameworks; however, only two interventions explicitly operationalized the constructs of the theories they applied.

Review's conclusion: Although schools are important milieus for addressing health behaviors, it is unlikely that targeting any one environment will have a dramatic impact on obesity prevalence. All but two interventions expanded beyond individual-level theoretical approaches to include ecological models of behavior change. Inclusion of family was an essential component of those interventions that successfully affected body composition. The Hip Hop to Health Jr. program and TEAM Mississippi interventions succeeded due to the exciting nature of the program modalities.

Methodological Problems: Only of the programs included process evaluation, one of which limited process evaluation to only participant satisfaction. In translating efficacy interventions to effectiveness interventions, interventionists should conduct a needs assessment prior to implementation to provide fidelity evaluation standards. The El Paso CATCH intervention was a quasi-experimental effectiveness trial based on the national, evidence-based CATCH program. Training sessions for the intervention emphasized adaptation over program fidelity. Interventionists were instructed to modify the program based on the needs of the students, the school district, and state mandates. By allowing for malleability of the original program, El Paso CATCH was able to slow the risk of overweight or overweight in low-income Hispanic children. These results differed from the national CATCH trials which were unsuccessful at influencing overweight outcomes. In the El Paso CATCH program, the researchers compromised fidelity for flexibility. It is important to recognize that intervention fidelity is a critical component of effectiveness trials. Without program fidelity and component analysis there is no way to confirm which components of the intervention resulted in positive outcomes. In the absence of program fidelity the rationale for positive outcomes become left to speculation. Incorporation of a needs assessment prior to implementation of an intervention can allow researchers to adjust the evidence-based programs to the needs of minority children while still allowing for measurement of program integrity.

Author Year: Nierkens 2013

Full Citation: Nierkens V, et al. (2013) Effectiveness of cultural adaptations of interventions aimed at smoking cessation, diet, and/or physical activity in ethnic minorities. a systematic review. PloS one 8(10):e73373 doi:10.1371/journal.pone.0073373

Cultural adaptation is the main focus of the review: yes

Included studies: n=17; of interest n=9; 4 on diet, 1 on PA, 3 on PA and diet combined and 1 on all three behaviors

Settings: (Not always stated in table, rather town/region): Inner-city health centres, home environment, Chinese, AA churches, community center

Population: 9 targeted AAs, 3 Latinos, 1 Chinese Americans

Designs of the included studies: 11 of the 13 studies of interest were Randomized Controlled Trials (RCT's). Two studies used a quasi-experimental design

Intervention components: *Studies on diet & PA:* S1: IG – Standard care plus consultation with linguistically and culturally sensitive case manager (registered nurse). Case management involved individual sessions using standardized clinic protocols based on ADA recommendations, and meeting patients' needs as needed (e.g. referral of community resources). CG – Standard care by physician and/or nurse practitioners: Standardized diabetic education materials in Spanish and English tailored for the local population provided at initial clinic visit. S2: A: Clinic (4) + community based (2 group sessions and monthly telephone contact with (lay) community DM advisor), B: Clinic only –4 clinic visits. C: Minimal intervention. S3: All African-American intervention groups vs. Mixed race intervention groups all getting 20 weekly group sessions led by an African-American interventionist trained on culturally appropriate delivery of the program. S4: Faith-based component added to the culturally tailored weight loss intervention as in the control group. S5: PC + HE + CHW (community health worker) vs. PC + HE (Health Education): PC (provider counseling) only in CG. S6: Combined intervention (TPV + LHA) vs. Theory based training for the LHA to disseminate info and promote interactions and activities. *Diet only:* S7 – Behaviorally and culturally tailored magazines (BCT + CRT) vs. Behaviorally tailored magazines (BCT). S8: IG – Tailored print newsletters and activity insert as in the tailored print condition. In addition: weekly home visits or telephone calls from sequentially assigned promotoras over a 12-week period, CG – 12 weeks of tailored print newsletters (based on baseline data) and activity inserts mailed to their homes. S9: The spiritually oriented bulletin vs. The expert oriented bulletin. S10: Newsletters targeted at one of the 16 ethnic identities (the 16 types were based on various combinations of five core types: assimilated, Black Americans, Afrocentric, Bicultural, and Multicultural, with cultural mistrust as subtypes of the Black American and Afrocentric identity types). E.g. risks of Black Americans on chronic diseases were specified for participants with a Black American EI. vs. General targeted newsletters for a Black-American audience with a slight untailedored, ethnically neutral graphics accomplished by generally featuring images without people or other racial or ethnic cues. Slight ethnocentric focus. *PA only:* S11: 8-week walking program similar to CG plus culturally sensitive monitor by phone every week including: (i) Emphasize Chinese cultural value of authority (opinions of people whom they respect). (ii) Family member involvement (signing informed consent by one of family members). (iii) Harmony and balance (harmony with the natural environment, social environment, and family is a way of life and will promote health and prevent illness). S12: IG – Culturally Sensitive Exercise Counseling (CS), identical to SB except for 4 culture specific key elements (surface- & deep-structure): all group members were African- American (AA) & he sessions were led by AA, CG2 – Standard Behavioral Exercise Counseling (SB), 10 group intervention sessions over 6 months, weekly during month 1, biweekly during month 2 to 3 and monthly during months 4 to 6, CG1 – Physician Advise (PA), a minimal treatment corresponding to the exercise guidelines that a healthcare provider would typically give to a sedentary individual. *All three behaviours:* S13 – IG – Care took place at a nonclinical site in the community. Physical assessment, evaluation for pharmacotherapy and monitoring adherence done by nurse practitioner. Smoking cessation and exercise counseling by community health worker. All siblings received pharmacy card for free pharmacotherapy, CG – individually tailored recommendations specific to the individual's risk factor status

Cultural adaptation: N-Promotora (and tailored print), cultural tailoring by CHW, family educational sessions, use of culturally adapted materials, counseling by community health worker in nonclinical site in community, easy access to free pharmacotherapy, community-based group sessions including cultural adaptation to participants, monthly telephone contact with lay community health advisor, group composition, faith-based component, use of LHA, adaptation of culturally relevant stories, spiritually orientation of health message, targeting information at ethnic group, incorporating cultural values, involvement family, only African-American group members and counselors, location – incorporating socio-cultural values and cultural values regarding exercising

Main Outcomes: Only 2 out of the 13 studies of interest that tested one or more cultural adaptations found statistically significant results on the effectiveness of cultural adaptations S1 & S13). S1, one of six studies regarding diet and PA demonstrated effectiveness on primary outcomes – study however aimed at improving diabetes care and health measures, i.e. secondary prevention. S13, which targeted smoking, diet and PA, reported effectiveness on smoking behavior and energy expenditure. Study however did not find any significant effects regarding the outcomes BMI, LDL cholesterol and metabolic equivalent at one year follow-up. *Diet:* The studies of interventions aimed to change diet all assessed one type of cultural adaptation instead of a package of different cultural adaptations. In one study, the effectiveness of targeting messages to the ethnic identity of respondents by using untailored, ethnically neutral graphics versus newsletters with information targeted at ethnic identity in a study population of African Americans was tested. A significant increase in fruit and vegetable intake was only found for a subpopulation of participants with Afrocentric identity but not for the total group. *PA:* The two culturally adapted interventions aimed at increasing PA without treatment effect tested a package of cultural adaptations.

Secondary Outcomes: Five broad categories of adaptations distinguished: level of adaptation, i.e. surface-vs. deep-structure; cultural values vs. interventions involving community health workers or lay health advisors; incorporating family vs. religious values; interventions employing intensive vs. non-intensive strategies; and use of a package of adaptations vs. one type of adaptation. *Surface- vs. deep-structure adaptations* – All in all authors found no indication that the level of adaptations influenced effectiveness. *Adaptations based mainly on cultural values vs. involvement of lay health advisors/community health workers* – No pattern of effectiveness when we distinguished the studies on the basis of adaptations that involved community health workers or lay health advisors versus adaptations mainly based on incorporating cultural values into intervention materials or in the counseling conducted by professionals observed. *Distinguishing incorporating family versus religious values* – topics used in the cultural adaptations, i.e. religious values, family values and/or family involvement and other cultural values which were not further specified could be distinguished. Statistically significant effects on primary outcomes were found by three interventions (of four – all on smoking) that incorporated family values and/or involved family members and by none interventions (of five) that incorporated religious values. *Intensity of the adaptation* – In 9 of the 17 studies, the cultural adaptation implied an increase of the intervention's intensity (e.g. extra sessions with a lay health advisor). This was the case in all studies that reported statistically significant effects on primary outcomes. *Number of adaptations tested* – Some of studies that incorporated a package of adaptations, e.g.; additional proactive calls together with tailoring to cultural values reported statistically significant effects. Studies using one type of adaptation, e.g. use of homogeneous groups, didn't show statistically significant effects (n= 8).

Review's conclusion: In five studies the adapted intervention had a positive statistically significant effect on the primary outcomes. These were mainly interventions that targeted smoking cessation. Twelve studies showed no statistically significant effects on primary outcomes, although some studies presented trends favorable for cultural adaptations. We observed that interventions incorporating a package of cultural adaptations, cultural adaptations that implied a higher intensity and those incorporating family values were more likely to report statistically significant effects. The results of our review indicate that: 1) Culturally targeted interventions may be more effective if cultural adaptations are implemented as a package of adaptations, the adaptation addresses family influences, and where the adaptation implies a higher intensity of the intervention; 2) Adaptations in smoking cessation interventions seem to be more likely to be effective than adaptations in interventions aimed at diet and PA; 3) More systematic experiments are needed in which the aim is to gain insight in the best mix of cultural adaptations among diverse populations in various settings, particularly outside the US.

Methodological Problems: The finding that including cultural adaptations is likely to result in a more intense intervention may reflect that enhancement of the intervention is an important aspect of the cultural adaptations. Most study populations in studies incorporating cultural adaptations have lower educational levels and are living in disadvantaged circumstances. It's possible that more time and attention is needed to make the information understandable to these groups and that the effects of the included studies are also attributable to the adaptation to lower health literacy. This implies that adaptations to characteristics other than norms and values should also be taken into account when developing interventions.

Author Year: Liu 2012

Full Citation: –

Cultural adaptation is the main focus of the review: yes

Included studies: all in all 7 reviews and 107 primary studies included: 2 reviews on smoking, 2 PA, one Type 2 diabetes (secondary prevention), 1 CVD and 1 obesity. 23 of primary studies were on smoking, 10 PA, 57 PA & diet, 16 PA and 1 all 3. Children/adolescents as well as adults focussed on

Settings: schools, community, churches etc

Population: 91/107 primary studies focused on AA, 7 on Chinese, 8 on South Asians and 1 was multiethnic. CVD and obesity reviews focussed on AA (diabetes on children), 1 smoking on AA and other on Asian American, and both PA reviews on AA, one of them only women

Designs of the included studies: 7 systematic reviews, all types of study designs, including experimental studies (controlled and uncontrolled studies), observational studies (prospective cohort studies) and evaluation studies using qualitative methods. Interventions at any level, ranging from individual to organisational, institutional and environmental, were eligible for inclusion

Intervention components: diverse, hence focus only on those with *Direct comparison of adapted with non-adapted/standard interventions* – S1 – Kreuter et al 2005 – healthy eating (AA): Compared intervention of six magazines to increase fruit and vegetable consumption. Four arms: magazine stories were tailored to behaviour (BCT), culture (CRT), behaviour + culture (BCT + CRT) or control (delayed intervention). S2 – Ard et al 2008 – PA & healthy eating (AA): Compared all African American group sessions with mixed race group sessions for weight loss. S3 – Resnicow et al. 2005 – PA & healthy eating (AA): Compared three church-delivered interventions: standard education materials vs. culturally adapted education materials vs. culturally adapted education materials and four motivational interviewing telephone counselling calls. S4 – Yanek et al 2001 – PA & healthy eating (AA): Compared three church-based interventions: standard group sessions vs. standard group sessions and spiritual/culturally adapted component vs. non-spiritual self-help materials: *Comparison of adapted with adapted plus an additional component interventions*: To increase effectiveness, some studies trialled the addition of a discrete adaptation. For example, a healthy eating intervention conducted by Resnicow et al. (2005) for an African American population ($n = 560$) utilised a RCT design to assess the addition of a heightened degree of cultural adaptation to an intervention that was already adapted for this population. Participants were randomised to receive magazines promoting fruit and vegetable intake over a 3-month period. The control group newsletters targeted a general 'black American' audience with minimal Afrocentric focus and the graphics were untailored and ethnically neutral (e.g. no people featured). The intervention newsletters were specifically adapted to 16 levels of ethnic identity as assessed by the Black Identity Classification Scale. Several studies examined the addition of a religious or spiritual component to an already culturally adapted intervention. E.g. Campbell et al. (1999) with a rural African American population. The study was part of a larger study called Black Churches United for Better Health (BCUBH), which delivered a multilevel, multicomponent healthy eating intervention. A total of 10 counties 320 (with 50 churches) were pair matched and randomised to receive either the intervention or the delayed intervention. The intervention included computer-tailored bulletins, healthy eating teams and lay health advisors, education sessions and cooking classes.

Environmental modifications were also made to increase fruit and vegetable availability within the churches and at points of purchase in the community. For this study, the 25 churches ($n = 2519$) initially randomised to the intervention group were further randomised to receive a spiritual or pastor-oriented bulletin or an expert-oriented bulletin to test the effect of the spiritual component ($n = 459$). Both bulletins were designed to promote fruit and vegetable intake and were tailored to participants according to their baseline assessments for factors including stages of change, perceived risk and barriers and social support. Each bulletin was also tailored to the participant's church name and contained a traditional African American fruit and vegetable recipe. The spiritual bulletin included a message from the pastor, a photo of the pastor, a 'five-a-day' grace, spiritual language, biblical references and articles written by church members. The expert bulletin referenced healthy eating research.

Cultural adaptation: 46-item Typology of Adaptation reported in all 107 primary studies included in review (this includes smoking cessation as well as some secondary prevention studies) with examples presented on pg 66 of manuscript (p83 of pdf)

Main Outcomes: Systematic reviews included: *Focus obesity* - Hudson 2008: reviewed obesity prevention interventions adapted for African Americans. Twenty-eight studies were included; six of these were experimental studies (one of these six was not explicitly adapted, but all six studies included physical activity and healthy eating components). The six experimental studies included preliminary data and therefore the authors were unable to draw any definitive conclusions. *Focus CVD* - Shaya et al. 2006 reviewed community interventions addressing cardiovascular disparities. They identified 10 studies, of which five were conducted in African American populations, focusing on physical activity and/or healthy eating, and described some form of cultural adaptation. Four of these studies were church-based interventions. Churches were identified as a focal point of the African American community, especially for older women, and therefore an acceptable setting for health promotion interventions. Lay health workers and culturally appropriate recruitment strategies were also discussed. Although the adaptations were described, no conclusions were offered on the effectiveness of adaptation for health promotion strategies. **Primary studies:** The vast majority of the 107 studies had effective outcomes. This is including studies that reported effectiveness for any of the outcomes measured, at any time point and sometimes within subgroups of the participants. These findings are encouraging; however, the design of these studies does not allow any assessment of the extent to which the adaptation contributes to their effectiveness. To determine whether or not adapted interventions are effective for ethnic minority populations we therefore identified the studies that directly compared an adapted approach with a non-adapted intervention. **Direct comparison of adapted with non-adapted/standard interventions** - S1 – Kreuter et al 2005 – healthy eating (AA): Compared intervention of six magazines to increase fruit and vegetable consumption. Four arms: magazine stories were tailored to behaviour (BCT), culture (CRT), behaviour + culture (BCT + CRT) or control (delayed intervention). Effect – Median changes in daily fruit and vegetable servings were significantly greater for women in the BCT + CRT group than for women in the CRT group, but not significantly greater than for those in the BCT or control group. S2 – Ard et al 2008 – PA & healthy eating (AA): Compared all African American group sessions with mixed race group sessions for weight loss. Effect – Significant weight loss was reported for both groups (mean weight loss 4.2 kg) with no effect (adherence, fruit and vegetable intake, physical activity or weight loss outcomes) attributable to group composition. S3 – Resnicow et al. 2005 – PA & healthy eating (AA): Compared three church-delivered interventions: standard education materials vs. culturally adapted education materials vs. culturally adapted education materials and four motivational interviewing telephone counselling calls. Effect – Participants who received the culturally adapted education materials with and without the motivational interviewing calls increased fruit and vegetable intake and minutes of physical activity at the 1-year follow-up compared with participants receiving standard education materials. S4 – Yanek et al 2001 – PA & healthy eating (AA): Compared three church-based interventions: standard group sessions vs. standard group sessions and spiritual/culturally adapted component vs. non-spiritual self-help materials. Effect - At the 1-year follow-up there were no differences in outcomes (dietary nutrient intake, physical activity and BMI) detected between the different conditions.

Comparison of adapted with adapted plus an additional component interventions: To increase effectiveness, some studies trialled the addition of a discrete adaptation. For example, a healthy eating intervention conducted by Resnicow et al. for an African American population ($n = 560$) utilised a RCT design to assess the addition of a heightened degree of cultural adaptation to an intervention that was already adapted for this population. Participants were randomised to receive magazines promoting fruit and vegetable intake over a 3-month period. The control group newsletters targeted a general 'black American' audience with minimal Afrocentric focus and the graphics were untailored and ethnically neutral (e.g. no people featured). The intervention newsletters were specifically adapted to 16 levels of ethnic identity as assessed by the Black Identity Classification Scale. The intervention group slightly increased their daily mean fruit and vegetable intake compared with those assessed to be the most 'Afrocentric' in the control group and this was not statistically significant. However, when participants who were assessed to be the most Afrocentric in the intervention group were compared with the control group, the increase was statistically significant ($p < 0.05$). The authors concluded that the additional effort of adjusting an adapted intervention for varying degrees of ethnic identity might be an effective strategy for some African American groups. Several studies examined the addition of a religious or spiritual component to an already culturally adapted intervention, but these did not find significant differences in outcomes between the spiritual and the other group (2 of primary studies also included in Lancaster et al 2014 (Resnicow 2005), and Campbell 1999). For the latter - At follow-up, message recall was good for both groups, but message trust was higher for the spiritual bulletin group ($p < 0.05$). Both groups increased fruit and vegetable consumption significantly (4.9 daily servings at follow-up for the spiritual group and 4.8 servings for the expert group) compared with the control group ($p < 0.05$), but there were no significant differences detected in outcomes between the spiritual and the expert groups. The results need to be interpreted with caution as it is difficult to know what changes in behaviour were attributed to the bulletin and what could be a result of the broader interventions in place.

Secondary Outcomes: In summary, the nine studies (4 of them on diet, respectively PA and diet) that compared an adapted intervention with a non-adapted or standard approach did not show increased effectiveness in favour of the adapted version. Only one study on PA & diet (Resnicow et al 2005) reported increased effectiveness with the use of adapted self-help material compared with standard materials; however, this study was the least equivalent in terms of materials received (the culturally tailored group also received pedometers as cues to walking) and detectable differences in fruit and vegetable intake also differed depending on the FFQ used. It is worthwhile noting that the two smoking studies with 'strong' quality scores demonstrated that, although adapted intervention materials were appropriate, particularly for those with higher degrees of ethnic identification, these preferences did not necessarily improve smoking cessation outcomes for participants in the intervention group. The healthy eating study with a 'strong' quality score (Kreuter et al 2005, AA) provides compelling evidence suggesting that adaptation alone is insufficient to change behaviour, and that an intervention component that explicitly addresses behaviour in conjunction with tailored information is needed. The only study to demonstrate a behaviour change from adaptation and with a 'strong' quality score is a church-based physical activity and healthy eating intervention (Resnicow et al 2005). It should be noted that both the standard and the adapted conditions were delivered in a church context and may therefore already incorporate an element of cultural appropriateness. The nine studies comparing adapted with unadapted interventions covered 39 of the 46 adaptations identified from the entire body of 107 studies.

Review's conclusion: From this systematic review of adapted health promotion interventions for smoking cessation, increasing physical activity and improving healthy eating for African-, Chinese- and South Asian-origin populations we identified 12 theoretical papers that provided some preliminary insights into the kinds of adaptations and considerations recommended for working with ethnic minority populations. We further identified seven systematic reviews that yielded mixed evidence regarding whether or not adaptation increases the effectiveness of health promotion interventions. Our own review of the empirical literature identified 107 adapted empirical studies (reported on in 154 papers) focusing on the three populations and three topics of interest. Overall, these studies suggested that adaptation could increase the salience and acceptability of studies, this translating into improved recruitment. However, many studies showing positive outcomes lacked comparable conditions and relied on self-reported measures. Of the 107 studies, only nine were designed to directly compare the effectiveness of adaptations for interventions and these too yielded mixed findings. Equally, there was no direct evidence found for the cost-effectiveness of adapted interventions with only a handful of studies reporting on cost data and none carrying out formal cost-effectiveness analyses. Some of our conclusions support those of other research groups; for example, the systematic review by Chen and Tang (2007 – review on smoking) also found varying degrees of success of adapted interventions related to the degree of acculturation within the population. The overarching themes from the review of the relevant theoretical literature (see Box 5) were observed in the kinds of adaptations undertaken and are reflected in our 46-item Typology of Adaptation. Adaptations such as 'Intervention goals and outcomes for participants are culturally appropriate' (number 23) suggest that the goals for behaviour change for ethnic minority groups should be framed around psychological community and family gains, rather than individual personal gains. Adaptations such as 'Present a pro-ethnic/race approach' (number 37) and 'Maintaining cultural significance of food' (number 43) emphasize that cultural elements are protective assets rather than pathologies.

Methodological problems: –

Author Year: Thomson 2011

Full Citation: Thomson CA, Ravia J. A systematic review of behavioral interventions to promote intake of fruit and vegetables. *J Am Diet Assoc.* 2011 Oct;111(10):1523–35. doi: 10.1016/j.jada.2011.07.013.

Cultural adaptation is the main focus of the review: yes

Included studies: n=36, of interest n=9

Settings: churches, community, homes

Population: 3 x AA women, 3 x AA adults, 1 x multiethnic adults, 1 x low income women, 1 x AA men

Designs of the included studies: 7 x RCTs, 2 pre-post

Intervention components: S1: Intervention: church-wide activities, policy changes, self-help materials, peer counselling with motivational interviewing, Control: delayed intervention. S2: G1 – CG receiving life-skills lessons, G2 – Gateway to Better Life education group receiving nutrition education, G3 – education group receiving nutrition education in addition to completing contract for change. S3: IG – weekly 2-h fitness plans and nutrition education sessions for 8 wk. CG- weekly 2-h general health sessions for 8 wk. S4: 20-wk nutrition education delivered as six 90-min lessons in local kitchen centres. S5: six 90-min classes twice weekly for 3 wk, booster at 9 wk. S6: IG – newsletters tailored by ethnic identity, CG – generic 'Afrocentric' newsletters. S7: IG – Social Cognitive Theory plus motivational interviewing and Social Determination Theory, CG – Social Cognitive Theory. All received 3-monthly multipage newsletters by mail. S8: IG – F/V education, brochures by mail, and 2 tailored telephone calls, CG – prostate education, brochures by mail, and 2 tailored telephone calls. S9: IG – series of mailed materials plus 2 phone calls, CG – 1 mailer

Cultural adaptation: Not explicitly mentioned in review, but following assumed from information in table: church-wide activities, motivational interviewing, social support, behaviour contracts, self-efficacy and family-related problem-solving, newsletters tailored by ethnic identity

Main Outcomes: S5 & S9 did not provide results in servings per day and S4 & S5 reported non-significant change in F/V intake.
Secondary Outcomes: The average reported change in F/V intake in minority and low-income population studies was +0.97 servings/day, slightly below those estimated for general adult samples also included in review. Results of some studies suggest that social support and self-efficacy generally promoted greater F/V intake (S1). High autonomy was associated with increased intake in S7 on AA adults, but not in S1.
Review's conclusion: Use of self-efficacy construct and/or Stages of Change theory at the individual level and Social Ecological or Social Contextual Theories at group level (e.g. church) was associated with positive change in F/V behaviour.
Methodological Problems: -

Author Year: Mier 2010
Full Citation: Mier N1, Ory MG, Medina AA. Anatomy of culturally sensitive interventions promoting nutrition and exercise in Hispanics: a critical examination of existing literature. <i>Health Promot Pract.</i> 2010 Jul; 11 (4):541–54. doi: 10.1177/1524839908328991. Epub 2009 Feb 4.
Cultural adaptation is the main focus of the review: yes
Included studies: n=18, of interest n=14, one of them on PA
Settings: community, preschools, schools, churches
Population: 2 x only Hispanic women (18 yrs), 2 x Hispanic adults, 1 x women of Mexican origin (21–65), 3 x adult Latinas (18–65), 1 x older Mexican Americans, 2 x Latino children and their parents, 1 x Hispanic American mothers and children, 1 x schools with Mexican American children, 1 x mainly Latino school children. Sample sizes varied from 38–6 902
Designs of the included studies: RCTs
Intervention components: Studies not fully described in review regarding what was actually done in IG and CG, rather reviewers focussed on cultural sensitive approaches used and classified these in 3 categories: Surface Structure, Deep structure and Recruitment Strategies. All but 2 of the interventions focussing only on children recruited in schools applied surface structure components such as using bilingual and bicultural contents or having programme delivered by promotoras. In the 2 interventions fun activities, student after-school health club, theatrical plays, bingo, salsa dancing, and school cafeteria programme were used. Involving the family in interventions (47%) was the dominant deep-surface component found in the review, including activities such as partner support techniques and parental training. Additional deep-structure components included the literacy level of participants (39%), use of social support and networks (29%), and incorporation of Hispanic cultural values in intervention design or implementation (29%)
Cultural adaptation: Varied from surface structure components such as bilingual and bicultural contents, bilingual facilitators, delivered by promotoras, cooking demonstrations, ethnic foods, easy and safe access to programm and theatrical plays, to deep-structure components such as social support, cultural values, acknowledgement of economic, social and environmental barriers, materials appropriate to literacy level, family based and based on development stage, as well as encompassing recruitment strategies such as community agencies, local churches, use of promotoras, development of a trustful working relationship with church leaders, media, direct mail, phone calls, health fairs, fun runs, medical providers, schools and participant referrals.
Main Outcomes: Although 10 studies of interest produced significant differences in eating or exercise outcomes, the research design of most of these studies did not address whether the intervention was successful or not because of its Hispanic-tailored nature. Only one study examined the effects of acculturation on health outcomes (S1 focussing on Hispanic women recruited through local churches – Balcazar, Castro, & Krull, 1995; Lopez & Castro, 2006), finding that highly acculturated, highly educated women had a stronger orientation to healthy eating than did the less acculturated.

Secondary Outcomes: Most interventions in this review were minimally guided by cultural models or frameworks. The emphasis of using behavioral and socio-ecological theories found in the reviewed studies may be justified by the fact that most interventions aimed at affecting behavioral health outcomes. However, it was surprising to learn that only two studies in this review were guided by a cultural framework, particularly considering the extensive research examining cultural competency frameworks in health care services and systems. Paucity of culturally sensitive models in behavioral health research should be of concern because the lack of such models could result in the implementation or replication of interventions based more on practitioners' perceptions and intuitions about how to tailor interventions for Hispanics than on empirically tested culture-related theories.

Review's conclusion: In summary, we found that three components were common to most of the interventions that produced significant differences in behavioral outcomes: involvement of family or social support, literacy-level appropriateness, and cultural values. However, the studies reviewed did not provide evidence that would allow us to draw valid scientific conclusions about what specific components (e.g., family-based activities, group settings, and other) mediate or predict behavioral outcomes of a culturally sensitive intervention for Hispanics. Also, it is not clear which tailored intervention elements that proved effective with one Hispanic subgroup could be systematically applicable to other subgroups. For example, would working with peer health workers be as effective with affluent, urban Hispanics as it has been with low-income, rural Hispanics?

Methodological problems: -

Author Year: Renzaho 2010

Full Citation: Renzaho AM1, Mellor D, Boulton K, Swinburn B. Effectiveness of prevention programmes for obesity and chronic diseases among immigrants to developed countries – a systematic review. *Public Health Nutr.* 2010 Mar;13(3):438–50. doi: 10.1017/S136898000999111X. Epub 2009 Sep 2.

Cultural adaptation is the main focus of the review: yes

Included studies: n=13, of interest n=5

Settings: 4 x church-based, 1 x school-based

Population: S1: West Samoans aged >14 years, two complete church congregations, South Auckland, New Zealand. S2: Four complete church congregations (2 x Samoan adults, 2 x Tongan adults), Auckland, New Zealand. S3: Samoan church members aged >20 years, church-based; New Zealand. S4: Greek-Australian women (aged 35–65 years), members of Greek Orthodox church; New South Wales, Australia. S5: Adolescent (12–17 years) female Latinas, homes and classrooms; Los Angeles, USA

Designs of the included studies: S1 & 2 – Non-randomised controlled study; S3 – Quasi-experimental design (pair matched); S4 – Non-equivalent control group; S5 – Comparative study

Intervention components: S1: Group 1: Intervention – The intervention included an introductory talk and four diabetes awareness sessions as part of the church services. These were complemented by leaflets in Samoan and English; a video customised for Pacific Islanders people; flip charts with specifically designed posters in Samoan; advice about weight; two blocks of four food cooking demonstrations and healthy eating sessions; exercise sessions focusing on sitting exercises, low-impact aerobics and walking. Finally, sport activities were organised once weekly for the first year and twice weekly thereafter; and a diabetes support group was established Group 2: Control – No education programme. S2: Group 1: Intervention – Diabetes education focused on the nature of diabetes and its symptoms, the long-term consequences of uncontrolled diabetes and nutrition (including cooking demonstrations). Exercise sessions were commenced which included sitting exercises, low-impact aerobics, traditional dance movements, walking and organised sports. Cooking sessions were tailored to the particular dietary preferences of each Islands group. Group 2: Control – No education program

S3: Group 1: Intervention church – Promotion of low-fat ad libitum diets: thirty-one sessions of 1 h duration addressing the nutrition education components (healthy eating), nine of which were held in the church in the context of a healthy feast (serving culturally appropriate fruits, with emphasis on fruit and vegetables). Targeted families, caterers and the church as a whole. Sessions delivered by Pacific Island Heartbeat. Physical activity: weekly aerobic sessions built into regular programme of church activities + walking groups + newsletters and diabetes support group to support the nutrition and exercise sessions. Trained instructors conducted the aerobic sessions: 170 sessions over the study period, with twenty-three people attending each session. Training church leaders to become leaders of nutrition education and aerobic sessions. Group 2: Control church – No intervention. S4: Group 1: Intervention – The first 12 weeks included attending a weekly group meeting at the church and an exercise programme which was provided in a written booklet encompassing a 12-week programme of low-to- moderate intensity aerobic exercise. Exercise frequency and duration increased from three sessions, each of 9 min of walking, in the first week, to four sessions of 45 min each in the final week. The booklet was written in English. At the weekly group meeting, the migrant health worker supplemented the booklet with verbal translations and participants were encouraged to make their own notes in their preferred language. The weekly group meeting also included a 2 h discussion where participants reported on their exercise activities during the previous week and identified barriers to exercise strategies for dealing with these barriers were discussed. The discussion covered dietary materials where women were encouraged to identify sources of saturated fat in their own diets, to modify traditional high-fat Greek and Australian recipes, and to bring in samples of modified foods for the group to taste. Group 2: Control – No intervention. S5: Comparative study of two interventions: a 90 min individualised home-based format v. a group classroom-based format. The study did not use a control group.

Cultural adaptation: S1: introductory talk and four diabetes awareness sessions as part of the church services, use of leaflets in Samoan and English; a video customised for Pacific Islanders people; flip charts with specifically designed posters in Samoan; advice about weight; two blocks of four food cooking demonstrations and healthy eating sessions; exercise sessions focusing on sitting exercises, low-impact aerobics and walking. S2: as in S1 plus traditional dance movements and organised sports. Cooking sessions were tailored to the particular dietary preferences of each Islands group. S3: 9/31 sessions of 1 h duration addressing the nutrition education components (healthy eating), held in the church in the context of a healthy feast (serving culturally appropriate fruits, with emphasis on fruit and vegetables). Targeted families, caterers and the church as a whole. Sessions delivered by Pacific Island Heartbeat. Physical activity: weekly aerobic sessions built into regular programme of church activities + walking groups + newsletters and diabetes support group to support the nutrition and exercise sessions. Trained instructors conducted the aerobic sessions: 170 sessions over the study period with twenty-three people attending each session. Training church leaders to become leaders of nutrition education and aerobic sessions. S4: intervention conducted at church. Weekly group meetings at which the migrant health worker supplemented information in booklet (English) providing exercise programme with verbal translations, and participants were encouraged to make their own notes in their preferred language. S5: Not clear.

Main Outcomes: S1: After 2 years of intervention the study found that, compared with the control group, those in the intervention group had significantly: (i) reduced waist circumference (change over time), (ii) reduced waist and hip circumference; (iii) increased open and closed knowledge scores; (iv) increased physical activity; and (v) reduced dietary fat intakes. However, the two groups did not differ in terms of BMI or waist:hip ratio. Despite these positive outcomes, the study suffered some serious limitations (did not adjust for baseline characteristics when assessing the effect of the intervention even though the two groups differed at baseline; small sample size). In addition, the two churches (intervention and control) were only 3 km away from each other and there was a spill-over effect in that the control group initiated its own exercise programme during the intervention. S2 (from same authors of S1 – to improve on S1 undertook a non-randomised controlled church-based study): found that after 2 years diabetes knowledge increased significantly in both intervention churches when compared with the control church, but more so among Samoans (2-year change in open knowledge score: 146(SD 26) % v. 14(SD 17) % for Samoans; 119(SD 24) % v. 18(SD 25) % for Tongans; P<0.001).

While there was an improvement in weight, waist circumference and physical activity in the Samoan intervention, no significant change was seen in either control church or the Tongan intervention church. In this study, baseline characteristics were not adjusted for when establishing the effect of the intervention. As in S1, this study also suffered from a small sample size and spill-over effects. S3: No changes were observed over time in the intervention churches in terms of knowledge about how to reduce the fat content of meals (e.g. diluting coconut milk, removing fat from meat or skin from chicken or eating vegetables frequently). However, the proportion of participants undertaking vigorous physical activity increased by 10% in the intervention churches but declined by 5% in the control church ($p=0.007$). BMI decreased by 0.2kg/m² (from 34.8 to 34.6kg/m²) in the intervention churches compared with an increase of 0.4kg/m² (from 34.3 to 34.7kg/m²) in the control group ($p=0.046$). No group difference was found over time for waist circumference and blood pressure after adjusting for baseline characteristics. S4: For the intervention group, there was a significant reduction in BMI (from 29.4 to 27.6kg/m²; $p=0.001$), total skinfold thickness (from 115.4 to 199.9mm; $p=0.001$), proportion of body fat derived from skinfold measurements (from 41.8% to 40.1%; $p=0.001$), diastolic blood pressure (from 87.1 to 79.3mmHg; $p=0.001$), and aerobic fitness as measured by the exercise heart rate (from 114.2 to 100.2 beats/min; $p=0.001$). There was no effect on food habits scores, serum lipids, systolic blood pressure and waist:hip ratio. There was no change in any of the outcome measures over the follow-up time for the comparison group. S5: Mixed modelling showed no significant differences in changes in dietary intake between intervention groups, but both groups significantly reduced their intake of added sugar, sugary beverages and refined carbohydrates by 33%, 66% and 35%, respectively, while dietary fibre consumption increased significantly by 44% ($p=0.01$) throughout the 12 weeks. There was a significant time effect for BMI Z-scores within each intervention group ($p=0.05$), exhibiting significant improvements (Z-score decreased by 0.1 in each of the interventions). There was no significant time by intervention group interaction for any of the physiological or metabolic variables, indicating that change over time was not significantly different between intervention groups. The lack of difference between the two groups may have been due to the small sample size.

Secondary Outcomes: Interventions that showed improvement had something in common: the application of a cultural competence framework and cultural leverage. That is, they used community participants' expertise and social structures both to define strategies for addressing culture-related factors and to shape the intervention. Use of culturally tailored and appropriate nutrition and exercise intervention resulted in decreased BMI and increased intensity of leisure-time activity, but had little impact on nutrition-related behaviour. Programs that apply practical tools and seek to overcome socio-cultural (using existing community social groups and networks and run in familiar settings) and linguistic barriers maximize participation and adherence to activities, and result in greater health outcomes (S4).

Review's conclusion: Generally: Interventions that were tailored to the cultural needs of the target population in terms of cultural norms, attitude and beliefs, and that were implemented within the community setting and utilized translated and culturally relevant educational tools, and community-based trained diabetes and physical activity educators (e.g. S1 and S2), showed greater improvements in diabetes-related behaviours and glycaemic control and in making changes in dietary and exercise patterns. Although the literature on interventions tailored specifically to immigrant groups targeted at obesity and related health concerns is limited, there are clear messages from the articles reviewed. Culturally tailored and language-specific educational programs are more likely to engage participants and result in more efficacious outcomes if designed well. The findings that culturally tailored and facilitated interventions aimed at diabetes among immigrants provide increased outcome measures in the target culture compared with generalised interventions, and that intervention content is more important than the duration or venue of the intervention, require further investigation. Any obesity and chronic disease-related intervention to be aimed at a particular immigrant group needs to be culturally competent and research should be done into the cultural expectations, beliefs, behaviours, and practices of the target group, which should be taken into account when designing the intervention program.

Methodological problems: -

Author Year: Perez-Escamilla 2008
Full Citation: Pérez-Escamilla R, Hromi-Fiedler A, Vega-López S, Bermúdez-Millán A, Segura-Pérez S. Impact of peer nutrition education on dietary behaviors and health outcomes among Latinos: A systematic literature review. <i>Journal of nutrition education and behavior.</i> 2008;40(4):208–225. doi:10.1016/j.jneb.2008.03.011.
Cultural adaptation is the main focus of the review: yes
Included studies: n=22, of interest n=5
Settings: community
Population: S1 – Expanded Food and Nutrition Education Program (EFNEP): multiethnic sample; Latinos were the largest ethnic category (43%), followed by non-Latino white (13%), non-Latino black (18.8) Asian (12%), Native American (3.0), and other (10.3%); S2: 357 Spanish speaking Latinas aged 18–65; S3: 216 female Latinos; S4: 389 female Latino participants; S5: N=223 Latino families (320 individuals) served by 33 promotores. S2–S5 not EFNEP
Designs of the included studies: S1 & S2 – RCTs; S3 & S5 pre-post, no control group; S4 – pre-post with CG, but no randomization
Intervention components: S1: Children randomized to the intervention group received 7 EFNEP education lessons (within 6–8 weeks) delivered by their respective group leaders (mostly teachers). Those in the control group did not receive these lessons until after 8 weeks. S2: During the 14-week program, participants were randomly assigned to 1 of 3 groups: 1) promotoras-led intervention group, involving weekly home visits or telephone contacts plus nutrition tailored newsletters with homework assignments mailed weekly to participants' homes, 2) tailored intervention group, involving weekly mailing of the same newsletters used with the promotora group; and 3) control group, involving mailing of 12 off-the shelf materials covering the same modules and content as the newsletters. S3: Pasos Adelante (Steps Forward), a 12-week program facilitated by CHWs, is a revised curriculum of the National Heart, Lung, and Blood Institute cardiovascular disease prevention program, Su Corazón, Su Vida (Your Heart, Your Life). The impact of this intervention was assessed in Arizona using pre- and post-curriculum questionnaires of self-reported measures of physical activity and dietary patterns in 216 participants who completed the program. S4: La Cocina Saludable (The Healthy Kitchen) was implemented in 10 southern Colorado counties to improve nutrition related knowledge, skills, and behaviors among low-income Latina mothers of preschool children based on the trans-theoretical model and assessing scale reliability. Latina grandmothers and grandmother figures (Abuelas) were selected as peer educators to deliver 5 nutrition education sessions. Peer educators participated in a two-day training program. Program evaluation was based on 337 participants. Tests were administered before and after each class to assess immediate changes in knowledge, skills and self-reported behaviors, and results were compared to a control group of 52 participants. A survey was mailed at 6 months postintervention to examine benefit retention. S5: evaluated the effectiveness of the Salud para Su Corazón (Health for your Heart) National Council of La Raza (SPSC-NCLR) Promotora Outreach Program. The goal of the program was to improve heart-healthy behaviors among 223 Latino families participating at 7 sites across the U.S. The intervention consisted of 7 two-hour lessons that took place during the first half of a 6-month intervention plus home visits or telephone contacts to reinforce the educational activities learned in the program. Participating families completed a 35-item survey on heart-healthy behaviors before and after the sessions.
Cultural adaptation: all used promotoras/CHWs, in addition S2: – weekly home visits or telephone contacts over 14 weeks, 12 tailored newsletters with homework assignments, mailed weekly. S3: Group sessions in community settings, walking clubs. S4: Latina grandmothers as peer nutrition abuela educators. S5: Group sessions, Educational materials: workbooks, fotonovela stories, easy to read booklets and videos. Home visits and follow-up contacts to reinforce learning

Main Outcomes: S1: Overall, children in the intervention group had improved outcomes in their nutrition knowledge, food preparation and safety skills, selection of foods, and eating varieties of foods. Latino youth that received 7 nutrition education lessons had significantly greater improvements in their nutrition knowledge and food preparation skills/food safety practices compared to those who did not receive the education. However, among Latino youth, no significant improvements between intervention and control groups were found for two other indicators, reflecting dietary variety and selection of nutritious foods. S2: Intervention impact was assessed at baseline, 12 weeks, 6 months and 12 months postintervention. Outcomes were based on 24-hour dietary recalls and anthropometric measures. At 12 weeks, participants in the promotores-led group had significantly lower intakes of total and saturated fat, glucose, and fructose than those in the tailored group and significantly lower intakes of energy and total carbohydrates than those in the control group. By 12 months, between-group dietary intake differences were no longer detected suggesting that interpersonal contact with the promotores is important in order to achieve long-term success. S3: Program participation was associated with increased physical activity, lower soft drink consumption, and increased consumption of fruits and vegetables. However, the benefit was stronger in one of the two counties included in the study. S4: Return rate at 6 months was only 24% and these results were not compared to the control group. Significant improvements were documented for self-reported nutrition, diet and food safety knowledge/skills and these improvements were retained at 6 months. Study limitations included very low follow-up survey response rate, lack of comparison of follow-up intervention group data with controls, all the measures were self-reported, and no in-depth dietary assessment methods used. S5: The program was associated with improved overall heart-healthy score that included physical activity, weight, and cholesterol, fat, salt and sodium intake. The greatest improvement was observed on practices related to dietary cholesterol and fat. This study was limited by the lack of a control group, the fact that all the measures were self-reported, and lack of in-depth measures of dietary intake.

Secondary Outcomes: –

Review's conclusion: Overall, these nutrition education demonstration studies suggest that peer education has the potential to change dietary behaviors among Latinos. However, several limitations to the studies deserve consideration. Most studies failed to address important factors in their analysis, such as acculturation, which can play an important role in the effect of nutrition education interventions. Moreover, the majority of the data in these studies was self-reported, thus the possibility of social desirability bias cannot be excluded. The characteristics of CHWs as well as their training and roles varied widely across studies. Salud Para su Corazón (S5) worked with promotores already employed by the community-based organizations (CBOs) participating in the study. The promotores' training program included 50-hours of curriculum exposure, participation in a 2-day national promotores conference, and monthly updates. The promotores delivered their services mostly through group education in the CBOs, but were also allowed to have contact with their clients at their homes or by telephone. La Cocina Saludable program (S4) was implemented by senior Latinas who were grandmothers or abuelas. They were recruited through job advertisements as well as health and social agencies referrals. The vast majority of them were females and most of them older than 40. Only 31% had a bachelor's degree, 64% were fluent in Spanish, and over three-quarters had previous teaching and community services experience. Abuela educators were trained with the same curriculums that they were going to use with their clients. A strength of these studies (S4 & S5) is that they both documented the effectiveness of trainings at improving promotores' knowledge and skills. The study Pasos Adelante (S3) worked with promotores employed by two different community agencies who received six hours of manual training although several of them had received prior training on heart disease prevention. Senior and junior promotores worked in pairs and they delivered group lessons to their clients and facilitated walking clubs at diverse community settings. Only 1 out of the 11 promotores only was a male. In the trial by Elder et al. (S1) the promotor's role was to work with clients in their homes or via telephone around themes highlighted by the tailored newsletters and homework assignments.

Methodological Problems: –

Author Year: Flynn 2006
Full Citation: Flynn MA, McNeil DA, Maloff B, Mutasingwa D, Wu M, Ford C, Tough SC. Reducing obesity and related chronic disease risk in children and youth: a synthesis of evidence with 'best practice' recommendations. <i>Obes Rev.</i> 2006;7(Suppl 1):7–66.
Cultural adaptation is the main focus of the review: yes
Included studies: n=147, of interest n=12
Settings: n=6 primary schools, n=6 community
Population: diverse populations: S1 – minority children (Hip Hop to health), S2 – child-parent (Memphis GEMS), S3 – American Indian school children (Pathways study), S4 – native Canadian children and community (Kahnawake Schools DPP), S5 – native American high school youth (The Zuni DPP), S6 – American Indian elementary students (Southwest cardiovascular curriculum project), S7 – AA girls (Stanford GEMS), S8 – AA mothers and daughters, S9 – AA girls (Minnesota GEMS), S10 – Black-American families, S11 – families (San Diego family health Project), S12 – school children – (The checkerboard cardiovascular curriculum)
Designs of the included studies: Cluster RCT, RCTs
Intervention components: S1: Hip Hop Jr. a 14-week preschool community intervention at a Head Start Centre. A culturally and linguistically appropriate exercise and nutrition program for minority children and their parents is presented. S2: GEMS Memphis 12-week pilot study for 8–10-year-old African American girls. Community-based weekly interactive group sessions including after school activities and health education focused on knowledge and behaviour change skills to promote healthy eating and increased physical activity. S3: Pathways – Obesity Prevention Program. A 3-year primary school-based program for grades three to at promoting healthful eating and five aimed increased physical activity among American Indian children. The program consisted of four components: food service, classroom curriculum, family involvement and physical activity. S4: Kahnawake Schools Diabetes Prevention Project. First Nation Canadian primary school and community health education and behaviour modification (diet and exercise) program. 3-year program. S5: The Zuni Diabetes Prevention program intervened on dietary intakes primarily through targeting beverage consumption of secondary school students at the Zuni Pueblo in New Mexico. Activities included modification of school meals, provision of exercise facilities and training. The water available for the Zuni Pueblo was high in sulphur and iron and was unpalatable for drinking. Students relied on soft drinks, which were replaced by the program with palatable water in coolers located in several places on the school premises and 'diet' soft drinks. S6: Southwestern Cardiovascular Curriculum is a primary school and community-based intervention program for grade five students using intergenerational and culturally appropriate activities designed to promote exercise and healthy eating in two Native American Indian tribes. S7: GEMS Stanford Pilot Study. Community school-based intervention including after school activities, health education and reduction of media use in homes for 8–10-year-old girls at risk of obesity. 12 weeks. S8: Community-based educational program for low-income, inner city African American girls and their mothers to promote healthful eating and physical activity. 12 weeks. S9: similar to S2/S7. S10: Community-based health education and aerobic exercise program targeting black, fifth to seventh grade students. 14 weeks. S11: Not described in review. S12: Checkerboard Cardiovascular Health Education Curriculum. Primary school-based, education program on nutrition, smoking, obesity. Most participants were American Indians 10 weeks.
Cultural adaptation: Cultural, religious, food and activity customs were considered and/or accommodations made in all 'High/Mid'-scoring programs. Gender roles and values considered in S6. Families also involved

<p>Main Outcomes: S1: had not published quantitative outcome measures at the time of this analysis and thus was excluded from the analysis of associations between outcomes and interventions. (Results summarised in Barr-Anderson 2014). S2: No change in body composition or fitness reported. Improvements were observed for psycho-social, nutrition & PA. S3: Lessons learned in the Pathways program suggest that multiple environmental interventions in several settings simultaneously may be required to impact the obesity epidemic. The multiple reinforcing effects of interventions that cover all the settings where people live, work and play (school, community, shops, home and clinic) in an integrated way is proposed as a way forward. Programme scored high in methodological rigour and programme development and evaluation. No other results are presented in review. S4: No results presented – scored low in methodological rigour and high for programme development and evaluation. S5: Intervention combined with information promoting water over soft drinks resulted in a change in drink consumption from 800 soft drink cans per week to 250 soft drink cans and 150 gallons of water per week. S6: No results presented – scored mid in methodological rigour and high for programme development and evaluation. S7: No change in body composition reported. Improvements were observed for psycho-social, nutrition & PA. S8: Improvements were observed for psycho-social & nutrition. S9: No change in body composition, nutrition or PA reported. Improvements were observed for psycho-social & knowledge. S10: No change in fitness, negative outcome for PA reported. S11: No change in fitness & PA, improvements in chronic disease awareness, nutrition and knowledge reported. S12: according to reviewers study instruments were not yet fully developed. Study rated low for methodological rigour.</p> <p>Secondary Outcomes: -</p> <p>Review's conclusion: Most studies in the school settings randomized by school or classroom but less than half took this factor into consideration by performing a cluster analysis approach using mixed models, calculating intraclass correlations or considering the school or class as a covariate for the analysis. Another limitation concerns the short duration of most of the programmes included in this review.</p> <p>Methodological problems: Reviewers don't really discuss whether cultural adaptation was effective or not. There are also no results presented for a number of the programmes – even large ones such as Pathways.</p>

Author Year: Yancey 2004
Full Citation: Yancey AK, et al. (2004) Population-based interventions engaging communities of color in healthy eating and active living: a review. Preventing chronic disease 1(1):A09
Cultural adaptation is the main focus of the review: yes
Included studies: n=23, of potential interest n= 13
Settings: community, home
Population: Focus on studies on or including and reporting on ethnic minorities: AA, Asian, Latino or Hispanic
Designs of the included studies: Information on this not provided for individual interventions, however 11 of all 23 studies included were on demonstration projects, 4 were RCTs, 5 uncontrolled pre-post trials, and 2 uncontrolled pre-test only trials.
Intervention components: Described for only some interventions. <i>Studies conducted between early 1970s and early 1990s – S1:</i> Within the Stanford Three Community Study, Fortmann and colleagues (47) promoted cholesterol and saturated fat restriction via mass and targeted print and electronic media in 3 semi-rural northern California towns with substantial proportions of Latinos (9% to 26% of the total population). Cross-sectional surveys captured sociodemographic and cardiovascular disease risk data at baseline and annually for 3 years.

S2: The Kaiser Family Foundation Community Health Promotion Grants Program was designed to improve multiple health outcomes, including cardiovascular disease and cancer, by changing community norms, environmental conditions, and individual behaviors in 11 western communities (7 randomly assigned intervention communities with 7 randomly assigned control communities, and 4 intervention communities selected on special merit with 4 matched control communities) (48). Local coalitions, with technical support from Stanford University, controlled program development. The program was stratified by community type: suburban/rural, urban, and state. In suburban and rural communities, nutrition and physical activity promotion included media campaigns and nutrition education campaigns in grocery stores. Urban community activity centered on school- and community-based nutrition education. The state component targeted worksite exercise. S3: Heart To Heart Project (15, 51) used walk-a-thons, a speaker's bureau, media messages, restaurant food labeling, and cooking seminars. S4: Project Salsa (52) used community organization techniques to promote nutrition behavior changes and institutionalize intervention components in San Ysidro, Calif. This study included the following components: cooking classes, point-of-purchase education, newspaper columns, coronary heart disease risk factor screenings, and school health and cafeteria programs. S5: The A Su Salud en Accion (53) project used two communications strategies aimed at diabetes prevention and control: 1) role modeling – individuals who had initiated recommended behaviors were promoted in broadcast and print media; and 2) mobilizing natural social networks – trained volunteers distributed materials and prompted and reinforced imitation of the media role models. *Studies conducted as from mid-1990s – S6:* Salud Para Su Corazon, a cardiovascular disease prevention community intervention in Washington, DC (65) used a multimedia bilingual communication campaign including TV telenovela-format public service announcements, radio programs, brochures, recipe booklets, charlas, a promotors training manual, and motivational videos. S7: obesity prevention intervention, Sisters Together: Move More, Eat Better, targeted young African American women in 3 inner-city communities of Boston, Mass (66). Strategies included social marketing and community building efforts and extensive formative research, which was aimed at forging partnerships and developing coalitions to institutionalize the campaign. Demonstrations provided role models who offered illustrations on how to implement campaign messages and activities to practice or prompt action. Activities included developing a local cable television show featuring local chefs who prepared healthy menu items available in their restaurants. S8: Project DIRECT (Diabetes Intervention Reaching and Educating Communities Together), a CDC-funded joint project of the local (Wake County, NC) and state health departments, was designed to decrease the burden of diabetes in an African American community (7 census tracts, 17,000 adults) located in southeast Raleigh, NC (67). The study identified a comparison community with similar sociodemographic and health-care resource profiles. A community coalition, with oversight from an executive committee comprised of community and agency representatives, directed project activities. The health promotion component included primary prevention strategies aimed at increasing participation in regular physical activity and decreasing dietary fat intake. S9: The Uniontown Community Health Project, also federally funded, was a Women's Health Initiative project that developed, implemented and evaluated a Community Health Advisor (CHA)-based intervention to reduce cardiovascular disease in peri-menopausal African American women (68, 69). Uniontown, Ala, a rural, underserved intervention community (67% African American), was matched sociodemographically with a nearby control community. A coalition of community leaders guided CHA-led social marketing activities and structured programs for healthy nutrition and physical activity promotion. S10: In a replication of an earlier effort by the Center for Science in the Public Interest in West Virginia (70), Spanish-language „1% or less“ milk campaigns were implemented in predominantly Latino communities, Santa Paula (in 1999) and East Los Angeles (in 2000), by the California Adolescent Nutrition and Fitness Program. Campaign elements included paid radio and print ads, point-of-purchase advertising, milk taste tests, community presentations, public relations, and a school-based program.

Cultural adaptation: includes cultural adaptation of exercises and cooking lessons/demonstrations, field trips, community events, culturally tailored community bulletins, point-of-purchase education, neighborhood canvas for healthy meal options, sponsoring book signing for healthy ethnic cookbook, development of cable TV show featuring local chefs preparing healthy recipes, bilingual/bicultural staff

Main Outcomes: S1: The reductions in dietary saturated fat consumption at follow-up (versus baseline) observed in the intervention areas compared with control areas were significantly greater among Latinos, but no significant differences were observed among whites. S2: Only one intervention community – predominantly Latino – showed a significant positive outcome: restaurants increasingly identified low-fat choices. However, the only significant difference in self-reported dietary behaviors in that community was a decline in fruit and vegetable consumption. S3: A telephone survey of a random sample of Florence, SC (35% African American) residents, followed over 4 years as a cohort, demonstrated prevention of increases in weight and hypercholesterolemia (though hypertension prevalence increased), compared with a matched control town. S4: Of these intervention components, only the latter 2 survived 4 years after funding ended. S5: Cross-sectional surveys were conducted in the west San Antonio, Tex target community (90% Latino), but only process data were reported during the 2-year project: 73 mass-media stories appeared, 34 newsletters and one booklet were produced, and 610 community networkers were recruited and trained. S6: Pre-post intervention intercept surveys (344 and 328, respectively) conducted in churches and grocery stores in 3 Washington, DC, geographic areas with high concentrations of Latinos of varying nationality demonstrated increases in awareness but no behavioral changes. S7: According to reviewers study did not provide outcome data. S8: According to reviewers – The study described plans for a multi-faceted process and outcome evaluation; it did not present outcome data. S9: According to reviewers – the planned process and outcome evaluation described individual- and community-level change variables. S10: After the 6-week campaign, sales of 1% and fat-free milk rose 60% in Santa Paula. A follow-up survey of retailers at 6 months found that 25% of this growth in sales was sustained.

Secondary Outcomes: Recent inclusive interventions reflect a new emphasis on environmental change strategies in obesity prevention and healthy nutrition and physical promotion. Distributions of theories referenced or implied and behaviors targeted are similar to earlier review findings, with social learning theory, community organization, and ecological models predominating. However, a greater emphasis on the processes of intervening is evident in this review, paralleling processes observed in individual-level interventions targeting underserved and understudied groups. These processes include the following: involving communities and coalition building from inception; targeting captive audiences; mobilizing social networks, particularly using lay health advisors, community health workers or promotores; cultural tailoring of messages and messengers (ethnically relevant role models in positions of power).

Review's conclusion: Given the presentation of outcome data in fewer than half of the studies, and the few significant effects and modest effect sizes, the best data available speak only to what it takes to engage and retain people of color, not what it takes to create and sustain weight loss, engagement in regular physical activity, or improved dietary quality. However, in 2 studies, outcomes for populations of color were the only significant positive outcomes demonstrated (47, 48). The contribution of cultural adaptations to outcomes is unclear, although an effect of these adaptations on recruitment and retention may be inferred from the availability of these data on ethnic groups largely absent from other studies.

Methodological Problems: –

A7 Extrahierte Reviews Bewegung

Author Year: Nierkens 2013
Full Citation: Nierkens V, et al. (2013) Effectiveness of cultural adaptations of interventions aimed at smoking cessation, diet, and/or physical activity in ethnic minorities. a systematic review. PloS one 8(10):e73373 doi:10.1371/journal.pone.0073373
Cultural adaptation is the main focus of the review: yes
Included studies: n=17; of interest n=9; 4 on diet, 1 on PA, 3 on PA and diet combined and 1 on all three behaviors.
Settings: Inner-city health centres, home environment, Chinese, AA churches, community center
Population: 9 targeted AAs, 3 Latinos, 1 Chinese Americans
Designs of the included studies: 11 of the 13 studies of interest were Randomized Controlled Trials (RCTs). Two studies used a quasi-experimental design
Intervention components: <i>Studies on diet & PA:</i> S1: IG – Standard care plus consultation with linguistically and culturally sensitive case manager (registered nurse). Case management involved individual sessions using standardized clinic protocols based on ADA recommendations, and meeting patients' needs as needed (e.g. referral of community resources), CG – Standard care by physician and/or nurse practitioners: Standardized diabetic education materials in Spanish and English tailored for the local population provided at initial clinic visit. S2: A: Clinic (4) + community based (2) group sessions and monthly telephone contact with (lay) community DM advisor), B: Clinic only –4 clinic visits, C: Minimal intervention. S3: All African-American intervention groups vs. Mixed race intervention groups all getting 20 weekly group sessions led by an African-American interventionist trained on culturally appropriate delivery of the program. S4: Faith-based component added to the culturally tailored weight-loss intervention as in the control group. S5: PC + HE + CHW (community health worker) vs. PC + HE (Health Education): PC (provider counseling) only in CG. S6: Combined intervention (TPV + LHA) vs. Theory based training for the LHA to disseminate info and promote interactions and activities. <i>Diet only:</i> S7 – Behaviorally and culturally tailored magazines (BCT + CRT) vs. Behaviorally tailored magazines (BCT). S8: IG – Tailored print newsletters and activity insert as in the tailored print condition. In addition: weekly home visits or telephone calls from sequentially assigned promotoras over a 12-week period, CG – 12 weeks of tailored print newsletters (based on baseline data) and activity inserts mailed to their homes. S9: The spiritually oriented bulletin vs. The expert oriented bulletin. S10: Newsletters targeted at one of the 16 ethnic identities (the 16 types were based on various combinations of five core types: assimilated, Black Americans, Afrocentric, Bicultural, and Multicultural, with cultural mistrust as subtypes of the Black American and Afrocentric identity types). E.g. risks of Black Americans on chronic diseases were specified for participants with a Black American EI. vs. General targeted newsletters for a Black-American audience with a slight untailored, ethnically neutral graphics accomplished by generally featuring images without people or other racial or ethnic cues. Slight ethnocentric focus. <i>PA only:</i> S11: 8-week walking program similar to CG plus culturally sensitive monitor by phone every week including: (i) Emphasize Chinese cultural value of authority (opinions of people whom they respect). (ii) Family member involvement (signing informed consent by one of family members). (iii) Harmony and balance (harmony with the natural environment, social environment, and family is a way of life and will promote health and prevent illness). S12: IG – Culturally Sensitive Exercise Counseling (CS), identical to SB except for 4 culture specific key elements (surface- & deep-structure): all group members were African-American (AA) & he sessions were led by AA, CG2 – Standard Behavioral Exercise Counseling (SB), 10 group intervention sessions over 6 months, weekly during month 1, bi-weekly during month 2 to 3 and monthly during months 4 to 6, CG1 – Physician Advise (PA), a minimal treatment corresponding to the exercise guidelines that a healthcare provider would typically give to a sedentary individual. <i>All three behaviours:</i> S13 – IG – Care took place at a nonclinical site in the community. Physical assessment, evaluation for pharmacotherapy and monitoring adherence done by nurse practitioner. Smoking cessation and exercise counseling by community health worker. All siblings received pharmacy card for free pharmacotherapy, CG – individually tailored recommendations specific to the individual's risk factor status

Cultural adaptation: N-Promotora (and tailored print), cultural tailoring by CHW, family educational sessions, use of culturally adapted materials, counseling by community health worker in nonclinical site in community, easy access to free pharmacotherapy, community-based group sessions including cultural adaptation to participants, monthly telephone contact with lay community health advisor, group composition, faith-based component, use of LHA, adaptation of culturally relevant stories, spiritually orientation of health message, targeting information at ethnic group, incorporating cultural values, involvement family, only African-American group members and counselors, location – incorporating socio-cultural values and cultural values regarding exercising

Main Outcomes: Only 2 out of the 13 studies of interest that tested one or more cultural adaptations found statistically significant results on the effectiveness of cultural adaptations S1 & S13). S1, one of six studies regarding diet and PA demonstrated effectiveness on primary outcomes – study however aimed at improving diabetes care and health measures, i.e. secondary prevention. S13, which targeted smoking, diet and PA, reported effectiveness on smoking behavior and energy expenditure. Study however did not find any significant effects regarding the outcomes BMI, LDL cholesterol and metabolic equivalent at one year follow-up. **Diet:** The studies of interventions aimed to change diet all assessed one type of cultural adaptation instead of a package of different cultural adaptations. In one study, the effectiveness of targeting messages to the ethnic identity of respondents by using untailored, ethnically neutral graphics versus newsletters with information targeted at ethnic identity in a study population of African Americans was tested. A significant increase in fruit and vegetable intake was only found for a subpopulation of participants with Afrocentric identity but not for the total group. **PA:** The two culturally adapted interventions aimed at increasing PA without treatment effect tested a package of cultural adaptations.

Secondary Outcomes: Five broad categories of adaptations distinguished: level of adaptation, i.e. surface-vs. deep-structure; cultural values vs. interventions involving community health workers or lay health advisors; incorporating family vs. religious values; interventions employing intensive vs. non-intensive strategies; and use of a package of adaptations vs. one type of adaptation. **Surface- vs. deep-structure adaptations** – All in all authors found no indication that the level of adaptations influenced effectiveness. **Adaptations based mainly on cultural values vs. involvement of lay health advisors/community health workers** – no pattern of effectiveness when we distinguished the studies on the basis of adaptations that involved community health workers or lay health advisors versus adaptations mainly based on incorporating cultural values into intervention materials or in the counseling conducted by professionals observed. **Distinguishing incorporating family versus religious values** – topics used in the cultural adaptations, i.e. religious values, family values and/or family involvement and other cultural values which were not further specified could be distinguished. Statistically significant effects on primary outcomes were found by three interventions (of four – all on smoking) that incorporated family values and/or involved family members and by none interventions (of five) that incorporated religious values. **Intensity of the adaptation** – In 9 of the 17 studies, the cultural adaptation implied an increase of the intervention's intensity (e.g. extra sessions with a lay health advisor). This was the case in all studies that reported statistically significant effects on primary outcomes. **Number of adaptations tested** – Some of studies that incorporated a package of adaptations, e.g.; additional proactive calls together with tailoring to cultural values reported statistically significant effects. Studies using one type of adaptation, e.g. use of homogeneous groups, didn't show statistically significant effects (n= 8).

Review's conclusion: In five studies the adapted intervention had a positive statistically significant effect on the primary outcomes. These were mainly interventions that targeted smoking cessation. Twelve studies showed no statistically significant effects on primary outcomes, although some studies presented trends favorable for cultural adaptations. Authors observed that interventions incorporating a package of cultural adaptations, cultural adaptations that implied a higher intensity and those incorporating family values were more likely to report statistically significant effects. The results of our review indicate that: 1) Culturally targeted interventions may be more effective if cultural adaptations are implemented as a package of adaptations, the adaptation addresses family influences, and where the adaptation implies a higher intensity of the intervention; 2) Adaptations in smoking cessation interventions seem to be more likely to be effective than adaptations in interventions aimed at diet and PA; 3)

More systematic experiments are needed in which the aim is to gain insight in the best mix of cultural adaptations among diverse populations in various settings, particularly outside the US.

Methodological Problems: –

Author Year: Liu 2012

Full Citation: Liu J, et al. (2012) Adapting health promotion interventions to meet the needs of ethnic minority groups: mixed-methods evidence synthesis. *Health technology assessment* (Winchester, England) 16(44):1-469 doi:10.3310/hta16440

Cultural adaptation is the main focus of the review: yes

Included studies: all in all 7 reviews and 107 primary studies included: 2 reviews on smoking, 2 PA, one Type 2 diabetes (secondary prevention), 1 CVD and 1 obesity. 23 of primary studies were on smoking, 10 PA, 57 PA & diet, 16 PA and 1 all 3. Children/adolescents as well as adults focussed on

Settings: schools, community, churches etc

Population: 91/107 primary studies focused on AA, 7 on Chinese, 8 on South Asians and 1 was multiethnic. CVD and obesity reviews focused on AA (diabetes on children), 1 smoking on AA and other on Asian American, and both PA reviews on AA, one of them only women

Designs of the included studies: 7 systematic reviews, all types of study designs, including experimental studies (controlled and uncontrolled studies), observational studies (prospective cohort studies) and evaluation studies using qualitative methods. Interventions at any level, ranging from individual to organisational, institutional and environmental, were eligible for inclusion

Intervention components: diverse, hence focus only on those with *Direct comparison of adapted with non-adapted/standard interventions* – S1 – Kreuter et al 2005 – healthy eating (AA): Compared intervention of six magazines to increase fruit and vegetable consumption. Four arms: magazine stories were tailored to behaviour (BCT), culture (CRT), behaviour + culture (BCT + CRT) or control (delayed intervention). S2 – Ard et al 2008 – PA & healthy eating (AA): Compared all African American group sessions with mixed race group sessions for weight loss. S3 – Resnicow et al. 2005 – PA & healthy eating (AA): Compared three church-delivered interventions: standard education materials vs. culturally adapted education materials vs. culturally adapted education materials and four motivational interviewing telephone counselling calls. S4 – Yanek et al 2001 – PA & healthy eating (AA): Compared three church-based interventions: standard group sessions vs. standard group sessions and spiritual/culturally adapted component vs. non-spiritual self-help materials: *Comparison of adapted with adapted plus an additional component interventions*: To increase effectiveness, some studies trialled the addition of a discrete adaptation. For example, a healthy-eating intervention conducted by Resnicow et al. (2005) for an African American population ($n = 560$) utilised a RCT design to assess the addition of a heightened degree of cultural adaptation to an intervention that was already adapted for this population. Participants were randomised to receive magazines promoting fruit and vegetable intake over a 3-month period. The control group newsletters targeted a general 'black American' audience with minimal Afrocentric focus and the graphics were untailored and ethnically neutral (e.g. no people featured). The intervention newsletters were specifically adapted to 16 levels of ethnic identity as assessed by the Black Identity Classification Scale. Several studies examined the addition of a religious or spiritual component to an already culturally adapted intervention. E.g. Campbell et al.(1999) with a rural African American population. The study was part of a larger study called Black Churches United for Better Health (BCUBH), which delivered a multilevel, multicomponent healthy-eating intervention. A total of 10 counties 320 (with 50 churches) were pair matched and randomised to receive either the intervention or the delayed intervention. The intervention included computer-tailored bulletins, healthy eating teams and lay health advisors, education sessions and cooking classes. Environmental modifications were also made to increase fruit and vegetable availability within the churches and at point of purchase in the community. For this study, the 25 churches ($n = 2519$) initially randomised to the intervention group were further randomised to receive a spiritual or pastor-oriented bulletin or an expert-oriented bulletin to test the effect of the spiritual component ($n = 459$).

Both bulletins were designed to promote fruit and vegetable intake and were tailored to participants according to their baseline assessments for factors including stages of change, perceived risk and barriers and social support. Each bulletin was also tailored to the participant's church name and contained a traditional African American fruit and vegetable recipe. The spiritual bulletin included a message from the pastor, a photo of the pastor, a 'five-a-day' grace, spiritual language, biblical references and articles written by church members. The expert bulletin referenced healthy eating research.

Cultural adaptation: 46-item Typology of Adaptation reported in all 107 primary studies included in review (this includes smoking cessation as well as some secondary prevention studies) with examples presented on pg. 66 of manuscript (p83 of pdf)

Main Outcomes: Systematic reviews included: *Focus obesity – Hudson 2008*: reviewed obesity-prevention interventions adapted for African Americans. Twenty-eight studies were included; six of these were experimental studies (one of these six was not explicitly adapted, but all six studies included physical activity and healthy eating components). The six experimental studies included preliminary data and therefore the authors were unable to draw any definitive conclusions. *Focus CVD – Shaya et al. 2006* reviewed community interventions addressing cardiovascular disparities. They identified 10 studies, of which five were conducted in African American populations, focusing on physical activity and/or healthy eating, and described some form of cultural adaptation. Four of these studies were church-based interventions. Churches were identified as a focal point of the African American community, especially for older women, and therefore an acceptable setting for health-promotion interventions. Lay health workers and culturally appropriate recruitment strategies were also discussed. Although the adaptations were described, no conclusions were offered on the effectiveness of adaptation for health promotion strategies. *Primary studies:* The vast majority of the 107 studies had effective outcomes. This is including studies that reported effectiveness for any of the outcomes measured, at any time point and sometimes within subgroups of the participants. These findings are encouraging; however, the design of these studies does not allow any assessment of the extent to which the adaptation contributes to their effectiveness. To determine whether or not adapted interventions are effective for ethnic minority populations we therefore identified the studies that directly compared an adapted approach with a non-adapted intervention. *Direct comparison of adapted with non-adapted/standard interventions – S1 – Kreuter et al 2005 – healthy eating (AA):* Compared intervention of six magazines to increase fruit and vegetable consumption. Four arms: magazine stories were tailored to behaviour (BCT), culture (CRT), behaviour + culture (BCT + CRT) or control (delayed intervention). Effect: Median changes in daily fruit and vegetable servings were significantly greater for women in the BCT + CRT group than for women in the CRT group, but not significantly greater than for those in the BCT or control group. *S2 – Ard et al 2008 – PA & healthy eating (AA):* Compared all African American group sessions with mixed race group sessions for weight loss. Effect: Significant weight loss was reported for both groups (mean weight loss 4.2 kg) with no effect (adherence, fruit and vegetable intake, physical activity or weight loss outcomes) attributable to group composition. *S3 – Resnicow et al. 2005 – PA & healthy eating (AA):* Compared three church-delivered interventions: standard education materials vs. culturally adapted education materials vs. culturally adapted education materials and four motivational interviewing telephone counselling calls. Effect: Participants who received the culturally adapted education materials with and without the motivational interviewing calls increased fruit and vegetable intake and minutes of physical activity at the 1-year follow-up compared with participants receiving standard education materials. *S4 – Yanek et al 2001 – PA & healthy eating (AA):* Compared three church-based interventions: standard group sessions vs. standard group sessions and spiritual/culturally adapted component vs. non-spiritual self-help materials. Effect: At the 1-year follow-up there were no differences in outcomes (dietary nutrient intake, physical activity and BMI) detected between the different conditions. *Comparison of adapted with adapted plus an additional component interventions:* To increase effectiveness, some studies trialled the addition of a discrete adaptation. For example, a healthy eating intervention conducted by Resnicow et al. for an African American population ($n = 560$) utilised a RCT design to assess the addition of a heightened degree of cultural adaptation to an intervention that was already adapted for this population. Participants were randomised to receive magazines promoting fruit and vegetable intake over a 3-month period.

The control group newsletters targeted a general 'black American' audience with minimal Afrocentric focus and the graphics were untailored and ethnically neutral (e.g. no people featured). The intervention newsletters were specifically adapted to 16 levels of ethnic identity as assessed by the Black Identity Classification Scale. The intervention group slightly increased their daily mean fruit and vegetable intake compared with those assessed to be the most 'Afrocentric' in the control group and this was not statistically significant. However, when participants who were assessed to be the most Afrocentric in the intervention group were compared with the control group, the increase was statistically significant ($p < 0.05$). The authors concluded that the additional effort of adjusting an adapted intervention for varying degrees of ethnic identity might be an effective strategy for some African American groups. Several studies examined the addition of a religious or spiritual component to an already culturally adapted intervention, but these did not find significant differences in outcomes between the spiritual and the other group (2 of primary studies also included in Lancaster et al 2014 (Resnicow 2005, and Campbell 1999). For the latter – at follow-up, message recall was good for both groups, but message trust was higher for the spiritual bulletin group ($p < 0.05$). Both groups increased fruit and vegetable consumption significantly (4.9 daily servings at follow-up for the spiritual group and 4.8 servings for the expert group) compared with the control group ($p < 0.05$), but there were no significant differences detected in outcomes between the spiritual and the expert groups. The results need to be interpreted with caution as it is difficult to know what changes in behaviour were attributed to the bulletin and what could be a result of the broader interventions in place.

Secondary Outcomes: In summary, the nine studies (4 of them on diet, respectively PA and diet) that compared an adapted intervention with a non-adapted or standard approach did not show increased effectiveness in favour of the adapted version. Only one study on PA & diet (Resnicow et al 2005) reported increased effectiveness with the use of adapted self-help material compared with standard materials; however, this study was the least equivalent in terms of materials received (the culturally tailored group also received pedometers as cues to walking) and detectable differences in fruit and vegetable intake also differed depending on the FFQ used. It is worthwhile noting that the two smoking studies with 'strong' quality scores demonstrated that, although adapted intervention materials were appropriate, particularly for those with higher degrees of ethnic identification, these preferences did not necessarily improve smoking cessation outcomes for participants in the intervention group. The healthy eating study with a 'strong' quality score (Kreuter et al 2005, AA) provides compelling evidence suggesting that adaptation alone is insufficient to change behaviour, and that an intervention component that explicitly addresses behaviour in conjunction with tailored information is needed. The only study to demonstrate a behaviour change from adaptation and with a 'strong' quality score is a church-based physical activity and healthy-eating intervention (Resnicow et al 2005). It should be noted that both the standard and the adapted conditions were delivered in a church context and may therefore already incorporate an element of cultural appropriateness. The nine studies comparing adapted with unadapted interventions covered 39 of the 46 adaptations identified from the entire body of 107 studies.

Review's conclusion: From this systematic review of adapted health-promotion interventions for smoking cessation, increasing physical activity and improving healthy eating for African-, Chinese- and South Asian-origin populations we identified 12 theoretical papers that provided some preliminary insights into the kinds of adaptations and considerations recommended for working with ethnic minority populations. We further identified seven systematic reviews that yielded mixed evidence regarding whether or not adaptation increases the effectiveness of health-promotion interventions. Our own review of the empirical literature identified 107 adapted empirical studies (reported on in 154 papers) focusing on the three populations and three topics of interest. Overall, these studies suggested that adaptation could increase the salience and acceptability of studies, this translating into improved recruitment. However, many studies showing positive outcomes lacked comparable conditions and relied on self-reported measures. Of the 107 studies, only nine were designed to directly compare the effectiveness of adaptations for interventions and these too yielded mixed findings. Equally, there was no direct evidence found for the cost-effectiveness of adapted interventions with only a handful of studies reporting on cost data and none carrying out formal cost-effectiveness analyses.

Some of our conclusions support those of other research groups; for example, the systematic review by Chen and Tang (2007 – review on smoking) also found varying degrees of success of adapted interventions related to the degree of acculturation within the population. The overarching themes from the review of the relevant theoretical literature (see Box 5) were observed in the kinds of adaptations undertaken and are reflected in our 46-item Typology of Adaptation. Adaptations such as ‘Intervention goals and outcomes for participants are culturally appropriate’ (number 23) suggest that the goals for behaviour change for ethnic minority groups should be framed around psychological community and family gains, rather than individual personal gains. Adaptations such as ‘Present a pro-ethnic/race approach’ (number 37) and ‘Maintaining cultural significance of food’ (number 43) emphasize that cultural elements are protective assets rather than pathologies.

Methodological Problems: –

Author Year: Ickes, M. J. Sharma, M. 2012

Full Citation: Ickes MJ, Sharma M. A Systematic Review of Physical Activity Interventions in Hispanic Adults. Journal of Environmental and Public Health. 2012;2012:156435. doi:10.1155/2012/156435.

Cultural adaptation is the main focus of the review: yes

Included studies: n=20, of interest n=14

Settings: mostly community-based settings, 3 x homes, 1 x church

Population: mainly Hispanic, respectively Hispanic descent. 8 x only women; 1 x mother-daughter dyads. Age range for adults 18–66 years; sample size 16–869; 7 x <100

Designs of the included studies: mostly RCTs; then quasi-experimental; nonexperimental; two-group repeated measures

Intervention components: S1 (Hovell et al.): Three 90-minute sessions per week of supervised aerobic dance in a community setting; 5 : 1 participant to staff ratio; bilingual aerobic instructor; 30-mins. of exercise/diet education after each session including culturally appropriate materials; problem-solve barriers; assigned exercise buddy. Duration 6 mths. S2 (Olvera et al.): Bounce; family-based program delivered in community and school settings; 3-week structured group aerobic, sport sessions, or free play recreational activities; 1-week behavioral counseling session – duration 12 wks. S3 (Pekmezi et al.): Seamos activas; emphasized behavioral strategies such as goal-setting, monitoring, problem-solving, barriers, increasing social support, and rewarding oneself for meeting PA goals; monthly educational materials mailed based on individual-level-tailored feedback – duration 6 mths. S4 (Hayashi et al.): Wisewoman; delivered by community health workers who were bilingual and bicultural; focused on health behavior counseling – 3 lifestyle sessions (30–45 mins.). S5 (Albright et al/Collins et al): Eight 1-hour weekly behavioral skill building sessions; focused on overcoming barriers, setting short-term goals, and developing a PA program; cultural tailored curriculum including ethnically matched health educators; home-based randomized trial began after the series of classes and included either mail support or ongoing PA counseling via telephone and mail (14 calls over 10 months) – duration 8 weeks then 10 months. S6 (Staten et al): One group received provider counseling (PC) (active control); 2nd group received health education classes and a monthly newsletter as well as PC (PC +HE); 3rd group received all of the above and social support provided by community health workers (PC + HE + CHW); CHW were bilingual Hispanic women; CHW led bimonthly walks and encouraged participants to find walking partners, build social support – duration 12 mths. S7 (Bopp et al): Faithful Footsteps Program; Faith-based physical activity intervention; culturally and spiritually relevant educational materials and activities developed promoting the health benefits of PA; team-based walking contest to promote social support for PA; health “fiesta” provided hands-on educational opportunities for PA – duration 8 wks. S8 (Mier et al): Spanish handbook (Let’s Walk) developed to include information which was culturally appropriate used individualized problem-solving and self-management strategies; use of social support – duration 12 wks. S9 (Grass et al): Participatory action research; four sessions over 3 mths. of “walking clubs”; family focused to influence social support; written materials in English and Spanish – duration 3 mths.

S10 (Poston et al): One session per week for 12 months focused on influence of education, use of social support networks, dealing with negative influences, and restructuring personal environment; instructors were bilingual; bilingual materials; participated in 30 mins. of walking during the weekly meeting and walking clubs set up during the week – duration 12 wks. S11 (Yan et al): Active start: 1 hour per week in a group setting to set goals, identify barriers, and establish social support system; after week 4, participants met 3 times/week for 45 mins.; exercises were performed to culturally preferred music; given safe exercises at home handout – duration 6 mths. S12 (Keele-Smith): Participants given brochure highlighting general information about exercise; individualized-written exercise prescription developed based on baseline data; one-on-one weekly educational seminars 30–45 mins.; monitoring only group that received weekly phone calls – duration 5 wks. S13 (Chen et al): Home-based behavioral intervention to promote walking; intervention group received six phone calls (20–30 mins.) with counseling versus educational phone calls intended to increase self-efficacy, assess barriers, problem solve to promote social support – duration 8 wks. S14 (Castro et al): Walking program with one session per week; participants given written materials and health and weekly phone counseling sessions; focusing on informational control, education, social support, motivation, problem-solving, and improving self-efficacy – duration 6 wks.

Cultural adaptation: cultural tailored curriculum including ethnically matched health educators; social support; bicultural Spanish speaking trainer; culturally and spiritually relevant educational materials and activities; walking clubs; family focused to influence social support; written materials in English and Spanish; intervention delivered by bilingual and bicultural CHWs; Spanish handbook (Let's Walk) developed to include information which was culturally appropriate used individualized problem-solving and self-management strategies; exercises were performed to culturally preferred music

Main Outcomes: The majority of the interventions reported success in some manner (i.e., change in physical activity, knowledge, fitness, etc.). Of those measuring physical activity as an outcome, 82% (n = 9) indicated an improvement. [S1, S2, S3, S5, S6, S8, S12 – S14] Five interventions reported an increase in minutes walking and/or associated METS [S1, S5, S8, S13, S14]. One intervention reported an increase in individuals meeting recommended physical activity levels [S1]. Two interventions indicated an increase in MVPA [S3, S6] and one an increase in VPA [S1].

Secondary Outcomes: Four of the interventions reported an improvement in either physical activity knowledge or awareness [S3, S5, S7, S14]. Social support reportedly increased in 83% (n = 3) of the interventions which measured it in some capacity [S1, S5, S14]. Improved psychological well-being including decreased stress and depressive symptoms was reported in one of the interventions of interest [S8]. Fitness assessments improved in two of the interventions [S1, S11]. Clinical measures related to diabetes and/or cardiovascular disease also reportedly improved in two of the interventions [S4, S6]. Yet, it is important to note that only a few interventions conducted a follow-up measure; one at 2 months [S5], one at 6 months [S7], and two at 12 months [S1, S3]. Sustainability of behavior change related to physical activity outcomes was not indicated among these four interventions.

Review's conclusion: Due to the varying nature of the intervention setting, the duration of each intervention, the target population, the theoretical frameworks used, and the strategies used for each intervention were extremely different. Ingrained into 65% of the interventions was the idea of social support. Much of the improvement in the benefits achieved during the interventions tends to be lost in follow-up measures. As a result, there is a need to continue support once the intervention is complete; changes in community-wide policies may include supportive social norms and community-based resources [S1]. With such a focus on individual-level variables as primary outcomes, these do not necessarily provide a full understanding of the potential for long-term community mobilization and change. Castro and colleagues recognize the complexity in changing physical activity behaviors, particularly in previously sedentary individuals. They acknowledge that future studies must consider environmental factors and other social and cognitive factors such as competing demands, stressful life events, role models, for physical activity, and normative and cultural beliefs about the importance of physical activity [Castro et al. 1999]. Evaluation of community level indicators is needed to demonstrate changes in community capacity, resource identification, and environmental change [Perez et al. 2010].

Methodological Problems: This is a narrative review and not a quantitative meta-analysis. Hence, comment on aspects such as effect sizes for all studies, correlation coefficients, and other quantitative measures cannot be made. Although various subsets of questions exist within this literature, the paper purpose was framed in a manner that was not so prespecified, allowing for a more iterative method of review. Further, the interventions included were limited to those in the English language, published between January 1988 and April 2011 and the location of study must have been in the United States.

Author Year: Jenkins 2017
Full Citation: Jenkins F, Jenkins C, Gregoski MJ, Magwood GS (2017) Interventions Promoting Physical Activity in African American Women: An Integrative Review. <i>The Journal of cardiovascular nursing</i> 32(1):22-29 doi:10.1097/jcn.0000000000000298
Cultural adaptation is the main focus of the review: yes
Included studies: n=32, 16 only Pa, 16 PA & diet, of interest n=5
Settings: n=5 faith setting; n=6 community; n=6 home-based; n=1 telephone-based; n=2 internet/social media; n=10 unspecified or mixed
Population: African American women
Designs of the included studies: supplement
Intervention components: <i>Study 1</i> (Christie et al. 2010): 24-wk intervention (12 wk. per phase), sessions incl. 1h of PA and 1,5 h nutrition education, cooking demonstrations, and social support – culturally tailored intervention incl. ethnically matched program staff, peer leaders/health coordinators recruited from each church, and the intervention was held in a church setting; <i>Study 2</i> (Karanja et al. 2002): 6 months weight loss program focused on nutrition and PA; weekly group meetings and supervised exercise sessions at a local community center – culturally tailored intervention included the following: participants chose the location and format of exercise sessions, the content of group meetings; ethnically matched program staff; social support; and group participants shared low-fat meals prepared by participants (participants also discussed how the reduce fat content for each meal). <i>Study 3</i> (Gaston et al. 2007): Culture- and gender-specific model (theory based), facilitators led small group that met for 90 min weekly for 10 wk. Majority of facilitators were AA women; goals were set related to nutrition, PA, stress management (!!!); participants received a textbook and curriculum workbook. Comparison group received a copy of the textbook provided to the intervention group. <i>Study 4</i> (Para-Medina et al. 2011): Culturally tailored and theory-based intervention included telephone calls and printed materials that addressed topics of concern for AA women; intervention also included 12 motivational, stage-matched ethnically tailored newsletters and up to 14 calls over 1 year. <i>Study 5</i> (Yancey et al. 2006): Theory-based, culturally tailored nutrition and PA intervention included 8 weekly 2-h sessions with ethnically matched community role models as guest instructors. Intervention also included skills training in a balanced regular exercise regime, nutrition education focusing on a low-fat, complex carbohydrate-rich diet, social support, and incentives. Participants received a 1-year free gym membership and were able to invite 1 family member or friend to receive a 1-y free membership as well (social support); incentives included pedometers and exercise bands.
Cultural adaptation: 1) cultural tailoring, including a) adapting educational materials and sessions for AA women, b) choice of location; c) social support; 2) faith-based interventions and interventions in faith-settings; 3) involvement of ethnically matched study leaders
Main Outcomes: <i>Study 1</i> reported significant results; <i>Study 2</i>) reported significant increase in PA; <i>Study 3</i>) reported significant results. <i>Study 4</i>) reported significant results. <i>Study 5</i>) mixed results.
Secondary Outcomes: no

Review's conclusion: Culturally tailored interventions increase acceptability by participants (Gaston et al. 2007); the majority of culturally tailored interventions reported significant or mixed changes in PA; faith-based settings have the potential to influence the health of African American women (Peterson et al. 2011), particularly those who consider their faith to be an important part of their life (Anderson et al. 2013; Duru et al. 2010)

Methodological Problems: Focus on African American women / USA, not generalizable to other ethnic minorities and other countries

Author Year: Mosdol 2017

Full Citation: Mosdol A, Lidal IB, Straumann GH, Vist GE (2017) Targeted mass-media interventions promoting healthy behaviours to reduce risk of non-communicable diseases in adult, ethnic minorities. The Cochrane database of systematic reviews 2: Cd011683 doi:10.1002/14651858.CD011683.pub2

Cultural adaptation is the main focus of the review: yes

Included studies: Total n=6, of interest n=2 (report on PA), Jih 2016, Risica 2013

Settings: home-based; individual and community level

Population: Study 1: older Chinese Americans; Study 2: African American women

Designs of the included studies: Cluster RCT; RCT

Intervention components: *Study 1:* Study objective/aim: to evaluate the efficacy of an in-language intervention of 2 lectures plus printed materials versus printed materials alone on knowledge and adherence to nutrition and physical activity guidelines among older Chinese Americans Intervention 1 (study control): targeted mass-media intervention Participants received the printed lecture handouts made for intervention group 2 that focused on culturally appropriate examples of food and physical activity and a Chinese nutrition brochure. Lay health workers (LHW) delivered 2 small-group education sessions with follow-up calls on colorectal cancer (control component). Intervention 2: lectures and targeted mass-media intervention. Participants received two 60–90 min lectures, printed lecture handouts and a nutrition brochure about 2 months apart, delivered by an instructor. LHW called about 1 month after each lecture to ask them recall the lecture and remind to attend the next lecture or final assessment. Content of the mass-media message: basic nutrition and physical activity education, with focus on recommended daily 5 servings of vegetables and 4 servings of fruit, and ≥ 150 min moderate intensity physical activity weekly. Media channel(s) of dissemination: printed information material. *Study 2:* Study objective/aim: to evaluate the effectiveness of a culturally tailored weight control cable TV program for black women. Control: wait-list/attention placebo comparison. Biweekly mailings for 12 weeks with other health-related information. Received all the TV shows as videos and other intervention material after the 12-month follow-up (i.e. after final outcome assessment). Intervention 1: participants were given access to 12 one-hour live program on cable TV and printed material corresponding to the shows biweekly by post. After the shows, participants received 4 monthly mailings with written material and booster videotapes including an exercise video. Intervention 2 (combination of 3 study arms): in addition to all intervention content described under intervention 1, participants received either access to a toll-free number to call during a live sharing part of show; 12 weekly and 4 monthly telephone support calls from a community outreach educator; or both access to call the 'live' sharing and the 16 telephone support calls. Content of the mass-media message: educational content regarding nutrition and physical activity to improve health and weight control as defined by each woman. Practical cooking demonstration or physical activity breaks. 20 min of each show devoted to a live 'sharing' between social worker, featured guest, and live callers Media channel(s) of dissemination: cable TV, print material, video

Cultural adaptation: Study 1) the lectures were presented in the participants' preferred language Cantonese, Mandarin, or English. Lectures and material were developed with culturally appropriate examples of common foods, relevant physical activities, and familiar portion size models for target group. A community advisory board reviewed the material for cultural and linguistic appropriateness, with subsequent testing in focus groups. Study 2) designed to be culturally appropriate based on formative research with 500 people from the target population. All African American female cast in the TV shows, including all experts; recruited only target population

Main Outcomes: Study 1) In Jih 2016, results indicated no difference in weekly physical activity meeting guidelines (adjusted OR 1.27, 95% CI 0.89 to 1.80). The same study indicated that more participants receiving personalized content had increased knowledge of nutrition guidelines than participants receiving the targeted mass media alone (knowledge of guideline for vegetables, adjusted OR 12.6, 95% CI 6.5 to 24.5, and fruit, adjusted OR 16.2, 95%CI 5.6 to 46.5), but this finding did not hold for knowledge of physical activity guidelines (adjusted OR 2.70, 95% CI 0.31 to 23.2). Lacks effects on PA. Study 2) Changes in BMI were comparable in the two groups 12 months after baseline (longest follow-up, mean difference in change 0.1 kg/m², 95%CI-0.4 to 0.6). Fat behaviour scores (no unit described, high scores reflecting high fat intake) were lower in participants who received the targeted mass-media intervention compared to the no intervention control group at 12 months longest follow-up, mean difference in change -0.2, 95%CI-0.3 to -0.1), while total leisure activity score (no unit described, high scores reflecting more activity) was higher in the intervention group (longest follow-up, mean difference in change 12.0, 95% CI 1.0 to 23.0). Mosdol et al. considered the effect measures based on the outcome BMI to be low quality evidence and the self-reported behavioural changes to be very low quality evidence.

Secondary Outcomes: –

Review's conclusion: The available evidence is inadequate for understanding whether mass-media interventions targeted toward ethnic minority populations are more effective in changing health behaviours than mass-media interventions intended for the population at large. When compared to no intervention, a targeted mass-media intervention may increase the number of calls to smoking quit line, but the effect on health behaviour is unclear. These studies could not distinguish the impact of different components, for instance the effect of hearing a message regarding behavioural change, the cultural adaptation to the ethnic minority group, or increase reach to the target group through more appropriate mass-media channels.

Methodological Problems: –

Author Year: Kong 2014
Full Citation: Kong A, Tussing-Humphreys LM, Odoms-Young AM, Stolley MR, Fitzgibbon ML (2014) Systematic review of behavioural interventions with culturally adapted strategies to improve diet and weight outcomes in African American women. <i>Obesity reviews: an official journal of the International Association for the Study of Obesity</i> 15 Suppl 4:62–92 doi:10.1111/obr.12203
Cultural adaptation is the main focus of the review: yes
Included studies: n=16
Settings: most studies were conducted in community-based settings; church (2), clinical/university (1), university/hospital (1), university/community center (1), community (3), primary care clinic (1), community clinic (1), university (1), academic medical center (1) university- and church-based (2), worksite (1),community center and clinics (1)
Population: Mostly 100% African American women
Designs of the included studies: RCT (11), quasi-experimental (4), crossover design (1)
Intervention components: multi-component behavioral change interventions
Cultural adaptation: CA 1) 7 out of 16 studies employed peripheral strategies (mostly during recruitment phase), including targeted advertisement, church- and community settings, study materials designed to appeal to participants; CA 2) 11 of 16 studies employed constituent-involving strategies (mostly during planning and implementation phase), including focus groups, advisory board with community stakeholders, church members or leaders, peer or lay educators and mentors or AA staff; CA 3) 3 of 16 studies employed evidential strategies (mostly during implementation phase); CA 4) 1 of 16 studies employed linguistic strategy by adapting program materials to participants' literacy levels, CA 5) 10 of 16 studies employed socio-cultural strategies (in intervention delivery), including themes such as faith, religiosity, spirituality; traditional and cultural foods; family and social support; barriers; body image specific to AA women
Main Outcomes: Dietary & weight-change outcomes: significant differences between groups in 4 of 16 studies; no significant between group differences in 7 studies; weight-change outcomes only: 3 of 16 studies showed significant differences between groups; in sum, 7 out of 16 studies showed significant differences between groups for weight-change outcomes.
Secondary Outcomes: Of the 4 studies with significant between-group differences for both weight and diet outcomes, constituent-involving and socio-cultural strategies were most frequently reported, followed by peripheral strategies. Commonly reported socio-cultural strategies addressed cultural and traditional foods (2); food insecurity (1); and spirituality, religiosity, and faith (2). Commonly reported constituent-involving strategies included conducting focus groups (2) and using lay or peer educators (2). Among the 3 studies that found significant between-group differences by weight only, socio-cultural strategies were most commonly reported (3), followed by constituent-involving strategies (2). Of the 11 studies that reported no significant between-group findings for diet or weight outcomes, socio-cultural (5) and constituent-involving strategies (7) were the most frequently reported, followed by peripheral strategies (2).
Review's conclusion: Overall, 7 of 16 studies of interest demonstrated significant improvements in outcomes in the treatment arms over controls, which suggests behavioral interventions incorporating culturally adapted strategies may be effective over control (e.g. usual care) or comparison arms. The most commonly identified strategies reported were socio-cultural and constituent-involving. Studies with significant findings often reported using constituent-involving strategies during the formative phases of research. What is still unknown is how any of these strategies actually influence outcomes.
Methodological Problems: –

Author Year: Sushames 2016
Full Citation: Sushames A, van Uffelen JG, Gebel K (2016) Do physical activity interventions in Indigenous people in Australia and New Zealand improve activity levels and health outcomes? A systematic review. <i>The international journal of behavioral nutrition and physical activity</i> 13(1):129 doi:10.1186/s12966-016-0455-x
Cultural adaptation is the main focus of the review: yes
Included studies: n=7
Settings: community/group-based
Population: Indigenous adults
Designs of the included studies: 2 RCT, 4 Cohort, 1 interrupted time-series
Intervention components: interventions to enhance PA included facilitated exercise sessions (with variations in modality); self-monitoring; education and lifestyle messages
Cultural adaptation: Main: cultural consultation to include in study protocols (constituent-involving, participatory). Cultural adaptations were noted in all studies. Specific efforts to make programs culturally appropriate included consultation with community members such as elders or an advisory group (McAuley et al. 2003, Canuto et al. 2012). Examples of cultural adaptations for interventions were using appropriate local dialect in promotion material (linguistic) (McAuley et al. 2003, Egger et al. 1999, Canuto et al. 2012, Coppell et al. 2009), using traditional games or historically important cultural activities such as paddling (McAuley et al. 2003) and hunting (Rowley et al. 2000, O'Dea 1984); considering different concepts of time (Dimer et al. 51) (sociocultural)
Main Outcomes: significant increases in PA level only in 1 study (Coppell et al. 2009)
Secondary Outcomes: There were mixed results in regards to maintenance of changes in health outcomes.
Review's conclusion: Cultural consultations, adaptation, and flexibility in the delivery of programs are important for interventions in Indigenous populations. Interventions that included facilitated exercise sessions, as opposed to written information, might be more appropriate for some Indigenous populations with lower levels of literacy.
Methodological problems: small number of studies, with most of them not being methodologically strong; the effects of the interventions on physical activity levels were hard to determine due to lack of objective measures of PA (only in 2 studies) and self-reported measures (only 4 studies), limits validity of the data due to recall and social desirability bias, especially as these self-report measures were not specifically designed for this population group.

Author Year: Barr-Anderson 2014

Full Citation: Barr-Anderson DJ, Singleton C, Cotwright CJ, Floyd MF, Affuso O (2014) Outside-of-school time obesity prevention and treatment interventions in African American youth. *Obesity reviews: an official journal of the International Association for the Study of Obesity* 15 Suppl. 4:26–45 doi:10.1111/obr.12204

Cultural adaptation is the main focus of the review: yes

Included studies: n=16

Settings: n=2 faith-based, n=5 school/education-based, n=6 community plus home, n=2 community, n=1 home-based, n=1 summer camp plus home, n=1 school plus home

Population: (largely) African American youth, age range 5 to 18, mostly female

Designs of the included studies: n=5 pilot uncontrolled trial, n=11 RCT (with and without control group)

Intervention components: *Study 1/Beech 2003:* Physical activity (hip hop aerobics) sessions; healthy eating session with taste tests of healthy foods and food preparation/games; culturally relevant take-home materials; *Study 2/Engels 2005:* 60–75 min sessions 4 d/week; dance, sport games and other fitness activities; pedometers provided; targeted educational handouts on nutrition and fitness; recording of fruit and vegetable intake and step counts; Poster board displays in school; *Study 3/Robinson 2003:* After-school dance classes with healthy snack, homework; period and discussion of increased physical activity (dance) and reduced TV screen time (TV watching, videotape use and video game use); family intervention which included role modeling for girls by African American interventionist and behaviour change discussions about reducing screen time; newsletters; *Study 4/Story 2003:* Physical activity and healthy eating, behavioural skills program based upon youth development and resiliency approach to build on family and personal strengths; family night events with interactive games and goal setting that they would continue throughout the program; phone calls by staff to check in on goals and provide support; *Study 5/Wadden 1990:* incentive structure based upon weight loss and attendance; take-home assignments; various levels of parental involvement based on treatment condition (parents received homework assignments, participated in program with girl, or talking with daughter or attended separate similar session); *Study 6/Baranowski 2003:* Camp program to increase behavioural and psychosocial factors related to healthy foods (i.e. fruit and vegetable intake, water consumption) and physical activity; self-monitoring using pedometers; goal-setting website; *Study 7/Black 2010:* Role modelling and support from AA college mentors; goal setting related to PA and diet; healthy snack preparation (taste tests, recipe sharing); *Study 8/Stolley & Fitzgibbon 1997:* Nutrition education sessions; cooking demonstration; music and dance incorporated into nutrition and physical activities; *Study 9/Thompson 2013:* Physical activity log; Aerobic dance class; physical activity education (knowledge about PA, goal setting, benefits and barriers, body image, role models, social support, hair maintenance, health statistics, solicit feedback from girls about changing environments); *Study 10/Klesges 2010:* Monthly field trips; nutrition and physical activity sessions (goal setting, provided feedback, encouragement to participants, skill building, self-monitoring, problem solving, and social support); parents/guardians were encouraged to make changes in the home food environment; *Study 11/Robinson 2010:* After-school program with dance, healthy snack, and homework; public performances; START (Sisters Taking Action to Reduce Television) home-based screen time reduction program (self-monitoring, a 2-week TV-turnoff, budgeting viewing hours, 'intelligent' viewing); newsletters

Cultural adaptation: *Study 1/Beech 2003:* culturally sensitive programming and tailored take-home materials, community engagement in design, implementation and evaluation of study; *Study 2/Engels 2005:* culturally tailored PA activities (use of African dance), community engagement in design, implementation and evaluation of study; *Study 3/Robinson 2003:* African Americans only interventionists and data collectors. Attempted to account for unique elements associated with AA culture. *Study 4/Story 2003:* AA only instructors. Culturally tailored activities and programming; *Study 5/Wadden 1990:* African American adapted curriculum content; *Study 6/Baranowski 2003:* formative focus groups with African American sample; *Study 7/Black 2010:* culturally tailored diet and PA activities; formative assessment assisted by advisory board of African American adolescents; *Study 8/Stolley & Fitzgibbon 1997:* culturally tailored content and programming; *Study 9/Thompson 2013:* AA only interventionists; incorporated AA cultural values in intervention; *Study 10/Klesges 2010:* culturally sensitive programming and tailored take-home materials; *Study 11/Robinson 2010:* AA culture infused in intervention activities;

Main Outcomes: Most of the studies assesses PA with different measures; in general, all but one study (Thompson 2013) were able to achieve behavioral and health outcome results in the desirable direction, regardless of study design (randomized-controlled or uncontrolled trial); n=5 studies were able to achieve an increase in PA

Secondary Outcomes: No studies were designed to isolate effects of culturally vs. not culturally adapted interventions

Review's conclusion: The lack of scientific rigor evident by low methodological quality scores, dearth of full trials powered to detect differences compared to the excess of pilot studies, and heterogeneity of study designs contribute to inconsistent findings that limit a clear understanding of the specific intervention strategies that are most effective. Nonetheless, we are able to conclude that some interventions in this review have shown promise to positively influence weight, physical activity, healthy eating and/or sedentary behaviours during OST: both after-school and summer program, perhaps in combination. This is an important area to further investigate with the potential to produce a sizable public health impact on weight-related health outcomes. However, more high-quality, full-length trials with consistent methodologies are needed to truly advance understanding of the ways to maximize effectiveness

Methodological Problems: not mentioned

Author Year: Bender 2014

Full Citation: Bender MS, Choi J, Won GY, Fukuoka Y (2014) Randomized controlled trial lifestyle interventions for Asian Americans: A systematic review. Preventive Medicine: An International Journal Devoted to Practice and Theory 67:171–181 doi:<http://dx.doi.org/10.1016/j.ypmed.2014.07.034>

Cultural adaptation is the main focus of the review: yes

Included studies: n=5

Settings: Community-based interventions

Population: Asian American adults and elderly; Hmong immigrants (>60 yrs, N=20); Japanese Americans with IGT (mean 55.8 yrs, N=74), Korean adults (mean 51.9 yrs, N=445), Chinese adults (mean 64.1 yrs, N=83), Korean immigrants (mean 59.7 yrs, N=48)

Designs of the included studies: RCT (3 pilot, 1 adaptive, 1 parallel)

Intervention components: *Study 1:* Duration = 12 weeks Goal – to improve physical and psychological health through Tai Chi practice. I: Tai Chi sessions on movements with mini-lectures on human physiology, common disease in older adults, emotional and mental health, and stress management + daily phone calls, 12-week intervention C: encouraged to continue normal physical activity routine. Daily phone contact to confirm compliance. Dose: 2 hour weekly Tai Chi sessions + mini-lecture × 10 weeks. *Study 2:* Duration = 24 months. Goal – to improve adiposity and body fat distribution through diet and PA to reduce diabetes risk in Japanese Americans. I: AHA Step 2 diet + endurance exercise + meetings with supervised PA and diet support first 6 months

intervention C: AHA Step 1 diet + stretching + meetings 3x/wk for supervised PA and diet support first 6 months; maintenance for both groups: after 6 months told to maintain diet and exercise unsupervised for next 18 months. Dose: 3 meetings/week × 6 months. *Study 3:* Duration = 15-months self-help intervention Program for HBP (SHIP-HBP) care and control of hypertension in Korean Americans la-MI. Goal: telephone counseling to reinforce HBP knowledge learned, while providing social support and opportunities to discuss participant progress to control HBP.

Curriculum: in-class HBP education, in-home BP monitoring and tele-transmit BP data, and bi-weekly telephone counseling groups. Group counseling sessions: reviewed BP reports, discussed BP control status, HBP management (med adherence, low-salt diet, exercise, smoking and alcohol cessation, BP monitoring and stress management).

15 month intervention. Dose: weekly class education × 6 weeks, in-home BP monitoring with a tele-transmission system × 6 weeks, and biweekly group telephone counseling sessions × 12 months Ib- Ll: 6-week mail-based HBP education, in-home BP monitoring with tele-transmission system, and monthly group telephone counseling. Group counseling sessions similar to group la above. Intervention × 15 months. Dose: weekly class education × 6 weeks, in-home BP monitoring with a tele-transmission system × 6 weeks, and bi-weekly group telephone counseling sessions × 12 months. *Study 4:* Duration: 2 weeks; SEOPE intervention goal to strengthen self-efficacy and outcome expectations for adopting behaviors to prevention OP. I: 1-hour PowerPoint class + materials on bone health & OP + Exercise & Screening tool for home use + individual goals & action strategies, 2-week intervention C: 1-hour PowerPoint class on brain diseases, cerebrovascular system & Alzheimer's disease. Dose: 1-hour/week class education × 2 weeks. *Study 5:* Duration = 6 months. Project RICE = Reaching Immigrants through Community Empowerment. Goal: improve health behaviors and clinical measures for diabetes prevention. I: Curricula: 2hr group topical sessions × 6 on nutrition, PA, diabetes, cardiovascular disease, stress, family support, and access to health care + FU phone calls × 10, 6-months intervention C: No details provided. Dose: Monthly 2-hour group sessions × 6, follow-up phone calls × 10

Cultural adaptation: *Study 1/Sun 1996:* peripheral: PA in Tai Chi Chuan; linguistic: surveys translated and validated for Hmong; tailoring: individual goal setting; *Study 2/Liao 2002:* peripheral: choice of cultural foods allowed sociocultural: Japanese dietician consulted on cultural foods; *Study 3/Han 2010:* peripheral: used community locations for meetings; evidential: evidence-based HBP education for Koreans; constituent-involving: SHIP HBP is a community-based trial; linguistic: bilingual nurses and stadd implemented interventions; tailoring: group tailored telephone counseling; *Study 4/Qi 2011:* peripheral: conducted in familiar church-based community clinic, *Study 5/Islam 2013:* peripheral: ethnic foods and cooking techniques and utensils; evidential: education on risks for diabetes for Koreans; constituent-involving: CBPR, community partnership, focus groups; sociocultural: trained bilingual community health workers facilitated intervention; linguistic: translated materials; tailoring: group PA preferences and discussions on health

Main Outcomes: *Study 1:* Duration = 12 weeks. Goal – to improve physical and psychological health through Tai Chi practice. I: Tai Chi sessions on movements with mini-lectures on human physiology, common disease in older adults, emotional and mental health, and stress management + daily phone calls, 12-week intervention. C: encouraged to continue normal physical activity routine. Daily phone contact to confirm compliance. Dose: 2 hour weekly Tai Chi sessions + mini-lecture × 10 weeks. *Study 2:* Duration = 24 months. Goal – to improve adiposity and body fat distribution through diet and PA to reduce diabetes risk in Japanese Americans. I: AHA Step 2 diet + endurance exercise + meetings with supervised PA and diet support first 6 months. 6-months intervention. C: AHA Step 1 diet + stretching + meetings 3x/wk for supervised PA and diet support first 6 months; maintenance for both groups: after 6 months told to maintain diet and exercise unsupervised for next 18 months. Dose: 3 meetings/week × 6 months. *Study 3:* Duration = 15 months. Self-Help Intervention Program for HBP (SHIP-HBP) care and control of hypertension in Korean Americans la-MI. Goal: telephone counseling to reinforce HBP knowledge learned, while providing social support and opportunities to discuss participant progress to control HBP. Curriculum: in-class HBP education, in-home BP monitoring and tele-transmit BP data, and bi-weekly telephone counseling groups. Group counseling sessions: reviewed BP reports, discussed BP control status, HBP management (med adherence, low-salt diet, exercise, smoking and alcohol cessation, BP monitoring and stress management).

15-months intervention. Dose: weekly class education × 6 weeks, in-home BP monitoring with a tele transmission system × 6 weeks, and bi-weekly group telephone counseling sessions × 12 months Ib- Ll: 6-week mail-based HBP education, in-home BP monitoring with tele-transmission system, and monthly group telephone counseling. Group counseling sessions similar to group la above. Intervention × 15 months. Dose: weekly class education × 6 weeks, in-home BP monitoring with a tele-transmission system × 6 weeks, and bi-weekly group telephone counseling sessions × 12 months. *Study 4:* duration: 2 weeks; SEOPE intervention goal to strengthen self-efficacy and outcome expectations for adopting behaviors to prevention OP. I: 1-hour PowerPoint class + materials on bone health & OP + Exercise & Screening tool for home use + individual goals &

action strategies 2 week intervention C: 1-hour PowerPoint class on brain diseases, cerebrovascular system & Alzheimer's disease Dose: 1-hour /week class education × 2 weeks. *Study 5:* Duration = 6 months Project RICE = Reaching Immigrants through Community Empowerment Goal: improve health behaviors and clinical measures for diabetes prevention. I: Curricula: 2hr group topical sessions × 6 on nutrition, PA, diabetes, cardiovascular disease, stress, family support, and access to health care + FU phone calls × 10 6 month intervention C: No details provided Dose: Monthly 2-hour group sessions × 6, follow-up phone calls × 10.

Secondary Outcomes: For PA: *Study 1/Sun 1996:* Intervention group increased the frequency of Tai Chi practice more than control group ($p < .001$); *Study 2/Liao 2002:* PA: At 24 months, intervention group improved VO₂max more compared to control group ($p = .0002$); BMI: intervention group reduced weight and BMI more than control (all $p < .005$). *Study 3/Han 2010:* No significant difference between Intervention a and b groups ($p > .05$), although both groups increased PA ($p < .01$); *Study 4/Qi 2011:* intervention group increased exercise time and exercise expenditure more than control ($p < .05$). Intervention group started exercising regularly compared to control group ($p < .05$), *Study 5/Islam 2013:* no significant change in either group ($p > .05$) in PA; No significant change in weight, BMI or hip-to-waist ratio in either group ($p > 0.05$). Intervention group (23.8%) lost more than 3 pounds, but control group (47.1%) had no change in weight.

Review's conclusion: Three out of five interventions scoring high or moderate for cultural appropriateness showed significant change in PA (Qi et al., 2011, Dirige et al., 2013, Sun et al., 1996). However, although the Han et al. (2010) and Islam et al. (2013) interventions scored high for cultural appropriateness, results indicated no between group differences in PA, diets, or weight outcomes. Cultural values and recruitment strategies may have influenced these outcomes; independent of overall cultural appropriateness scores, three RCTs that demonstrated significant change in measured outcomes also used individual tailoring

Methodological Problems: Overall, study outcomes and intervention design were inconsistent making comparisons and statistically valid conclusions difficult; small sample size in single studies

Author Year: Lancaster 2014
Full Citation: Lancaster KJ, Carter-Edwards L, Grilo S, Shen C, Schoenthaler AM (2014) Obesity interventions in African American faith-based organizations: a systematic review. <i>Obesity reviews : an official journal of the International Association for the Study of Obesity</i> 15 Suppl. 4:159–76 doi:10.1111/obr.12207
Cultural adaptation is the main focus of the review: no
Included studies: n= 14
Settings: churches
Population: African American church attendees, mostly, mostly female, ages of participants ranged from 12 to 87 years old (mean age 53 years)
Designs of the included studies: 4 RCTs, 3 Quasi-experimental studies, 1 Single-group study, 6 Pilot studies
Intervention components: Interventions used a variety of intra- and interpersonal methods: self-help, motivational interviewing (MI) counselling, group sessions and church-level activities. Some studies included group sessions and some had church-level activities. Church level interventions included health messages from the pastor or printed in church bulletins, education sessions, cooking classes, grocery store promotions and community coalitions.
Cultural adaptation: Conducting programs in culturally appropriate settings, i.e. churches.
Main Outcomes: 6 studies reported improvements in PA (6 studies reported no improvements, another 2 did not report at all); among those that reported on improvements in PA, one reported that both groups improved significantly; in another one the comparison group significantly improved but was not significantly different from intervention group. Yet another two reported that intervention group significantly improved compared with comparison group.
Secondary Outcomes: Even at the community level, churches could potentially influence access to health services and availability of healthy food and physical activity options. Multi-level interventions did not have more success than those targeting only one level.
Review's conclusion: Interventions with rigorous methodologies are possible, and that faith-based and faith-placed approaches can be distinctively feasible strategies to address the higher rates of obesity in African Americans.
Methodological Problems: –

Author Year: Laws 2014
Full Citation: Laws R, et al. (2014) The impact of interventions to prevent obesity or improve obesity related behaviours in children (0–5 years) from socio-economically disadvantaged and/or indigenous families: a systematic review. <i>BMC public health</i> 14:779 doi:10.1186/1471-2458-14-779
Cultural adaptation is the main focus of the review: No
Included studies: n=11
Settings: 2 home-based, 6 preschool, 3 community
Population: mostly preschoolers, toddlers and/or their mothers (or parents)
Designs of the included studies: 4 RCT, 5 Cluster RCT, 1 Quasi-experimental, 1 Before and After
Intervention components: Study 1: aimed to prevent obesity in native American toddlers/preschool children; used a 16-week home visiting program (1 hour per week) delivered by an Indigenous peer educator. The intervention focused on role modelling healthy behaviours, parental feeding practices and general parenting skills to set rules and routines around food, physical activity and TV watching; Study 2: aimed to prevent obesity in low income racial minority families with preschool children; focused on promotion of four household routines (family meals, adequate sleep, limiting TV time, no TV in the bedroom) among racial minority families (33% Black, 52% Hispanic).

The intervention was delivered by bilingual health educators through four home visits and phone calls and one to two reinforcing text messages per week over six months. *Study 3:* (Hip Hop to Health Jr.) aimed to prevent obesity in USA Latino preschool children and their families; Fitzgibbon and colleagues pilot tested a 'family-based Hip Hop to Health' for Latino families [61] (low quality). This consisted of the standard Hip Hop intervention combined with a more intensive parental component consisting of six 90 minute group education and physical activity sessions for parents. *Study 4:* aimed for obesity prevention and school readiness in low income Latino preschool children. The "Healthy and Ready to Learn" study (low quality) was also amongst Latino preschool children and used a unique intervention approach focusing on both obesity prevention and school readiness. The intensive six month intervention consisted of activities for children at preschool and at home as well as monthly training sessions for parents and 20 hours of training for preschool teachers. The intervention integrated nutrition and physical activity messages into activities to promote literacy (e.g. story telling) as well as focusing on physical activity sessions and gross motor development. The parental component focused on motivating parents to engage in health promoting behaviours and modelled how to implement child activities at home. *Study 5:* aimed to prevent obesity in low income Latino parents; used group education sessions for parents (ranging from four to 12 sessions over a two to three month period). *Study 6:* aimed to improve child diet and maternal PA in low income Mexican parents with 3–5 year olds

Cultural adaptation: *Study 1:* Harvey-Berino 2003: Indigenous peer educators; *Study 2:* Haines et al. 2013 and *Study 3:* Fitzgibbon 2013: use of bilingual health educators; *Study 4:* Winter 2013: teachers plus promotoras; *Study 5:* Slusser 2012: bilingual social worker; *Study 6:* Bender 2013: promotoras

Main Outcomes: *Study 1:* no effects for PA; the intervention was effective in improving parental feeding practices (less use of restrictive feeding), reducing child energy intake and a weak trend of decreases in weight – for height z scores compared to general parenting support alone. The study was however under-powered and had only a short follow up duration of four months. *Study 2:* The intervention improved sleep duration and decreased TV viewing and BMI at six months follow-up (mean BMI difference between intervention and control groups of -0.40 kg/m^2 , 95% CI: $-0.79\text{--}0.00 \text{ kg/m}^2$). *Study 3:* attendance at the parental sessions was low (only 38% parents attended at least one session) and the intervention had no impact on child diet, physical activity, sedentary behaviours or BMI at one year compared to a general health intervention. This suggests that parental engagement in preschool based interventions is critical to their success and that capacity to engage may differ by cultural group or be influenced by the cultural appropriateness of the program. *Study 4:* The intervention had a positive impact on gross motor skills, physical activity and receptive language development (an important indicator of school readiness) but not BMI at six months follow-up; *Study 5:* had a positive impact on BMI at 1 year, (decrease of 9.1% in prevalence of overweight and obesity in the intervention group compared to a 16.3% increase in the control group); *Study 6:* only positive changes in diet following the intervention, not for anthropometrics (BMI).

Secondary Outcomes: –

Review's conclusion: Common features of successful interventions for preschoolers (aged three to five years) include a dual focus on obesity prevention and school readiness, weight screening and referral, focus on household routines, and an educational component for parents. Studies with positive outcomes successfully engaged parents, had a strong focus on skill building (e.g. cooking skills, media literacy, communication, problem solving, conflict resolution and parenting skills), use of behaviour change strategies (such as self-monitoring and goal setting), social networking, progressive rewards systems and links to community resources. Developing culturally appropriate programs appear to be critical to engaging parents from racial minority groups. Successful interventions also engaged children in educational activities related to nutrition, physical activity and sedentary behaviours as well as physical activity sessions focusing on development of gross motor skills.

Methodological Problems: the majority of studies were rated as moderate (44%) or low (47%) quality, with only three (9%) studies assessed to be high quality (internal validity assessment).

Author Year: Towns 2014
Full Citation: Towns C, Cooke M, Rysdale L, Wilk P (2014) Healthy Weights Interventions in Aboriginal Children and Youth: A Review of the Literature. Canadian journal of dietetic practice and research : a publication of Dietitians of Canada = Revue canadienne de la pratique et de la recherche en dietétique : une publication des Dietétistes du Canada 75(3):125-31 doi:10.3148/cjdpr-2014-006
Cultural adaptation is the main focus of the review: yes
Included studies: n= 17 publications reporting on 7 interventions
Settings: Community level, home-based, school-based interventions
Population: Aboriginal children and youth
Designs of the included studies: RCTs, quasi-experimental, pre-post-test design
Intervention components: <i>Study 1/SHARE-AP</i> : aimed to reduce energy intake and increase PA. Local health workers visited intervention households regularly and assisted families in assessing and setting dietary and PA goals. The intervention also provided filtered or bottled water to intervention and control participants; <i>Study 2/KDSPP</i> : aimed to reduce rates of obesity and type 2 diabetes by improving children's knowledge, attitudes, and behaviour regarding healthy diets and PA and to change school environments and the nutritional content in school meals. Included classroom activities and teacher training as well as community activities. <i>Study 3/SLHP</i> : adapted some elements of KDSPP curriculum, also included a family component to reinforce healthy eating and PA messaged within the home; a school meal nutrition policy was also enacted; <i>Study 4/Pathways</i> : aimed to improve diets and PA through classroom curriculum components and training of teachers and food services to staff to increase PA in schools and to reduce fat and sugar in school lunches; also provided kits for families and engaged parents in family activities. <i>Study 5/Action Schools!</i> : aimed to improve the ability of schools and educators to include diet and PA components in school curricula; encouraged the production of 'action plan' by teachers and administrators, as well as additional PA.
Cultural adaptation: family and parent engagement; community engagement; most interventions included some Aboriginal cultural element or other adaptation to make them more appropriate, but reviewers say these are not specified in primary studies. Elements included material about importance of traditional foods, using families as intervention sites, including activities that were adapted by local teachers to be more relevant to community.
Main outcomes: There were few significant effects among the interventions measuring change in childrens' PA; although KDSPP found that PA increase in some years, these had returned to baseline levels by year 8. The Action Schools! BC outcome evaluation found no significant change in the minutes per day of moderate to vigorous PA activity by students, despite a process evaluation indicating that teachers planned more activity. Pathways found that both boys and girls experienced improvement in food choice, PA intentions and curriculum knowledge.
Secondary outcomes: Community control and involvement of community members in implementation and evaluation was an important aspect of all interventions. Intervention descriptions and process evaluations of Pathways, SHARE-AP, KDSPP and SLHDP indicated the importance of community control over the intervention and of having Aboriginal researchers and staff. Action Schools! BC. Was done in 'partnership' with the communities concerned. Descriptions provided in all but two of the interventions (OPPS and Action Schools! BC), regarding cultural content were judged by reviewers as fitting to the populations addressed, and for 4 interventions it was deemed plausible that they had used a participatory approach. The 3 without plausibility are the Minneapolis after-school program and the OPPS, both of which the reviewers say did not describe the relationship between researchers and local communities, and the Action Schools! BC.

Review's conclusion: None of the programs reviewed showed clear evidence of effectiveness. This applies even for KDSPP, programs that combined participatory, community-based approaches and environmental supports for behaviour change with strong evaluation and measurement designs. Only KDSPP found some evidence of improvement in obesity, but this was not sustained. According to reviewers, this lack of demonstrated effectiveness has been observed in obesity interventions in the general population (here they cite Waters et al 2011, the update of Campbell). They say one explanation may be that aspects of the broader social and economic environment may limit the potential effectiveness of local interventions. This they say may be even more important in the case of Aboriginal children, who are more likely than others to live in social, economic and physical environments that may make change more difficult.

Methodological Problems: –

Author Year: Whitt-Glover 2014

Full Citation: Whitt-Glover MC, Keith NR, Ceaser TG, Virgil K, Ledford L, Hasson RE (2014) A systematic review of physical activity interventions among African American adults: evidence from 2009 to 2013. *Obesity reviews: an official journal of the International Association for the Study of Obesity* 15 Suppl. 4:125–45 doi:10.1111/obr.12205

Cultural adaptation is the main focus of the review: yes

Included studies: n=12

Settings: 4 church, 3 not specified, else community, senior centers and housing facilities, home-based (internet and print material), community clinic, university campus, housing-authority complex

Population: African American adults

Designs of the included studies: 6 quasi-experimental, 4 RCT, 1 randomized trial, 1 non-randomized controlled trial

Intervention components: Nine studies in the current review used objective measures of PA or fitness. Most used pedometers one used accelerometers and one used a heart rate monitor. Four studies included cardiorespiratory fitness (CRF) as an outcome variable, all of which were objective measures, with three studies assessing submaximal aerobic capacity, strength or physical function tests, and one study assessing maximal aerobic capacity.

Cultural adaptation: One study in the current review identified strategies for cultural adaptation of the intervention at the surface structure level, and seven studies identified strategies for cultural adaptation of the intervention at the deep level. Examples of surface-level cultural adaptation included holding sessions in churches or locations within the African American community. Examples of deep-structure cultural adaptation included infusion of scriptures and prayer in faith-based intervention sessions and gender- and race-specific topics and testimonials. Eight studies did not specifically note any cultural adaptation related to race/ethnicity.

Main Outcomes: Most studies that used self-report data showed statistically significant within-group differences in PA/fitness outcomes. Studies that used measures of fitness to assess study outcomes also tended to show statistically significant improvements in outcomes of interest (Wilder 2011, Yan 2009). When objective measures of PA were used, only two studies (Zoellner 2010, Duru 2010) showed statistically significant within-group differences, none of the studies of interest showed statistically significant between-group differences.

Secondary Outcomes: no effects related to CA reported

Review's conclusion: Many studies included in the current review reported cultural adaptations in their intervention strategies. Most studies incorporated deep structure adaptations by infusing elements of African American culture into intervention content and strategies. However, given the generally positive findings presented in all studies, it is not clear the extent to which cultural adaptation impacted study implementation or outcomes.

Methodological Problems: –

Author Year: Barr-Anderson 2013

Full Citation: Barr-Anderson DJ, Adams-Wynn AW, DiSantis KI, Kumanyika S (2013) Family-focused physical activity, diet and obesity interventions in African-American girls: a systematic review. *Obesity reviews: an official journal of the International Association for the Study of Obesity* 14(1):29–51
 doi:10.1111/j.1467-789X.2012.01043.x

Cultural adaptation is the main focus of the review: yes

Included studies: n=26

Settings: The majority of studies took place in a community setting (n=15), with the remaining taking place in either the home or a combination of community and home settings

Population: Fourteen of the 26 studies targeted only African American girls, six targeted African American girls and boys, five targeted multi-ethnic samples of girls and boys, and one study included a multi-ethnic sample of girls. Sample sizes ranged from 154 to 618.

Designs of the included studies: Seventeen of the studies were randomized controlled trials; seven were uncontrolled (i.e., before and after) studies; two were non-randomized controlled trials and one was a randomized trial of three active interventions.

Intervention components: Behavioural change techniques and cultural adaptation: With the exception of five studies, both physical activity and diet were the main focus of the behavioral change strategies. Most studies made specific attempts to tailor their intervention components; these attempts varied, although most reported culturally tailoring the content of intervention materials and messages. Three studies did not report any level of cultural adaptation, and four additional studies limited their cultural modifications to recruiting only African American participants. Theories specific to African American families were not generally mentioned or identified for the behavioral change techniques. Although a variety of strategies were reported, no clear pattern based on age of the child or family member involvement emerged.

Cultural adaptation: Most studies made specific attempts to tailor their intervention components; these attempts varied, although most reported culturally tailoring the content of intervention materials and messages. Three studies did not report any level of cultural adaptation, and four additional studies limited their cultural modifications to recruiting only African American participants. Theories specific to African American families were not generally mentioned or identified for the behavioral change techniques. Although a variety of strategies were reported, no clear pattern based on age of the child or family member involvement emerged.

Main Outcomes: In general, both physical activity and dietary intake were positively affected in the prevention studies, regardless of study design. All fourteen of the 18 prevention studies that assessed some form of physical activity behavior and all 15 of the prevention studies that assessed some form of dietary intake were able to positively influence the behaviors. Most of the studies assessed physical activity and dietary intake using several measures; four and eight of the prevention studies also reported null or opposite to expected results for physical activity and dietary intake, respectively. Seven full-length RCTs were prevention studies. Of those, six assessed a weight-related outcome with four reporting positive effects on weight. The two RCTs reporting negative or null effects on weight had the highest methodological quality ranking of the prevention studies.

Secondary Outcomes: The five studies that mentioned limited or no intervention cultural adaptation, reported generally favorable outcomes, although they also ranked low on methodological quality (scores=1, 2, 5, 5, 6). All but Janicke et al., who did not assess physical activity or dietary behavior, reported a statistically significant increase in physical activity. Newton et al., Barbeau et al. and MacDonnell et al., who recruited African American only samples, also reported statistically significant, positive influences on some of the other outcomes they assessed: dietary, weight-related, and dietary, respectively. Greening et al., who did not culturally adapt any of their intervention, reported positive results for all outcomes. No studies were designed to isolate effects of culturally vs. not culturally adapted interventions.

Review's conclusion: Overall, we were unable to draw clear inferences with respect to the most promising or effective ways of involving family members in weight interventions with African American girls. The studies reviewed here reflect the variety of approaches that can be used for cultural adaptation, including recruitment of only African American samples and instructors, emphasizing cultural norms and traditions, preparing foods and planning activities with which African Americans may be familiar, placing African American images on materials, incorporating focus group feedback of African Americans, and utilizing locations for intervention activities in primarily African American communities. Most of the studies included in this review addressed African American culture through direct targeting, cultural tailoring or a combination of these approaches. The cultural tailoring may confer familiarity and greater acceptance of the intervention but may not directly impact effectiveness. For this reason, studies that compare culturally tailored with non-tailored interventions may be difficult to implement. While the overall quality of the available evidence was low from a study design perspective, several studies included in this review developed and implemented innovative intervention strategies (i.e., computer technology, internet delivery, theater-based education program, and active video games). The use of computer technology and internet intervention delivery attempts to lessen the burden for families to meet outside the home. Utilizing digital media to increase physical activity capitalizes on the higher than average digital media use in African American youth. Theater-based education programs have been used in overweight and obesity prevention in many studies, but this review highlights their use with African American children and families.

Methodological Problems: –

Author Year: Knowlden 2013
Full Citation: Knowlden AP, Sharma M (2013) Systematic review of school-based obesity interventions targeting African American and Hispanic children. Journal of Health Care for the Poor and Underserved 24(3):1194–1214 doi: http://dx.doi.org/10.1353/hpu.2013.0129
Cultural adaptation is the main focus of the review: yes
Included studies: n=10
Settings: schools, community
Population: 4 targeted Hispanic students, 3 African American students & 3 equally towards both. Sample size varied from 60 persons to 36 schools
Designs of the included studies: 7 x RCTs, 1 x randomized control, 2 x quasi-experimental designs
Intervention components: Treatment groups: S1 (El Paso CATCH) – Children followed from third through sixth grade, physical education and activity, cafeteria meal quality. S2 (Hip Hop Jr) – 14-week intervention measured at post-intervention with follow-up at 1 and 2 years, 40 sessions held 3 times per week, 20 minutes of education and 20 minutes of physical activity in each session, newsletters and weekly homework for parents. S3 – 12-week intervention measured at baseline, post-intervention, and 6 months, 12 weeks of daily sessions followed by 12 weeks of biweekly sessions, nutrition instruction and physical activity training, bi-weekly quizzes, goal setting reinforced with point system, monthly parent training. S4 (Get Moving!) – five to seven consecutive school day intervention measured 3 months prior and 3 months post- intervention, education curriculum regarding physical activity and sedentary behavior, students participated in group activities. S5 (TAAG): 3-year intervention with baseline measures taken in sixth grade and follow- up measures taken in eighth grade, health education, physical education, training for program maintenance after program terminated, SOFIT system for observing fitness instruction time. S6 – 16-week intervention measured at baseline, and 1 year, nutrition education with emphasis on culturally specific foods, exercise education, coping skills training, health counseling.

S7 (HOPS/OWG) – Two-year intervention measured at baseline, year 1 and year 2, inclusion of healthy foods in school-provided meals, healthy lifestyle curriculum delivered to children, parents, teachers, and school staff, fruit and vegetable gardens at schools, increased physical activity, opportunities during school day. S8 (New Moves!) – 16-week intervention measured at baseline and 9 month follow-up (1 academic year), New Moves physical education class, educational workbooks, motivational interviewing, lunch socials with group discussions, parent outreach activities. S9 (TEAM Mississippi) – 9-month intervention (1 academic year) measured at baseline and post-intervention, Family- and school-based nutritional and physical activity events, Health education, Replaced school lunch deep frying equipment with baking ovens. S10 (ACT) – 17-week-after school intervention (1 academic year) measured at baseline, 9 weeks (mid-intervention), post-intervention, and 2-weeks follow-up, physical activity component, homework/snack, behavioral skills and motivational strategies to increase physical activity in participants' social and home environment

Cultural adaptation: culturally relevant games, songs, and dancing (Hip Hop Jr); promotional animated characters used to deliver the nutritional curriculum converted from Hearty-Heart and Friends to the CATCH Amigos; monthly parent training; nutrition education with emphasis on culturally specific foods; healthy lifestyle curriculum delivered to children, parents, teachers, and school staff; motivational interviewing, lunch socials with group discussions, parent outreach activities; family- and school-based nutritional and physical activity events, monthly nutritional and physical activity events that coincided with popular community activities (TEAM Mississippi). Behavioral skills and motivational strategies to increase physical activity in participants' social and home environment (ACT)

Main Outcomes: Nine of the interventions measured body composition at baseline and follow-up, with five of these reporting positive effects on one or more adiposity indexes. Programs that affected body composition all included physical activity and nutritional components while three of these programs modified school meals. In addition, parents were involved in achieving intervention objectives to some capacity. Cultural tailoring was critical to those interventions that were able to improve body composition: The El Paso CATCH program highlighted the importance of cultural tailoring for nutritional components of an intervention, The Hip Hop to Health Jr. program highlighted some important cultural implications pertinent to interventions targeting African American and Hispanic children & The TEAM Mississippi intervention included monthly nutritional and physical activity events that coincided with popular community activities. Integration of intervention activities with pre-established community undertakings assisted with improving participation rates and reduced costs associated with program promotion. For example, the interventionists designed a healthy eating initiative in which schoolchildren and parents created healthy meals for a tailgating party for the local high-school football game. The researchers also designed a parent-child-soft-ball throw contest for the beginning of the baseball season. Prizes for the various community competitions included cooking and physical activity equipment. Socio-ecological and multi-level models: Evidence of the limitation of the school environment for addressing childhood obesity was demonstrated through the Healthier Options for Public Schoolchildren (HOPS)/Organ Wise Guys (OWG) intervention. Although the program produced positive outcomes on body composition, diastolic blood pressure increased in the children over the summer.

Secondary Outcomes: A majority of the programs (n=8) were rooted in theoretical frameworks; however, only two interventions explicitly operationalized the constructs of the theories they applied.

Review's conclusion: Although schools are important milieus for addressing health behaviors, it is unlikely that targeting any one environment will have a dramatic impact on obesity prevalence. All but two interventions expanded beyond individual-level theoretical approaches to include ecological models of behavior change. Inclusion of family was an essential component of those interventions that successfully affected body composition. The Hip Hop to Health Jr. program and TEAM Mississippi interventions succeeded due to the exciting nature of the program modalities.

Methodological Problems: –

Author Year: Mier 2010
Full Citation: Mier N, Ory MG, Medina AA (2010) Anatomy of culturally sensitive interventions promoting nutrition and exercise in Hispanics: a critical examination of existing literature. <i>Health promotion practice</i> 11(4):541–54 doi:10.1177/1524839908328991
Cultural adaptation is the main focus of the review: yes
Included studies: n=14
Settings: community, preschools, schools, churches
Population: 2 x only Hispanic women (18 yrs), 2 x Hispanic adults, 1 x women of Mexican origin (21–65), 3 x adult Latinas 18–65), 1 x older Mexican Americans, 2 x Latino children and their parents, 1 x Hispanic American mothers and children, 1 x schools with Mexican American children, 1 x mainly Latino school children. Sample sizes varied from 38–6 902
Designs of the included studies: all RCTs
Intervention components: Studies not fully described in review regarding what was actually done in IG and CG, rather reviewers focussed on cultural sensitive approaches used and classified these in 3 categories: Surface Structure, Deep structure and Recruitment Strategies. All but 2 of the interventions focussing only on children recruited in schools applied surface structure components such as using bilingual and bicultural contents or having program delivered by promoters. In the 2 interventions fun activities, student after-school health club, theatrical plays, bingo, salsa dancing, and school cafeteria program were used. Involving the family in interventions (47%) was the dominant deep-surface component found in the review, including activities such as partner support techniques and parental training. Additional deep-structure components included the literacy level of participants (39%), use of social support and networks (29%), and incorporation of Hispanic cultural values in intervention design or implementation (29%)
Cultural adaptation: Varied from surface structure components such as bilingual and bicultural contents, bilingual facilitators, delivered by promoters, cooking demonstrations, ethnic foods, easy and safe access to program and theatrical plays, to deep structure components such as social support, cultural values, acknowledgement of economic, social and environmental barriers, materials appropriate to literacy level, family based and based on development stage, as well as encompassing recruitment strategies such as community agencies, local churches, use of promoters, development of a trustful working relationship with church leaders, media, direct mail, phone calls, health fairs, fun runs, medical providers, schools, and participant referrals.
Main Outcomes: Although 10 studies of interest produced significant differences in eating or exercise outcomes, the research design of most of these studies did not address whether the intervention was successful or not because of its Hispanic-tailored nature. Only one study examined the effects of acculturation on health outcomes (S1 focussing on Hispanic women recruited through local churches – Balcazar, Castro, & Krull, 1995; Lopez & Castro, 2006), finding that highly acculturated, highly educated women had a stronger orientation to healthy eating than did the less acculturated.
Secondary Outcomes: Most interventions in this review were minimally guided by cultural models or frameworks. The emphasis of using behavioral and socio ecological theories found in the reviewed studies may be justified by the fact that most interventions aimed at affecting behavioral health outcomes. However, it was surprising to learn that only two studies in this review were guided by a cultural framework, particularly considering the extensive research examining cultural competency frameworks in health care services and systems. Paucity of culturally sensitive models in behavioral health research should be of concern because the lack of such models could result in the implementation or replication of interventions based more on practitioners' perceptions and intuitions about how to tailor interventions for Hispanics than on empirically tested culture-related theories.

Review's conclusion: In summary, we found that three components were common to most of the interventions that produced significant differences in behavioral outcomes: involvement of family or social support, literacy-level appropriateness, and cultural values. However, the studies reviewed did not provide evidence that would allow us to draw valid scientific conclusions about what specific components (e.g., family-based activities, group settings, and other) mediate or predict behavioral outcomes of a culturally sensitive intervention for Hispanics. Also, it is not clear which tailored intervention elements that proved effective with one Hispanic subgroup could be systematically applicable to other subgroups. For example, would working with peer health workers be as effective with affluent, urban Hispanics as it has been with low-income, rural Hispanics?

Methodological Problems: –

Author Year: Renzaho 2010

Full Citation: Renzaho AM, Mellor D, Boulton K, Swinburn B (2010) Effectiveness of prevention programmes for obesity and chronic diseases among immigrants to developed countries – a systematic review. *Public health nutrition* 13(3):438–50 doi:10.1017/s136898000999111x

Cultural adaptation is the main focus of the review: yes

Included studies: n=5

Settings: 4 x church- based, 1 x school-based

Population: S1: West Samoans aged >14 years, two complete church congregations, South Auckland, New Zealand. S2: Four complete church congregations (2 x Samoan adults, 2 x Tongan adults), Auckland, New Zealand. S3: Samoan church members aged >20 years, church-based; New Zealand. S4: Greek-Australian women (aged 35–65 years), members of Greek Orthodox church; New South Wales, Australia. S5: Adolescent (12–17 years) female Latinas, homes and classrooms; Los Angeles, USA

Designs of the included studies: S1 & 2 – Non-randomized controlled study; S3 – Quasi-experimental design (pair matched); S4 – Non-equivalent control group; S5 – Comparative study

Intervention components: S1: Group 1: Intervention – The intervention included an introductory talk and four diabetes awareness sessions as part of the church services. These were complemented by leaflets in Samoan and English; a video customized for Pacific Islanders people; flip charts with specifically designed posters in Samoan; advice about weight; two blocks of four food cooking demonstrations and healthy eating sessions; exercise sessions focusing on sitting exercises, low-impact aerobics and walking. Finally, sport activities were organized once weekly for the first year and twice weekly thereafter; and a diabetes support group was established. Group 2: Control – No education program. S2: Group 1: Intervention – Diabetes education focused on the nature of diabetes and its symptoms, the long-term consequences of uncontrolled diabetes and nutrition (including cooking demonstrations). Exercise sessions were commenced which included sitting exercises, low-impact aerobics, traditional dance movements, walking and organized sports. Cooking sessions were tailored to the particular dietary preferences of each Islands group. Group 2: Control – No education program. S3: Group 1: Intervention church – Promotion of low-fat ad libitum diets: thirty-one sessions of 1 h duration addressing the nutrition education components (healthy eating), nine of which were held in the church in the context of a healthy feast (serving culturally appropriate fruits, with emphasis on fruit and vegetables). Targeted families, caterers and the church as a whole. Sessions delivered by Pacific Island Heartbeat. Physical activity: weekly aerobic sessions built into regular program of church activities + walking groups + newsletters and diabetes support group to support the nutrition and exercise sessions. Trained instructors conducted the aerobic sessions: 170 sessions over the study period, with twenty-three people attending each session. Training church leaders to become leaders of nutrition education and aerobic sessions. Group 2: Control church - No intervention.

S4: Group 1: Intervention – The first 12 weeks included attending a weekly group meeting at the church and an exercise program which was provided in a written booklet encompassing a 12-week program of low-to-moderate intensity aerobic exercise. Exercise frequency and duration increased from three sessions, each of 9 min of walking, in the first week, to four sessions of 45 min each in the final week. The booklet was written in English. At the weekly group meeting, the migrant health worker supplemented the booklet with verbal translations and participants were encouraged to make their own notes in their preferred language. The weekly group meeting also included a 2-h discussion where participants reported on their exercise activities during the previous week and identified barriers to exercise strategies for dealing with these barriers were discussed. The discussion covered dietary materials where women were encouraged to identify sources of saturated fat in their own diets, to modify traditional high-fat Greek and Australian recipes, and to bring in samples of modified foods for the group to taste. Group 2: Control – No intervention. S5: Comparative study of two interventions: a 90 min individualized home-based format v. a group classroom-based format. The study did not use a control group.

Cultural adaptation: S1: introductory talk and four diabetes awareness sessions as part of the church services, use of leaflets in Samoan and English; a video customized for Pacific Islanders people; flip charts with specifically designed posters in Samoan; advice about weight; two blocks of four food cooking demonstrations and healthy eating sessions; exercise sessions focusing on sitting exercises, low-impact aerobics and walking. S2: as in S1 plus traditional dance movements and organized sports. Cooking sessions were tailored to the particular dietary preferences of each Islands group. S3: 9/31 sessions of 1 h duration addressing the nutrition education components (healthy eating), held in the church in the context of a healthy feast (serving culturally appropriate fruits, with emphasis on fruit and vegetables). Targeted families, caterers and the church as a whole. Sessions delivered by Pacific Island Heartbeat. Physical activity: weekly aerobic sessions built into regular program of church activities + walking groups + newsletters and diabetes support group to support the nutrition and exercise sessions. Trained instructors conducted the aerobic sessions: 170 sessions over the study period, with twenty-three people attending each session. Training church leaders to become leaders of nutrition education and aerobic sessions. S4: intervention conducted at church. Weekly group meetings at which the migrant health worker supplemented information in booklet (English) providing exercise program with verbal translations and participants were encouraged to make their own notes in their preferred language. S5: Not clear.

Main Outcomes: S1: After 2 years of intervention the study found that, compared with the control group, those in the intervention group had significantly: (i) reduced waist circumference (change over time, (ii) reduced waist and hip circumference; (iii) increased open and closed knowledge scores; (iv) increased physical activity; and (v) reduced dietary fat intakes. However, the two groups did not differ in terms of BMI or waist: hip ratio. Despite these positive outcomes, the study suffered some serious limitations (did not adjust for baseline characteristics when assessing the effect of the intervention even though the two groups differed at baseline; small sample size). In addition, the two churches (intervention and control) were only 3 km away from each other and there was a spill-over effect in that the control group initiated its own exercise program during the intervention. S2 (from same authors of S1 – to improve on S1 undertook a non-randomized controlled church-based study): found that after 2 years diabetes knowledge increased significantly in both intervention churches when compared with the control church, but more so among Samoans (2-year change in open knowledge score: 146 (SD 26) % v. 14 (SD 17) % for Samoans; 119 (SD 24) % v. 18 (SD 25) % for Tongans; P<0.001). While there was an improvement in weight, waist circumference and physical activity in the Samoan intervention, no significant change was seen in either control church or the Tongan intervention church. In this study, baseline characteristics were not adjusted for when establishing the effect of the intervention. As in S1, this study also suffered from a small sample size and spill-over effects. S3: No changes were observed over time in the intervention churches in terms of knowledge about how to reduce the fat content of meals (e.g. diluting coconut milk, removing fat from meat or skin from chicken or eating vegetables frequently). However, the proportion of participants undertaking vigorous physical activity increased by 10% in the intervention churches but declined by 5% in the control church (p=0.007). BMI decreased by 0.2kg/m² (from 34.8 to 34.6kg/m²) in the intervention churches compared with an increase of 0.4kg/m² (from 34.3 to 34.7kg/m²) in the control group (p=0.046).

No group difference was found over time for waist circumference and blood pressure after adjusting for baseline characteristics. S4: For the intervention group, there was a significant reduction in BMI (from 29.4 to 27.6kg/m²; p=0.001), total skinfold thickness (from 115.4 to 199.9mm; p=0.001), proportion of body fat derived from skinfold measurements (from 41.8% to 40.1%; p=0.001), diastolic blood pressure (from 87.1 to 79.3mmHg; p=0.001) and aerobic fitness as measured by the exercise heart rate (from 114.2 to 100.2 beats/min; p=0.001). There was no effect on food habits scores, serum lipids, systolic blood pressure and waist:hip ratio. There was no change in any of the outcome measures over the follow-up time for the comparison group. S5: Mixed modelling showed no significant differences in changes in dietary intake between intervention groups, but both groups significantly reduced their intake of added sugar, sugary beverages and refined carbohydrates by 33 %, 66% and 35 %, respectively, while dietary fiber consumption increased significantly by 44% (p=0.01) throughout the 12 weeks. There was a significant time effect for BMI Z-scores within each intervention group (p=0.05), exhibiting significant improvements (Z-score decreased by 0.1 in each of the interventions). There was no significant time by intervention group interaction for any of the physiological or metabolic variables, indicating that change over time was not significantly different between intervention groups. The lack of difference between the two groups may have been due to the small sample size.

Secondary Outcomes: Interventions that showed improvement had something in common: the application of a cultural competence framework and cultural leverage. That is, they used community participants' expertise and social structures both to define strategies for addressing culture-related factors and to shape the intervention. Use of culturally tailored and appropriate nutrition and exercise intervention resulted in decreased BMI and increased intensity of leisure-time activity, but had little impact on nutrition-related behaviour. Programs that apply practical tools and seek to overcome socio-cultural (using existing community social groups and networks and run in familiar settings) and linguistic barriers maximize participation and adherence to activities, and result in greater health outcomes (S4).

Review's conclusion: Generally: Interventions that were tailored to the cultural needs of the target population in terms of cultural norms, attitude and beliefs, and that were implemented within the community setting and utilized translated and culturally relevant educational tools, and community-based trained diabetes and physical activity educators (e.g. S1 and S2), showed greater improvements in diabetes-related behaviours and glycaemic control and in making changes in dietary and exercise patterns. Although the literature on interventions tailored specifically to immigrant groups targeted at obesity and related health concerns is limited, there are clear messages from the articles reviewed. Culturally tailored and language-specific educational program are more likely to engage participants and result in more efficacious outcomes if designed well. The findings that culturally tailored and facilitated interventions aimed at diabetes among immigrants provide increased outcome measures in the target culture compared with generalized interventions, and that intervention content is more important than the duration or venue of the intervention, require further investigation. Any obesity and chronic disease-related intervention to be aimed at a particular immigrant group needs to be culturally competent and research should be done into the cultural expectations, beliefs, behaviours and practices of the target group, which should be taken into account when designing the intervention program.

Methodological Problems: –

Author Year: Whitt-Glover 2009
Full Citation: Whitt-Glover MC, Kumanyika SK (2009) Systematic review of interventions to increase physical activity and physical fitness in African-Americans. American journal of health promotion : AJHP 23(6):S33–56 doi:10.4278/ajhp.070924101
Cultural adaptation is the main focus of the review: yes
Included studies: n=12
Settings: 4 x churches, 2 x home-based, 1 x fitness/senior center, 1 x internet, 1 x primary health care center
Population: mostly middle-aged AA women (11 x), 1 x African American men, sample size full trials n =44 – n= 246, pilot studies n=18 & n= 25
Designs of the included studies: 4 RCTs, 1 non-randomized CT, 5 quasi-experimental, 2 pre-post single group design pilot with no control group
Intervention components: S1: Self-reported PA, pedometer steps, blood pressure, BMI, Intervention length: 8 weeks, Delivery method: trained volunteer, facilitator from each church intervention setting: churches (AME), PA measures: CHAMPS, pedometer/Post-intervention follow-up: 3 and 6 months post-intervention. S2: Body weight, self-reported PA/self-reported barriers to PA/Intervention length: 6 months/Delivery method: project staff (qualified fitness professional with a master's degree in exercise physiology and trained in motivational interviewing techniques/Intervention setting: telephone/PA measures: PA and disability survey/Post-intervention follow-up: immediate post-test. S3: Changes in body weight, self-reported PA, PA self-efficacy/Intervention length: 1 year/Delivery method: diabetes educator/Intervention setting: church/ PA measures: 7-d PA record/Post-intervention follow-up: immediate post-test. S4: Body weight, pedometer-determined steps per day; upper and lower body strength/intervention length: 12 weeks/Delivery method: investigator/Intervention setting: not given/PA measures: pedometer, muscle strength/Post-intervention follow-up: immediate post-test. S5: Self-reported measure of walking adherence/Intervention length: 24 weeks/Delivery method: telephone system/Intervention setting: not given/PA measures: PA diary, heart rate monitor/Post-intervention follow-up: immediate post-test. S6: Body weight (BMI, central adiposity), self-reported and objective measures of PA (accelerometer)/Intervention length: 12 months/Delivery method: providers and nurses/Intervention setting: community clinic/PA measures: CHAMPS PA Survey/Post-intervention follow-up: immediate post-test. S7: Self-reported PA/Intervention length: 12 months/Delivery method: computer system/Intervention setting: home-based (Internet or print materials)/PA measures: 7-d PA record/Post-intervention follow-up: immediate post-test. S8: Body weight, physical fitness (treadmill time, oxygen consumption)/Intervention length: 6 months/Delivery method: athletic trainer/exercise specialist Intervention setting: housing authority complex/PA measures: maximal graded treadmill exercise test/Post-intervention follow-up: immediate post-test. S9: Pedometer-determined PA; body weight; blood pressure/Intervention length: 6 months/Delivery method: community coaches/Intervention setting: community/PA measures: pedometer, pedometer diary/Post-intervention follow-up: immediately post-test. S10: Self-reported total and moderate-to-vigorous PA, aerobic fitness; measures of social support, self-efficacy, and self-regulation of PA/Intervention length: 8 weeks/Delivery method: trained facilitators/ Intervention setting: not specified PA measures: chair stand test, chair sit-and-reach test, Rockport Fitness (1 mile) Walking test,/CHAMPS PA questionnaire for older adults/Post-intervention follow-up: immediate post-test. S11: Change in pedometer steps per week; change in systolic blood pressure/Intervention length: 8 weeks of weekly meetings and 6 months of monthly meetings/Delivery method: study research assistant/ Intervention setting: three Los Angeles churches/PA measures: pedometer, CHAMPS/Post-intervention follow-up: immediate post-test. S12: Physical fitness/Intervention length: 24 weeks/Delivery method: lay leaders/Intervention setting: senior centers and housing facilities/PA measures: 7-item battery measure of lower body flexibility, upper body flexibility and balance/Post-intervention follow-up: immediate post-test.

<p>Cultural adaptation: S10: tailored cultural and gender intervention elements for African American men. Conducted in partnership with city-managed wellness center in an all-African American neighborhood. Teams formed to build camaraderie. S2: sessions held in African American church, prayer to open and close sessions, biblical messages on holistic wellness. S1: held in church, incorporated biblical scriptures into session content. S11: sessions included scripture reading and prayer, set in churches. S3: held in churches, education sessions plus Bible study (but did not include scriptures). S4/S5: not noted. S6: used photos, common foods, and testimonials of African Americans to emphasize cultural values and norms. S7 to S12: not noted</p>
<p>Main Outcomes: Most studies that used self-report data showed statistically significant within-group differences in PA/fitness outcomes. Studies that used measures of fitness to assess study outcomes also tended to show statistically significant improvements in outcomes (S4, S8, S12). When objective measures of PA were used, only two studies (S9, S11) showed statistically significant within-group differences.</p>
<p>Secondary Outcomes: 10 of the 12 studies focused solely on improving PA or fitness, 1 on reducing CVD risk, 1 to reduce the effects of diabetes. Six studies included either structured exercise as a part of the group-based intervention (S1, S2, S11, S10) or supervised, structured exercise training under controlled laboratory or fitness center settings (S4 & S8). Only 5 studies in the review provided participants with specific PA or fitness goals (S4, S5, S8, S10, S9). Nine studies did not describe PA or fitness goals for participants (S2, S3, S6, S7, S10, S11). 7 of the 12 papers listed one or more behavioural sciences theories as the basis of the intervention content; 5 papers did not provide such information. Studies that listed behavioural science theories typically incorporated components of the theory into the intervention design. Intervention length and follow-up period: three interventions lasted <3 months (S1, S2 & S10), one lasted 3-<6 months (S4) and 8 lasted >6 months (S3, S5-S9, S11, S12). Only one of the relevant studies included a follow-up period in addition to immediate post-intervention follow-up (S1). Attrition: High attrition, defined as >20% for studies lasting <6 months or >30% for studies lasting longer than 6 months, was observed in 5 studies (S1, S3, S4; S6, S9). Three studies had a quality score less than 7 (S2, S3, S4). Review also reviewed individual elements within the overall quality score to determine if any quality elements clearly impacted study findings. None of the study quality ratings (individual component scores or the summary quality score) appeared to impact whether the study found statistically significant within- or between-group changes in study outcomes.</p>
<p>Review's conclusion: Most papers included in the current review identified statistically significant within- and between-group differences in the expected direction (improvement over time and intervention group improving more than control group) for at least one PA/fitness outcome, suggesting that intervention strategies to increase PA or fitness in African American adults in the current review have promise. Recommendations from previous reviews of the literature regarding PA interventions in African Americans appeared to be taken into account in the papers included in the current review. For example, previous literature reviews recommended more rigorous study designs (e.g. randomized, controlled trials), the use of theoretically based strategies to improve specific elements of interventions linked with behaviour change, and cultural adaptation for intervention materials. Most studies included in the current review included those elements. Several theoretical frameworks were used to develop the interventions included in the current review; because the frameworks used varied greatly, the extent to which the frameworks truly shaped intervention strategies and the extent to which framework elements were truly relevant to African Americans is not clear. None of the evidence from the current review points to a specific theory that can assist with understanding why a particular intervention strategy might or might not be effective. Many studies included in the current review reported cultural adaptations in their intervention strategies. Most studies incorporated deep structure adaptations by infusing elements of African American culture into intervention content and strategies. However, given the generally positive findings presented in all studies, it is not clear the extent to which cultural adaptation impacted study implementation or outcomes.</p>
<p>Methodological Problems: not mentioned</p>

Author Year: Flynn 2006
Full Citation: Flynn MA, McNeil DA, Maloff B, Mutasingwa D, Wu M, Ford C, Tough SC. Reducing obesity and related chronic disease risk in children and youth: a synthesis of evidence with 'best practice' recommendations. <i>Obes Rev.</i> 2006;7(Suppl 1):7–66.
Cultural adaptation is the main focus of the review: yes
Included studies: n =147, of interest n = 12
Settings: n=6 primary schools, n=6 community
Population: diverse populations: S1 – minority children (Hip Hop to health), S2 – child-parent (Memphis GEMS), S3 – American Indian school children (Pathways study), S4 – Native Canadian children and community (Kahnawake Schools DPP), S5 – Native American high school youth (The Zuni DPP), S6 – American Indian elementary students (Southwest cardiovascular curriculum project), S7 – AA girls (Stanford GEMS), S8 – AA mothers and daughters, S9 – AA girls (Minnesota GEMS), S10 – Black-American families, S11 – families (San Diego family health Project), S12 – school children – The checkerboard cardiovascular curriculum
Designs of the included studies: Cluster RCT, RCT
Intervention components: S1: Hip Hop Jr. a 14-week preschool community intervention at a Head Start Centre. A culturally and linguistically appropriate exercise and nutrition programme for minority children and their parents is presented. S2: GEMS Memphis 12-week pilot study for 8–10-year-old African American girls. Community-based weekly interactive group sessions including after school activities and health education focused on knowledge and behaviour-change skills to promote healthy eating and increased physical activity. S3: Pathways – Obesity Prevention Programme. A 3-year primary school-based programme for grades three to at promoting healthful eating and five aimed increased physical activity among American Indian children. The programme consisted of four components: food service, classroom curriculum, family involvement, and physical activity. S4: Kahnawake Schools Diabetes Prevention Project. First Nation Canadian primary school and community health education and behaviour modification (diet and exercise) programme. 3-year programme. S5: The Zuni Diabetes Prevention programme intervened on dietary intakes primarily through targeting beverage consumption of secondary school students at the Zuni Pueblo in New Mexico. Activities included modification of school meals, provision of exercise facilities and training. The water available for the Zuni Pueblo was high in sulphur and iron and was unpalatable for drinking. Students relied on soft drinks, which were replaced by the programme with palatable water in coolers located in several places on the school premises and 'diet' soft drinks. S6: Southwestern Cardiovascular Curriculum is a primary school and community-based intervention programme for grade-five students using intergenerational and culturally appropriate activities designed to promote exercise and healthy eating in two Native American Indian tribes. S7: GEMS Stanford Pilot Study. Community school-based intervention including after school activities, health education, and reduction of media use in homes for 8–10-year-old girls at risk of obesity. 12 weeks. S8: Community-based educational programme for low-income, inner city African American girls and their mothers to promote healthful eating and physical activity. 12 weeks. S9: similar to S2/S7. S10: Community-based health education and aerobic exercise programme targeting black, fifth-to-seventh-grade students. 14 weeks. S11: Not described in review. S12: Checkerboard Cardiovascular Health Education Curriculum. Primary school-based, education programme on nutrition, smoking, obesity. Most participants were American Indians. 10 weeks.
Cultural adaptation: Cultural, religious, food and activity customs were considered and/or accommodations made in all 'High/Mid'-scoring programmes. Gender roles and values considered in S6. Families also involved

Main Outcomes: S1: had not published quantitative outcome measures at the time of this analysis and thus was excluded from the analysis of associations between outcomes and interventions. (Results summarised in Barr-Anderson 2014). S2: No change in body composition or fitness reported. Improvements were observed for psycho-social, nutrition & PA. S3: Lessons learned in the Pathways programme suggest that multiple environmental interventions in several settings simultaneously may be required to impact the obesity epidemic. The multiple reinforcing effects of interventions that cover all the settings where people live, work and play (school, community, shops, home, and clinic) in an integrated way is proposed as a way forward. programme scored high in methodological rigour and programme development and evaluation. No other results are presented in review. S4: No results presented - scored low in methodological rigour and high for programme development and evaluation. S5: Intervention combined with information promoting water over soft drinks resulted in a change in drink consumption from 800 soft drink cans per week to 250 soft drink cans and 150 gallons of water per week. S6: No results presented – scored mid in methodological rigour and high for programme development and evaluation. S7: No change in body composition reported. Improvements were observed for psycho-social, nutrition & PA. S8: Improvements were observed for psycho-social & nutrition. S9: No change in body composition, nutrition or PA reported. Improvements were observed for psycho-social & knowledge. S10: No change in fitness, negative outcome for PA reported. S11: No change in fitness & PA, improvements in chronic disease awareness, nutrition and knowledge reported. S12: According to reviewers study instruments were not yet fully developed. Study rated low for methodological rigour.

Secondary Outcomes: –

Review's conclusion: Most studies in the school settings randomized by school or classroom but less than half took this factor into consideration by performing a cluster analysis approach using mixed models, calculating intraclass correlations or considering the school or class as a covariate for the analysis. Another limitation concerns the short duration of most of the programmes included in this review.

Methodological Problems: Reviewers don't really discuss whether cultural adaptation was effective or not. There are also no results presented for a number of the programmes – even large ones such as Pathways.

Author Year: Yancey 2004
Full Citation: Yancey AK, et al. (2004) Population-based interventions engaging communities of color in healthy eating and active living: a review. Preventing chronic disease 1(1):A09
Cultural adaptation is the main focus of the review: Yes
Included studies: n=13
Settings: community, home
Population: Focus on studies on including and reporting on ethnic minorities: AA, Asian, Latino or Hispanic
Designs of the included studies: Information on this not provided for individual interventions, however 11 of all 23 studies included were on demonstration projects, 4 were RCTs, 5 uncontrolled pre-post trials, and 2 uncontrolled pre-test only trials.
<p>Intervention components: Described for only some interventions. Studies conducted between early 1970s and early 1990s – S1: Within the Stanford Three Community Study, Fortmann and colleagues (47) promoted cholesterol and saturated fat restriction via mass and targeted print and electronic media in 3 semi-rural northern California towns with substantial proportions of Latinos (9% to 26% of the total population). Cross-sectional surveys captured sociodemographic and cardiovascular disease risk data at baseline and annually for 3 years. S2: The Kaiser Family Foundation Community Health Promotion Grants Program was designed to improve multiple health outcomes, including cardiovascular disease and cancer, by changing community norms, environmental conditions, and individual behaviors in 11 western communities (7 randomly assigned intervention communities with 7 randomly assigned control communities, and 4 intervention communities selected on special merit with 4 matched control communities) (48). Local coalitions, with technical support from Stanford University, controlled program development. The program was stratified by community type: suburban/rural, urban, and state. In suburban and rural communities, nutrition and physical activity promotion included media campaigns and nutrition education campaigns in grocery stores. Urban community activity centered on school- and community-based nutrition education. The state component targeted worksite exercise. S3: Heart To Heart Project (15, 51) used walk-a-thons, a speaker's bureau, media messages, restaurant food labeling, and cooking seminars. S4: Project Salsa (52) used community organization techniques to promote nutrition behavior changes and institutionalize intervention components in San Ysidro, Calif. This study included the following components: cooking classes, point-of-purchase education, newspaper columns, coronary heart disease risk factor screenings, and school health and cafeteria programs. S5: The A Su Salud en Accion (53) project used two communications strategies aimed at diabetes prevention and control: 1) role modeling – individuals who had initiated recommended behaviors were promoted in broadcast and print media; and 2) mobilizing natural social networks – trained volunteers distributed materials and prompted and reinforced imitation of the media role models. Studies conducted as from mid-1990s – S6: Salud Para Su Corazon, a cardiovascular disease prevention community intervention in Washington, DC (65) used a multimedia bilingual communication campaign including TV telenovela-format public service announcements, radio programs, brochures, recipe booklets, chartas, a promotors training manual, and motivational videos. S7: obesity prevention intervention, Sisters Together: Move More, Eat Better, targeted young African American women in 3 inner-city communities of Boston, Mass (66). Strategies included social marketing and community building efforts and extensive formative research, which was aimed at forging partnerships and developing coalitions to institutionalize the campaign. Demonstrations provided role models who offered illustrations on how to implement campaign messages and activities to practice or prompt action. Activities included developing a local cable television show featuring local chefs who prepared healthy menu items available in their restaurants. S8: Project DIRECT (Diabetes Intervention Reaching and Educating Communities Together), a CDC-funded joint project of the local (Wake County, NC) and state health departments, was designed to decrease the burden of diabetes in an African American community (7 census tracts, 17,000 adults) located in southeast Raleigh, NC (67). The study identified a comparison community with similar sociodemographic and health-care resource profiles. A community coalition, with oversight from an executive committee comprised of community and agency representatives, directed project activities. The health promotion component included primary prevention strategies aimed at increasing participation in regular physical activity and decreasing dietary fat intake.</p>

S9: The Uniontown Community Health Project, also federally funded, was a Women's Health Initiative project that developed, implemented and evaluated a Community Health Advisor(CHA)-based intervention to reduce cardiovascular disease in peri-menopausal African American women (68, 69). Uniontown, Ala, a rural, underserved intervention community (67% African American), was matched sociodemographically with a nearby control community. A coalition of community leaders guided CHA-led social marketing activities and structured programs for healthy nutrition and physical activity promotion. S10: In a replication of an earlier effort by the Center for Science in the Public Interest in West Virginia (70), Spanish-language „1% or less“ milk campaigns were implemented in predominantly Latino communities, Santa Paula (in 1999) and East Los Angeles (in 2000), by the California Adolescent Nutrition and Fitness Program. Campaign elements included paid radio and print ads, point-of-purchase advertising, milk taste tests, community presentations, public relations, and a school-based program.

Cultural adaptation: includes cultural adaptation of exercises and cooking lessons/demonstrations, field trips, community events, culturally tailored community bulletins, point-of-purchase education, neighborhood canvas for healthy meal options, sponsoring book signing for healthy ethnic cookbook, development of cable TV show featuring local chefs preparing healthy recipes, bilingual/bicultural staff

Main Outcomes: S1: The reductions in dietary saturated fat consumption at follow-up (versus baseline) observed in the intervention areas compared with control areas were significantly greater among Latinos, but no significant differences were observed among whites. S2: Only one intervention community — predominantly Latino — showed a significant positive outcome: restaurants increasingly identified low-fat choices. However, the only significant difference in self-reported dietary behaviors in that community was a decline in fruit and vegetable consumption. S3: A telephone survey of a random sample of Florence, SC (35% African American) residents, followed over 4 years as a cohort, demonstrated prevention of increases in weight and hypercholesterolemia (though hypertension prevalence increased), compared with a matched control town. S4: Of these intervention components, only the latter 2 survived 4 years after funding ended. S5: Cross-sectional surveys were conducted in the west San Antonio, Tex target community (90% Latino), but only process data were reported during the 2-year project: 73 mass-media stories appeared, 34 newsletters and one booklet were produced, and 610 community networkers were recruited and trained. S6: Pre-post intervention intercept surveys (344 and 328, respectively) conducted in churches and grocery stores in 3 Washington, DC, geographic areas with high concentrations of Latinos of varying nationality demonstrated increases in awareness but no behavioral changes. S7: According to reviewers study did not provide outcome data. S8: According to reviewers – The study described plans for a multi-faceted process and outcome evaluation; it did not present outcome data. S9: According to reviewers – the planned process and outcome evaluation described individual- and community-level change variables. S10: After the 6-week campaign, sales of 1% and fat-free milk rose 60% in Santa Paula. A follow-up survey of retailers at 6 months found that 25% of this growth in sales was sustained.

Secondary Outcomes: Recent inclusive interventions reflect a new emphasis on environmental change strategies in obesity prevention and healthy nutrition and physical promotion. Distributions of theories referenced or implied and behaviors targeted are similar to earlier review findings, with social learning theory, community organization, and ecological models predominating. However, a greater emphasis on the processes of intervening is evident in this review, paralleling processes observed in individual-level interventions targeting underserved and understudied groups. These processes include the following: involving communities and coalition building from inception; targeting captive audiences; mobilizing social networks, particularly using lay health advisors, community health workers or promotoras; cultural tailoring of messages and messengers (ethnically relevant role models in positions of power).

Review's conclusion: Given the presentation of outcome data in fewer than half of the studies, and the few significant effects and modest effect sizes, the best data available speak only to what it takes to engage and retain people of color, not what it takes to create and sustain weight loss, engagement in regular physical activity, or improved dietary quality. However, in 2 studies, outcomes for populations of color were the only significant positive outcomes demonstrated (47,48). The contribution of cultural adaptations to outcomes is unclear, although an effect of these adaptations on recruitment and retention may be inferred from the availability of these data on ethnic groups largely absent from other studies.

Methodological Problems: –

Author Year: Satterfield 2003
Full Citation: Satterfield DW, et al. (2003) Community-based lifestyle interventions to prevent type 2 diabetes. <i>Diabetes care</i> 26(9):2643-52
Cultural adaptation is the main focus of the review: yes
Included studies: n=11
Settings: community, school
Population: 6 interventions targeted youth, 9 adults, and 1 both youth & adults. Sample sizes: from 24 adolescents on a U.S. Indian Reservation, to all residents living in several municipalities in Stockholm, Sweden. Population groups included Native American Indians, Native Hawaiians, Mexican Americans. 4 Studies were conducted in Canada, 2 in New Zealand and one each in Australia and Sweden.
Designs of the included studies: All studies on youth were quasi-experimental generally with no control group. One had a comparison group and a further had a nonequivalent comparison community.
Intervention components: Studies on youth (only those with results): S1 (Holcomb et al 1998): Curriculum-based program that integrates program's goals into reading, writing, mathematics, science, and physical education and encourages students to eat low-fat foods and exercise regularly. S2 (Marlow et al 1998): Educational intervention designed to provide information about diabetes prevention through physical activity and good nutrition within a cultural context. S3 (Teufel & Ritenbaugh 1998): Supportive social networks established within community, faculty, and youth. Teen wellness facility established to emphasize physical activity. Curriculum-based diabetes education introduced. Food supply in schools modified. S4 (Trevino et al 1998): Parent health education, School classroom intervention designed to supplement existing health curriculum. School cafeteria component, After-school component promoting physical activity. Studies on adults: S5 (Bjaras et al 1997): Community interventions: • Create supportive policy environment for interventions, • Obtain media coverage, • Inform public about planned activities. Intervention within communities (e.g., work-places, residential areas): • Implement strategies related to dietary change, weight control, and physical activity (e.g., walking groups). S6 (Daniel et al): Physical activity events (e.g., 100-mile club), cooking demonstrations, supermarket and restaurant tours, media campaign, environmental support. S7 (Mau et al 2001): Lifestyle intervention in both communities. Trained family support person to attend diabetes-related functions with participant. S8 (Narayan et al 1998): Intervention group: activity-based intervention involving structured physical activity and nutrition interventions; behavioral techniques, such as modeling and roleplay group problem solving, and food preparation demonstrations. Comparison group: unstructured lifestyle intervention based on self-directed learning, facilitated by incorporation of history and culture. S9 (Rowley et al 2000): Informal education by physicians on diet and exercise. Health educator for 1 to 2 years, subsequent ongoing health promotion by health-service staff including trained diabetes community-health educators. S10 (Simmons et al 1996): One educator presentation, one video presentation, and 4-month exercise program. S11 (Simmons et al 1998): Diabetes-awareness sessions followed by exercise groups. Reduced membership fees at local gymnasium, cooking demonstrations and local-health promotion services involving diabetes community-health educators.
Cultural adaptation: The various program components were designed to engage the target population in the development, implementation, and promotion of the interventions. Many incorporated culturally relevant messages, symbols, and strategies, with respect for and inclusion of traditional foods, activities, and knowledge. Many were also based on a holistic view of health, embracing spiritual, mental, emotional, and physical dimensions.

Main Outcomes: Studies on youth: S1: Significant gains in knowledge about diabetes, self-efficacy, and healthy dietary- and exercise-related behavior from pretest to posttest; also from posttest through 4 weeks of follow-up, but on fewer variables. S2: On nine sets of matched pretests and posttests of knowledge, 89% achieved higher scores (no statistical analysis). S3: Significant reduction in consumption of sugared beverages decrease in pulse rates, suggesting improved cardiovascular fitness. S4: Diabetes health knowledge significantly improved. Significant decreases in dietary fat servings; and total calories; significant increases in fruit and vegetable servings. Studies on adults: S5 Results reported for walking campaign conducted in one municipality: increased (by one-third) the proportion of adults participating in regular exercise. S6 Cohort: significant reduction in proportion of intervention participants who engaged in sweat-producing activity. Cross-sectional survey: significant increases in knowledge of diabetes and prevalence of sweat-producing activity at least once per week in intervention group. Clinical markers: Intervention community: • Six new cases of IGT, • Substantially lower systolic blood pressure and BMI than in comparison communities. Comparison communities: • Four new cases of IGT. Prevalence of diabetes: Intervention community: • No new cases of diabetes. Comparison communities: • Six new cases of diabetes. S7 Intervention group in pre-action stage more likely to advance to action stage for dietary fat and physical activity vs. comparison group. S8: Increased levels of physical activity in both groups but no statistically significant differences between groups. Clinical markers: Intervention group: • Significant increases in BMI, weight, systolic blood pressure, diastolic blood pressure, and plasma concentrations of glucose and insulin after 2-hr fast. • Significantly greater weight gain and increase in plasma concentrations of glucose than comparison group. Comparison group: Significant decreases in waist circumference and starch intake. S9: Knowledge & attitude not targeted. Clinical markers: Significant increases in mean BMI; greater increase for study participants residing adjacent to a store compared with those far from a store. Significant decreases in prevalence of IGT and hypercholesterolemia among women only. Prevalence of diabetes unaltered. S10: Significantly more retention of diabetes knowledge in intervention group than in comparison group; significant increase in amount of exercise in intervention group but decline in comparison group. Clinical markers: Weight control in intervention group; weight gain in comparison group. S11: Significant differences between intervention and comparison churches for diabetes knowledge, exercise amount, and dietary fat intake. Clinical markers: Significant differences between intervention and comparison churches for weight gain, BMI, and waist circumstance.

Secondary Outcomes: –

Review's conclusion: Although the studies we have reviewed are to be lauded for using participatory approaches, said to be the new gold standard for federally funded research, most had a number of limitations. Only one of the interventions we found used an experimental design (S8), likely because of the cultural unacceptability of this approach (S7). Some comparison groups find this design discomfiting enough to mount their own interventions, even when promised a delayed intervention. The successful Pride group (S8) was essentially meant to be a comparison group that chose to incorporate traditional ways. Interventions that show the most promise were associated with well-designed research combined with participatory approaches. Other common study limitations included the shortness of intervention duration, large numbers of non-responders, and the inability to match pre- and posttest data or to link self-reported lifestyle changes to health outcomes/indicators (e.g., BMI, prevalence of IGT). Few studies demonstrated positive outcomes in all the intermediate outcomes of interest (e.g., healthy eating behaviors and physical activity/exercise). Further, few studies assessed whether the interventions are effective in reducing plasma-glucose levels or other diabetes-risk factors among target populations

Methodological Problems: –

A8 Extrahierte Reviews psychosoziale Gesundheit

Author Year: Lood 2015
Full Citation: Lood Q, Hagglom-Kronlof G, Dahlin-Ivanoff S (2015) Health promotion programme design and efficacy in relation to ageing persons with culturally and linguistically diverse backgrounds: a systematic literature review and meta-analysis. BMC health services research 15:560 doi:10.1186/s12913-015-1222-4
Cultural adaptation is the main focus of the review: yes
Included studies: n=8 (n=6 different programs); of interest: n= 2
Settings: community
Population: Ethnically diverse (African-American, white, Asian, Hispanic, immigrants, Native American, Mandarin-speaking Chinese); the mean age was 65.3 years, ranging from 54.5 to 74.9 years.
Designs of the included studies: RCTs
Intervention components: Both studies: physical activities with cultural and linguistic adaptations and provision of health information (health information); study 2 additionally followed a person-centered approach (focus on goal setting and interactive group settings) and professional provision (by a dietician)
Cultural adaptation: Both studies: translation of written material (linguistic), cultural modifications to health information (not specified), and cultural modifications to physical exercises according to music, dance and instructions; (sociocultural). Study 1: employed the use of a peer educator from the same country as the participants when possible (constituent-involving), and divided participants by gender according to their choice (sociocultural)
Main Outcomes: physical health outcomes; study 1: standardized mean difference (SMD) = 0.03, 95% CI = -0.31 to 0.27; study 2: SMD = 0.63, 95% CI = 0.20 to 1.05
Secondary Outcomes: Mental health outcomes: Study 1: SMD = 1.24, 95% CI = 0.79 to 1.70; Study 2: SMD = 0.27, 95% CI = -0.13 to 0.67; depression outcomes study 2: SMD = -0.38, 95% CI = -0.78 to 0.02
Review's conclusion: Limited for the effect of health promotion on physical health; statistically significant and clinically relevant pooled effect on improved mental health, albeit with high heterogeneity and limited scientific foundation; significantly lower risks for depression in intervention group with low heterogeneity, clinically relevant effects, but limited scientific foundation
Methodological Problems: <ul style="list-style-type: none"> • Resnik 2002 with high risk of bias • limited number of studies, limited study quality • partly heterogeneity • majority of studies conducted in USA;

Author Year: Healey 2017
Full Citation: Healey P, et al. (2017) Cultural adaptations to augment health and mental health services: a systematic review. BMC health services research 17(1):8 doi:10.1186/s12913-016-1953-x
Cultural adaptation is the main focus of the review: Yes
Included studies: Total of n=31 studies, only n=1 of interest
Settings: community
Population: N=139 Latinas/-os
Designs of the included studies: RCTs and quasi-experimental designs with parallel cohorts of control
Intervention components: Culturally Adapted (CA): Illustrated fotonovela to increase depression knowledge and reduce stigma. (health information)
Standard (STD): Standard depression pamphlet
Cultural adaptation: illustrations (fotonovela) (peripheral) to simplify content
Main Outcomes: Lower in antidepressant stigma ($p < .05$) and mental health care stigma ($p = <.05$) in CA group; higher in depression knowledge in CA group; No significant differences in self-efficacy to identify depression or willingness to seek help ($p > .05$) between groups.
Secondary Outcomes: -
Review's conclusion: Researchers did not find consistent evidence supporting implementation of any specific type of adaptation nor increased efficacy with any particular cultural group.
Methodological Problems:
<ul style="list-style-type: none"> • Only 1 relevant study • Small sample size

Author Year: Milne 2016
Full Citation: Milne T, Creedy DK, West R (2016) Integrated systematic review on educational strategies that promote academic success and resilience in undergraduate indigenous students. <i>Nurse education today</i> 36:387–94 doi:10.1016/j.nedt.2015.10.008
Cultural adaptation is the main focus of the review: no
Included studies: Total of n=16 papers, of interest n=12
Settings: education-based (nursing and midwifery higher education settings)
Population: Indigenous undergraduate students
Designs of the included studies: 8 qualitative research design, 3 mixed-methods, 1 quantitative
Intervention components: <i>Example (CA 4): Strengthening of Cultural Identity program as primary prevention strategy against poor academic achievement in Maori students in New Zealand/Aotearoa (Bennett 2002) (enhancing cultural awareness in academic curricula)</i>
Cultural adaptation: CA 1: inclusion of aboriginal community members or elder representation on the research team as strategy of representation of 'other' (Adams 2005, Kippen 2006, DiGregorio 2000, Oliver 2013, Hall 2013) (constituent-involving); CA 2: importance of family and connection to community (Kippen 2006, Usher 2005, West 2013, Day/Nolde 2009, Bingham 2014) (sociocultural); CA 3: establishment of indigenous education support units (Oliver 2013, Pechenkina 2011, West 2014, Day/Nolde 2009) (socio-cultural); CA 4: representation of indigenous culture within academic curricula (sociocultural) (Bennett 2002, West et al. 2013)
Main Outcomes: CA 3: existence of IESU was associated with improved student success, retention and engagement if an adequate level of support was received. CA 4: A clear respectful presence of indigenous culture throughout the university and in academic programs was seen as protective of resilience in indigenous students (Bennett 2002); West et al. (2013) concluded that faculty who are respectful and acknowledge indigenous culture have the potential to significantly influence successful outcomes for indigenous students. If academics are reflexive they are able to see how empowering indigenous student knowledge can make a difference in the classroom and in the eyes of other students; transformative teaching methods will increase indigenous students' resilience when dealing with these challenging situations.
Secondary Outcomes: -
Review's conclusion: Although a number of factors appear to impact the success of indigenous students the most crucial factor is one of support. Indigenous students are more successful when they have the support of their communities and families. As evidenced in the literature students attending universities with IESUs are more likely to report receiving mentorship and have positive relationships with 'others', as well as strong cultural and academic support.
Methodological Problems: No detailed study characteristics of all included studies reported, no specific interventions reported (only selected interventions), no outcomes reported (only narrative in some cases), no control groups reported

Author Year: Antonio 2015
Full Citation: Antonio MC, Chung-Do JJ (2015) Systematic review of interventions focusing on indigenous adolescent mental health and substance use. American Indian and Alaska Native Mental Health Research 22(3):36–56
Cultural adaptation is the main focus of the review: yes
Included studies: n=8; of interest: n=6
Settings: n=3 community; n=3 school
Population: indigenous children and adolescents; ages range between 11 and 18 years, sample sized: 61/128/19/53/73/56
Designs of the included studies: n=3 quasi-experimental, n=1 mixed-method pre-experimental, n=2 RCT
Intervention components: <i>Study 1 (Elluam Tungiinun/ET program)</i> : focus on suicide-risk factors and SU; 26 Qungasvik prevention modules over 52 total sessions (information units); <i>Study 2</i> : focus on suicide and depression risk factors; 2–3 times/week, 20–30 weeks (year 1). Additional booster sessions (year 3); (information units); <i>Study 3</i> : focus on depression and anxiety; 15 total sessions: 13 sessions, 2/week, 7 weeks, 35 40 minutes/session. Additional 2 booster sessions within 1 month post-intervention (information units); <i>Study 4 (Yupiucimta Asvairtuumallerkaa//YA program)</i> : focus on suicide risk and SU; 15 prevention modules (information units); <i>Study 5</i> : focus on mental health and resilience; 10-day program during two summers (information units); <i>Study 6</i> : focus on mental health, symptoms of depression and suicide; 1-year duration, 8 sessions, 90 minutes/session (information units)
Cultural adaptation: indigenous children and adolescents targeted in all interventions; use cultural tailoring framework analysis/scale adapted from Okamoo et al. 2013: n=3 culturally grounded programs (community-based programs developed by community members (constituent-involving)); n=2 deep structure programs (incorporate modifications to a pre-established or evidence-based program rooted in cultural contexts and constructs to enhance acceptance by targeted participants (sociocultural)); n=1 surface structure programs (modifications to images or text in existing or previously validated curricula to increase familiarity of concepts being taught) (peripheral); some studies modified evidence-based interventions with deep structure adaptations, e.g. LaFromboise and Lewis (2008) incorporated Zuni core values (e.g., family, community cohesion, and pre-colonization traditions) in their suicide prevention program. Lustig-Lunde et al. (2013) made cultural adaptations to the Adolescent Coping with Depression course, such as changing role-play situations to be culturally relevant and incorporating discussions focusing on cultural impacts of assertiveness, eye contact, constructive criticism, and self-disclosure (sociocultural). Woods/Jose (2011) applied surface-structure adaptations onto evidence-based intervention (peripheral)=
Main Outcomes: Self-reported outcome measures: <i>Study 1</i> : increase in protective factors and reasons for life, increase in coping/life skills; <i>Study 2</i> : increase in overall mental health and suicide knowledge (decrease in reported symptoms for suicide and depression), increase in coping/life skills (compared to control group; not specified); <i>Study 3</i> : decrease in reported symptoms for depression (statistically significant findings for outcome); <i>Study 4</i> : increase in protective factors and reasons for life, increase in coping/life skills; <i>Study 5</i> : increase in reported short-term resilience (statistically significant) and overall mental health; <i>Study 6</i> : increase in overall mental health and decrease in depressive symptoms (statistically significant), increase in coping/life skills.
Secondary Outcomes: Authors examining interventions implemented in different communities (Allen et al., 2009, and Mohatt et al., 2014) found more favorable outcomes for participants receiving increased dosages of culturally competent interventions. Program dosage was guided by the community's ability to implement the program based on available resources, and by participants' desire to have a longer program.
Review's conclusion: In general, interventions included in this review had positive or expected outcomes relating to mental health and substance use.
Methodological Problems: Mostly no control groups included, and if included, not specified or outcomes not compared (except for Study 2)

Author Year: Day 2013
Full Citation: Day A, Francisco A (2013) Social and emotional wellbeing in Indigenous Australians: identifying promising interventions. Australian and New Zealand journal of public health 37(4):350–5 doi:10.1111/1753-6405.12083
Cultural adaptation is the main focus of the review: yes
Included studies: n=8 interventions; of interest n=3 evaluations as only these are described in detail and outcomes reported
Settings: individual and community level
Population: Indigenous Australians (Aboriginals and Torres Strait Islander people)
Designs of the included studies: 1 RCT, 2 unspecified
Intervention components: <i>Study 1: Mental Health First Aid: An International Programme for Early Intervention:</i> training of instructors and individuals in mental health first aid, subsequently developed for Indigenous Australians through process of cultural sensitivity training and expert reference groups, involving relevant local communities providing comment on the proposed adaptations (participatory); <i>Study 2: Evaluation of Bringing Them Home and Indigenous Mental Health Programs:</i> consisted of four programs, including 1) The Link-Up Program (national network of services supporting and assisting Aboriginal people affected by past removal policies in tracing their family history and potentially reuniting with their families; culturally specific and designed exclusively for Aboriginal clients), 2) Bringing Them Home Program (counselling to individuals, families and communities affected by past practices regarding the forced removal of children from Aboriginal families), 3) The Social and Emotional Wellbeing Regional Centre Program (funds professional support and training to program 1) and 2) staff and mental health workers), 4) Mental Health Program (funds Mental Health Service Delivery Projects in Aboriginal Community Controlled Health Services to develop appropriate approaches in mental health service delivery). <i>Study 3: Monitoring the 'Strong Women, Strong Babies, Strong Culture Program': The First Eight Years.</i> : community-based early intervention program that utilizes senior Aboriginal women to help younger women prepare for pregnancy and childbirth; aim: empowerment through parental capacity building
Cultural adaptation: Sought studies that incorporated Social and Emotional Wellbeing (SEWB) as culturally appropriate construct which reflects the holistic philosophy that many Aboriginals and Torres Strait Islander people have towards health and encapsulates the wide range of experiences that have the potential to adversely affect an individual's wellbeing (sociocultural); community and individual-based, participatory interventions, training of members of cultural groups, including them into design and implementation of programs (constituent-involving)
Main Outcomes: <i>Study 1:</i> An initial uncontrolled evaluation suggested that program attendance led to an improvement in the recognition of mental disorders, confidence in the value of treatment (to be more like those of health professionals), decreased social distance from people with mental disorders, increased confidence in providing help, and an increase in the amount of help provided to others. Changes were maintained over a six-month follow up. <i>Study 2:</i> The evaluation concluded that the programs had provided culturally appropriate services to a large number of Aboriginal clients who were unlikely to have otherwise received services, and that there were generally high levels of client satisfaction and positive outcomes for clients, particularly for the Link-Up and Bringing Them Home programs. <i>Study 3:</i> The program was shown to have a positive impact on birth weight by a pre- and post-assessment for an intervention and comparison group using routinely collected data.
Secondary Outcomes: <i>Study 1:</i> Two subsequent randomized control trials reported statistically significant results on changes in similar measures sustained up to six months after program completion. One trial demonstrated positive effects on mental health.

Study 2: The evaluation of these programs identified a number of factors that had limited their effectiveness. For example, the service was typically used by second and subsequent stolen generations and, as such, missed the primary target group of first generation Stolen Generation members. There was variability in the skills and qualifications of staff, and the use of young counsellors was identified as an issue for some older Stolen Generation clients, which restricted the quality of engagement. Finally, there was a lack of national consistency in service delivery between states, and limited geographical coverage of some programs. *Study 3:* The authors note that their evaluation design made it difficult to exclude the possibility that concurrent changes in health care provision by the Health Department and other service providers has influenced outcomes, although point to both scientific and logistic reasons as to why randomized control trials are not practical in evaluation programs delivered in sparsely populated remote Aboriginal communities.

Review's conclusion: The three programs identified as having the strongest level of evidence (according to authors' criteria) provide mental health first aid, services for those who have been affected by the Stolen Generation, and a program that aims to improve early childhood health.

Methodological Problems:

- Small number of included studies
- Only 1 RCT

Author Year: Cain 2016
Full Citation: Cain M, Lakhani A, Istvandity L (2016) Short and long term outcomes for culturally and linguistically diverse (CALD) and at-risk communities in participatory music programs: A systematic review. Arts & Health: An International Journal of Research, Policy and Practice 8(2):105–124 doi: http://dx.doi.org/10.1080/17533015.2015.1027934
Cultural adaptation is the main focus of the review: No
Included studies: Total of n=6 studies, of interest: n=3
Settings: education-based
Population: At-risk youth from CALD backgrounds; Study 1: Nineteen students between 11 and 15 years of age, from Haitian or Hispanic descent. Study 2: A total of 218 minority and immigrant young people from grades 6–12. Over 70% Latino; 32% from immigrant families. Study 3: Alienated youth from Western Australia's Wheatbelt Region. Sixty participants between years 6 and 7 with an average age of 12
Designs of the included studies: Study 1: quasi-experimental. Study 2: (quantitative and qualitative) surveys; Study 3: quasi-experimental.
Intervention components: Study 1: <i>Guitars Over Guns Organization, Inc. (GOGO)</i> program (Bernstein 2012): not-for-profit music education program, where mentors work with at-risk adolescents in high-crime neighborhoods and encourage them to learn contemporary instruments in after-school bands. The main aim of the program is to use music to counteract negative influences in the students' immediate environments, and to encourage them to remain in school. The GOGO program makes music an accessible option and provides instruments to participants. Within the program, individualized mentoring sessions are integral and become a tool to support young people's academic success. Study 2: Evaluate the outcomes of the drumming, dance, and theatre arts program. <i>D4-H Bloco Drum and Dance</i> . Study 3: Evaluating the DRUMBEAT program and exploring the well-being outcomes for participants. <i>Discovering Relationships Using Music, Beliefs, Emotions, Attitudes & Thoughts (DRUMBEAT)</i> program. A 10-week program
Cultural adaptation: Study 1 and 2: use of culturally relevant music which appealed to the age of the participants
Main Outcomes: Study 1: On average, student GPA, and coping attitudes and strategies increased. Students generally enjoyed the program and were engaged, and they also suggested that the program duration be longer with increased practice sessions. Study 2: The quantitative data yielded statistically significant changes for all of the outcomes, cultural appreciation, gang-related attitudes and involvement, health awareness, and exercise and nutrition. Young people felt empowered and motivated by the program. The program also discouraged their involvement in gangs. Furthermore, playing on the drums, performing and dancing were activities which engaged young people and provided positive feelings for them. Study 3: Participants within the treatment group, on average had a 16% increase in self-esteem and reduced their half-day absences in school from 13 to 8. Sixteen of the 27 participants in the treatment group increased their performance on the collaboration and cohesion scale. Additionally, teachers noticed a significant decrease in incidences requiring teacher intervention.
Secondary Outcomes: Study 1 & 2: Bernstein (2012) and Conklin-Ginop et al. (2011) noted that the opportunity to perform music that was widely recognized by their peers, was the main impetus for participants' engagement and success of the program overall. Study 3: Twenty-six of the 27 participants described the program as positive and suggested that they would highly recommend the program to other participants.
Review's conclusion: Qualitative evidence suggests that participation in music programs assists in reducing isolation, supports diverse young people's ability to develop positive social connections, and encourages them to participate more competently within their community. Additionally, such programs have been instrumental in increasing participants' confidence and self-esteem, supporting more socially acceptable behavior in academic settings, and promoting positive mental and physical health outcomes.
Methodological Problems: No definition of what is culturally relevant; culture as ethnic identify component?

Author Year: Clelland 2007
Full Citation: Clelland N, Gould T, Parker E (2007) Searching for evidence: what works in Indigenous mental health promotion? <i>Health promotion journal of Australia : official journal of Australian Association of Health Promotion Professionals</i> 18(3):208–16
Cultural adaptation is the main focus of the review: yes
Included studies: n=22 articles, of interest: n=13 (others, out of topic, wrong setting, or nor primary prevention)
Settings: 4 community-based, 3 education setting, 1 home-based, 1 health center, 4 combination of sites
Population: 9 Indigenous people, 1 Hispanic, 1 not specified, 2 (majority) African American
Designs of the included studies: not specified
Intervention components: 1) family functioning and parenting interventions (4 studies, incl. McFarlaine 1994, Cooper 2002, Fisher 2002, Kumpfer 2002); 2) promoting positive aspects of mental health including a) empowerment of Indigenous people (Tsey 2000, Mardiros 2001), promoting wellness through traditional practices (Hodge 2002), improve cognitive skills (Ritchie 1996), and provide social support (Forti 2002 incl. Indigen. volunteers), 3) reducing the impact of violence/school-based violence prevention program (DuRant 1996), 4) prevention of suicide (La Framboise 1995, DeBry 1998, Capp 2001)
Cultural adaptation: CA strategy 1: programs based on traditional cultural practices (based on storytelling to disseminate health information, Fisher 2002, Kumpfer 2002); CA strategy 2: involvement of Indigenous people (Indigenous community workers in 4 studies incl. Cooper 2002, Fisher 2002, Kumpfer 2002, Tsey 2000; Indigenous volunteers in 5 studies incl. McFarlaine 1994, Mardiros 2001, Hodge 2002, Forti 2002 and LaFromboise 1995), these were more likely to feature appropriate cultural practice and therefore receive community support; CA strategy 3: one intervention delivered by non-Indigenous teachers working with Indigenous aides (LaFramboise 1995)
Main Outcomes: –
Secondary Outcomes: –
Review's conclusion: It was encouraging to find that many of the interventions were developed and implemented by Indigenous people or involved Indigenous participants at all levels of decision making. This is a significant factor for ensuring cultural relevance and community involvement in Indigenous mental health promotion interventions.
Methodological Problems: no outcomes reported

Author Year: Hays 2016
Full Citation: Hays K, Aranda MP (2016) Faith-based mental health interventions with African Americans: A review. <i>Research on Social Work Practice</i> 26(7):777–789 doi: http://dx.doi.org/10.1177/1049731515569356
Cultural adaptation is the main focus of the review: yes
Included studies: Total of n=5 studies; of interest n=3 studies
Settings: faith-based organisations
Population: African Americans
Designs of the included studies: uncontrolled before after trial, post-intervention comparison only
Intervention components: Brown 2009: a 90-min workshop led by nursing students that included (1) a PowerPoint presentation, (2) a brief video, (3) pre- and posttest assessments of stigma, and (4) an interactive learning game/activity; Crewe 2006: Joy of Living program, featuring three workshops focused on health and its relationship to mental health, memory loss, and depression; guest speakers presented topics followed by sharing circles with participants; Pickett-Schenk 2002: monthly meetings at a church led by a mental health professional and family members; no details of support group curriculum or structure provided
Cultural adaptation: Brown 2009: translators for Spanish-speaking groups (linguistic), workshops in church settings (sociocultural); Crewe 2006: African American experts ensured that messages were based on a strengths versus pathology framework (constituent-involving). Sessions were held at sites in the community that served seniors to increase trust (sociocultural). The connection with faith was used to reach African Americans (sociocultural) (Context/Persons/Methods); Pickett-Schenk 2002: Group sessions were held in a large African American church to appeal to African American families (sociocultural)
Main Outcomes: Brown (2009) analyzed pre- and posttest differences for 38 participants and concluded that there was a significant decrease in participants' total stigma score (pre- to posttest difference = 4.25, $p = .04$) and that the relationship between a participant's level of familiarity score and pretest stigma score was significant as well ($r = -.451, p = .01$), suggesting that the intervention workshop improved attitudes toward mental illness; Crewe 2006: The intervention was effective at raising participants' awareness of normal and abnormal mental health and available resources; Pickett-Schenk (2002) concluded that the church-based family group intervention successfully improved target measures at posttest. The author reported that 91% of participants had a significant increase in knowledge of the treatment and causes of mental illness, 91% reported increased knowledge of the treatment service system, and 69% reported significantly improved morale
Secondary Outcomes: –
Review's conclusion: Considering the ongoing racial disparities, low rates of professional service use, and stigma regarding mental health in African-American communities, it is critical that interventions such as these be developed to improve mental health outcomes. However, there continues to be very little empirical research in this area and what evidence does exist is of questionable quality. Churches and other religious institutions are often the center for healing, yet this natural community resource remains largely untapped in terms of mental health needs. Reducing disparities in mental health outcomes could be addressed by engaging faith-based programs in rigorous treatment studies with socio-cultural adaptations that increase relevance and acceptability of mental health care in the community.
Methodological Problems:
<ul style="list-style-type: none"> • Weak study designs (no control groups)

Author Year: Ruiz-Casares 2017
Full Citation: Ruiz-Casares M, Drummond JD, Beeman I, Lach LM (2017) Parenting for the promotion of adolescent mental health: a scoping review of programmes targeting ethnoculturally diverse families. <i>Health & social care in the community</i> 25(2):743–757 doi:10.1111/hsc.12364
Cultural adaptation is the main focus of the review: no
Included studies: Total of n=18 studies; only n=5 of interest
Settings: Family, community
Population: Ethno-cultural communities (e.g. African Americans, Latin Americans, Asian Americans, Hispanics and other ethnic minorities in Europe)
Designs of the included studies: Qualitative
Intervention components: Allen 2013: Family Skills Training Intervention for Latino Families; a family-skills training intervention was developed for cultural appropriateness for Latino parents by involving professionals from Latino-serving agencies as well as creating and consulting a parent-advisory board of 13 Latino parents of adolescents; Lalonde 1997: Esperanza del Valle; developed interventions that addressed culturally specific risk and protective factors by engaging with the ethnocultural community they serve
Cultural adaptation: participatory approach, including community/family members (cultural relevance) into program design and implementation (constituent-involving)
Main Outcomes: –
Secondary Outcomes: –
Review's conclusion: family-centered approach emphasized cultural relevance of family's centrality in the lives of individuals; community-based participatory approach to achieve cultural relevance
Methodological Problems: <ul style="list-style-type: none"> • Weak study designs (no outcomes, no control groups) • Small number of relevant studies

Author Year: Baker 2016
Full Citation: Baker AE, Procter NG, Ferguson MS (2016) Engaging with culturally and linguistically diverse communities to reduce the impact of depression and anxiety: a narrative review. <i>Health & social care in the community</i> 24(4):386–98 doi:10.1111/hsc.12241
Cultural adaptation is the main focus of the review: Yes
Included studies: Total of n=15 studies; n=3 of interest
Settings: community
Population: Barrett 2001: children and adolescents (intervention, n = 121; waiting-list control, n = 83) of former-Yugoslavian, Chinese and mixed NESB (South-East Asia, Pacific Islands, Europe, Africa, Middle East) attending ESL classes in Australian primary and high schools; Kiropoulos 2011: Greek (intervention, n = 67; control, n = 62) and Italian(intervention, n = 43; control, n = 30)-born immigrants aged over 45 years, living in one Australian city; Unger 2013: Hispanic adults (n = 139), primarily immigrants, attending three US community adult schools
Designs of the included studies: RTCs plus qualitative results
Intervention components: Barrett 2001: anxiety prevention and stress-resiliency program for CALD, qualitative interviews with facilitators and representatives; Kiropoulos 2011: use of internet-based multi-lingual information website on depression literacy, stigma, and symptoms; Unger 2013: depression fotonovela to increase depression knowledge, reduce stigma, increase self-efficacy to recognize depression and increase intentions to seek treatment, compared to text pamphlet
Cultural adaptation: participatory approach, including community/family members (cultural relevance) into program design and implementation (constituent-involving)
Main Outcomes: Barrett 2001: intervention group showed greater improvement in self-esteem, reduced internalizing of symptoms (anxiety) and future outlook than the waiting-list group. Participating students highly satisfied with the intervention. Interviews with facilitators and participants revealed that the program may be enhanced by culturally sensitive elements so that the program is more applicable for use with NESB participants; Kiropoulos 2011: intervention group showed significant difference compared to control group with higher depression literacy scores post-assessment and at follow-up; significantly greater decrease in mean personal stigma scores post-assessment and at follow-up. No significant difference in perceived stigma or level of depression between groups at post-assessment or follow-up; Unger 2013: the fotonovela and text pamphlet produced significant improvements in depression knowledge and self-efficacy to identify depression, but the fotonovela produced significantly larger reductions in antidepressant stigma and mental healthcare stigma.
Secondary Outcomes: –
Review's conclusion: engaging through culturally tailored websites (Kiropoulos 2011) or provision of information via fotonovelas and pamphlets (Unger 2013) may be more suitable for individuals with CALD backgrounds; Six-key themes were identified: (i) setting the scene for engagement; (ii) cultural values and preferences; (iii) language considerations; (iv) 'engagers' in the therapeutic process; (v) opening out engagement to include others; and (vi) engaging through the use of technology and alternative mediums
Methodological Problems: –

A9 Extrahierte Reviews Sucht

Author Year: Bledsoe 2003
Full Citation: -
Cultural adaptation is the main focus of the review: yes
Included studies: N=31
Settings: schools
Population: adolescents; African American, Hispanic/Latino; Asian and Native American
Designs of the included studies: experimental designs, quasi-experimental designs and pretest and posttest designs.
Intervention components: interventions including: knowledge, affective, drug-refusal skills, life skills/generic skills, safety skills, extra-curricular skills and other strategies.
Cultural adaptation: use of cultural staff, cultural knowledge components and components that dealt with cultural issues related to the environment; delivery strategies: educational training, role-play, skills training, video, vignette, combination of other strategies.
Main Outcomes: Those programs that dealt with spirituality or made of use of cultural activities were more effective than those programs that did not; African American participants benefited from the inclusion of the components of spirituality, violence and stress; drug-prevention program delivery provided affirming results in terms of effectiveness for refusal-skills training (strongest in Latino populations); affective strategies were found to be least effective; results indicated that using theoretical foundations to develop prevention strategies did not increase effectiveness. Programs without such theoretical models were found to be more effective than those with such models.
Secondary Outcomes: programs with a cultural component that used an experimental design did not differ significantly from those without a cultural component; quasi-experimental designs yielded similar results to experimental designs; that is, those programs with a cultural component that used a quasi-experimental design were not significantly different than those that did not; however, for those programs that used a pretest-posttest design, programs with a cultural component were less effective than those programs that did not include such a component.
Review's conclusion: No clear evidence that having a cultural component leads to effectiveness in prevention programs for adolescents of color; only a relationship can be inferred; speculate that there are differences in effectiveness for those programs that contain a cultural component versus those that don't.
Methodological Problems: only one of the studies actually tested for the quality of the cultural component; study is limited in determining how effective cultural components are in directly influencing the outcomes of behavior, attitude, and knowledge change in drug prevention; no prior analysis of programs that focus on, service, or cater to adolescents of color has been conducted; the study data are limited due to a combination of study coding, and imitations of the data provided by the studies included in the meta-analysis; as well, there were limitations in the data available for this study (many of the studies reviewed here did not provide information concerning the quality of the services provided); because of the small number of effect sizes representing some outcomes, these few effect sizes may not provide a good measure of true population effects

Author Year: Hodge 2012
Full Citation: –
Cultural adaptation is the main focus of the review: yes
Included studies: n=10
Settings: schools
Population: The majority of participants had to be under 18 years of age and racial/ethnic minorities (African American, Latino, or Native American): S1 & S4 focused on juvenile offenders
Designs of the included studies: 5 x non-randomization: Single group; 5 x randomized
Intervention components: S1 (Cervantes et al 2004) – Non-randomization: Single group, 8-week CSI, pre/posttest; S2 (Emshoff et al 1996) – Non-randomization: Single group, 2-week CSI (with booster session at 1 month), pre/posttest, substance use assessed at 3 months; S3 (Flay 2004) – Randomization, by school, into 3 groups: CSI skills-based, non-CSI community-based, and CSI health control (16 to 21 lessons per year, from grades 5 to 8), pre/posttest; S4 (Gil 2004) – Randomization into 4 groups: 3 CSI conditions (approximately 10 weeks in duration) and wait-list control, pre/posttest (of CSIs only); S5 (Hecht et al 2008) – Randomization by school, into 2 groups: CSI (12 classroom lessons, and 1 year of booster sessions) and non-treatment control, pre/posttest (1 to 2 months after the classroom lessons); S6 (Komro 2006) – Randomization, by school, into 2 groups: 1-year CSI and non-treatment control, pre/posttest; S7 (Kulis et al 2005) – Randomization, by school, into 4 groups: 2 CSIs (10 classroom lessons and 1 year of booster sessions), standard treatment, and non-treatment control, pre/posttest (14 months after the 10 classroom lessons); S8 (Moran 1999) – Non-randomization: 14-week after-school CSI and non-treatment comparison group, pre/posttest; S9 (Stevenson 1998) – Non-randomization: Single group, 1-year CSI, pre/posttest; S10 (Weaver & Jackson – not dated) – Non-randomization: Single-group, 5-week CSI, pre/posttest.
Cultural adaptation: Not explicitly mentioned in review – just says interventions that incorporate norms, beliefs, and values of the target population were included.
Main Outcomes: <i>CSI Effectiveness across Measures and Time Frames:</i> Three studies, in particular, were characterized by wide confidence intervals (CIs), which serve to underscore the uncertainty of the pooled point estimate (S2, 8 & 10). The overall results suggest that CSIs are, at least as currently operationalized, minimally effective with minority youths. Youths participating in CSIs obtained an aggregate standardized mean difference of 0.118 compared with those not participating in CSIs (Hedges's $g = .118$, 95% CI = 0.004 to 0.232, $p = .043$), an effect size that is typically considered small. <i>CSI Effectiveness for Recent Alcohol:</i> Six studies assessed recent alcohol use (S1, 2, 4, 7, 8 &). Analysis revealed a small but significant effect. Youths participating in CSIs obtained an aggregate standardized mean difference of 0.225 compared with those not participating in CSIs (Hedges's $g = .225$, 95% CI = 0.015 to 0.435, $p = .036$). Although the effect was significant, the wide CIs and the relatively small number of studies suggest the findings should be viewed with caution.
Secondary Outcomes: CSI has to be distinguished between surface structure and deep structure CSIs; Surface structured CSI: involves tailoring interventions to conform to observable social and behavioral characteristics of the population, entails use of people, language, clothing, settings, music, and exemplars that resonate with the population; deep structured CSI: involves construction of interventions that reflect the social, historical, psychological, and cultural forces related to health and wellness in that population.
Review's conclusion: The small beneficial results obtained in this study suggest that CSIs may hold promise in this regard in the area of substance use; the lack of clarity regarding the active cultural component introduces an element of uncertainty into the analysis.

Methodological Problems: Across the 10 studies, small but significant effects emerged. Similar findings occurred for recent alcohol use, but the effects for recent marijuana use were not significant. Little evidence emerged supporting the concern that CSIs may engender detrimental outcomes. A number of factors should be considered in interpretation of the findings. Effect sizes may have been attenuated in some studies by lack of variability in the dependent measure. When little variability exists, it is difficult to show an intervention effect. Although in some cases it was possible to focus on outcomes with some degree of pretest variability (for example, Stevenson et al., 1998), in other studies pretest substance use was minimal across all measures (for example, Emshoff et al., 1996). Alternatively, the failure of many studies to include a comparison group may have also attenuated effect sizes. Substance use tends to increase over time as youths age. Without a comparison group to control for this progression, interventions may seem less effective than they really are when compared with normative behaviors. Degree of heterogeneity raises substantial concerns about the appropriateness of aggregating effects across studies. The lack of clarity regarding the active cultural component introduces an element of uncertainty into the analysis.

Author Year: Minichiello 2016

Full Citation: -

Cultural adaptation is the main focus of the review: Yes

Included studies: N=73

Settings: community, legislative and individual level

Population: A number of diverse indigenous groups such as: Alaska Natives and people of Yup'ik ancestry, Native Hawaiians, Pacific Islanders, American Indians including members from the Ojibwe tribe, and Native Americans. Three political groups from Canada: First Nations, Inuit and Métis peoples participated in interventions. In Australia, Aboriginal and Torres Strait Islander people included Tiwi peoples, Jawoyn peoples, and Yolngu peoples. The Māori peoples of New Zealand were also engaged in interventions as well as ethnic Fijians from Fiji and the Aborigine population in Taiwan.

Designs of the included studies: Mixture of many before & after, RCTs, cross-sectional designs and 2 cohort and 2 observational

Intervention components: Community level activities included education, media campaigns, quit lines, and the use of cultural protocols or ceremonial practices; individual level activities include pharmacotherapy, behavioural support, training health professionals and incentives; legislative level activities refer to policies, laws and taxes

Cultural adaptation: Interventions were organized and implemented by a number of different actors. Some interventions were organized and implemented entirely by Indigenous researchers, health professionals or community members while many others were implemented in partnership with Indigenous and non-Indigenous peoples. Interventions were also implemented as mainstream health services.

Main Outcomes: While the impact of these interventions was diverse, many led to desired changes in each of the outcomes, except in communities in Australia and New Zealand where prevalence rates were not impacted. **Community:** Qualitative results in these studies demonstrate a greater sense of community interest to prioritize tobacco a feeling of greater self-determination to shape the health and well-being of both individuals and the community and development of local Indigenous capacity, **Knowledge:** Eight of the interventions revealed a positive impact on change in knowledge, while the effect of the other 3 interventions is unknown due to insignificant results; **smoke-free environment:** Three qualitative studies represent three interventions of which two showed positive changes towards developing smoke-free environments while one did not. The two interventions that showed positive change either by establishing a smoke-free policy or through advocacy work, incorporated ceremonial practices in their educational programming, none of the quantitative studies were statistically significant.

Changes in initiation: education alone (either community or school based education) led to positive changes in reducing initiation rates, but did not have any measured effect on reducing consumption; *Changes in quit rates:* Three of the four interventions that demonstrated a change in quit rates either incorporated ceremonial practices or had culturally based activities. For example, for the STOMP project (Stop Smoking by Mobile Phone); *Changes in prevalence:* Of the 293 participants contacted at 12-month follow-up, no significant change in smoking prevalence and intensity was observed.

Secondary Outcomes: In this review, interventions that incorporated educational programs with other activities such as pharmacotherapy and/or counselling did result in reductions. In accordance with the World Health Organization's Framework Convention on Tobacco Control the use of comprehensive tobacco cessation strategies that include a myriad of activities such as taxation, smoke-free policies, behavioural therapy, and media campaigns are most effective at motivating and supporting people to quit. Review also aimed to uncover common elements that worked well across multiple interventions while exploring how programs and services reflect Aboriginal self-determination. To these aims, many of the interventions analyzed in this review report high levels of community engagement and ownership. Interventions that led to positive changes were 1) led by Indigenous community members; 2) implemented in partnership with non-Indigenous health workers; 3) offered as mainstream health services. Further, consistent with approaches to Indigenous health-knowledge translation, this review found a preference for 'within the community' messages [80]. These health messages incorporate culturally appropriate icons and symbols and are relayed by members of the community. This was made evident through the frequent use of culturally relevant health-promotion materials that were adapted to reflect the communities' unique history and culture as well as the use of Aboriginal project staff and research officers in many of the interventions. Moreover, the 73 interventions described in this review were found to be most effective when local protocols were acknowledged and ceremony adhered. For example, many program organizers relied on the guidance and knowledge of community Elders in creating and implementing their intervention. This relationship was found to be an important way to honour local protocols and Aboriginal self-determination.

Review's conclusion: Overall, it appears that there is not one type of intervention nor a combination of activities that will most likely support the reduction of commercial tobacco use in Indigenous communities but rather programs that 1) Use a comprehensive approach inclusive of multiple activities, 2) Centre Aboriginal leadership, 3) Make long term community investments, and 4) Provide culturally appropriate health materials and activities produce desired changes. A comprehensive approach that uses multiple activities, the centring of Aboriginal leadership, long-term community investments, and the provision of culturally appropriate health materials and activities appear to have an important influence in producing desired change. All the included programs were developed and evaluated many years ago, with no program evaluated after 2000.

Methodological Problems: the lack of measured effect reported within many interventions in this dataset are explained by a variety of factors, including: poorly designed interventions, insufficient dosage and duration, incompatibility of intervention with community context, and study design flaws including small samples with insufficient power to detect small differences. In summary, this systematic review of adolescent smoking prevention programs finds that only 5 such programs were deemed successful by the NCI and that these were evaluated, on average, about a decade ago. Programs that were successful were generally targeted toward specific demographic groups, were conducted in schools, and often used professional health educators and/or trained community members. The lessons that these successful programs have provided may assist in the development of urgently needed new programs addressing current tobacco control issues.

Author Year: Sherman 2009
Full Citation: –
Cultural adaptation is the main focus of the review: yes
Included studies: 5 programmes included: (1) Project Towards No Tobacco Use (TNT), 1993; (2) Pathways to Health, 1995; (3) Native FACETS, 1996; (4) Kentucky Adolescent Tobacco Prevention Project (KATPP), 1998; and (5) Sembrando Salud, 2000.
Settings: all school based, apart from P3
Population: P1 – general adolescents; P2 – Native American adolescents in 5th & 7th grades; P3 – Native American youth in the northeastern United States; P4 – middle school youth living in counties that produce 7.7 pounds of tobacco annually; P5 – migrant adolescents aged 11–16 years; sample sizes from 86 (P3) to 6716 (P1). P5 had 660.
Designs of the included studies: not applicable
Intervention components: P1 – Ten 40- to 50-minute lessons over 10 consecutive school days; 2 booster lessons (given by trained health educators not pupils' regular teachers); P2 – 16-session program implemented over the course of 2 semesters (done by classroom teachers); P3 – 15 weekly 90-minute group sessions after the school days or on Saturdays (done by Community-based native Americans trained to deliver intervention); P4 – Six 45- to 50-minute sessions in seventh grade; 3 booster sessions in eighth grade (done by classroom teachers); P5 – 8 weekly 2-hour sessions; parents attend 3 sessions jointly with their adolescents (done by bilingual, bicultural Mexican Americans from local universities who attended 10 weekly training sessions and met a minimum competency).
Cultural adaptation: P3 (Native FACETS) – Community-based native Americans trained to deliver intervention; P5 (Sembrando Salud) – intervention implemented by trained community leaders; the instructors were trained bilingual, bicultural Mexican American group leaders from local universities.
Main Outcomes: <i>Evaluation of Project TNT (P1)</i> found that the initiation of cigarette use was reduced by 26% and initiation of smokeless tobacco use was reduced by approximately 30% over the course of the study period. Weekly or more frequent cigarette smoking was reduced to 60% and weekly or more frequent smokeless tobacco use was eliminated. However, the teaching of refusal assertion skills and facts about classmate peer disapproval of tobacco use was not effective. Sembrando Salud sessions were less susceptible to using tobacco and alcohol. Additionally, those that took part in the program also reported better communication among family members. Thirty-day smoking and drinking rates did not change significantly, but they remained at low levels. <i>Evaluation of Pathways to Health (P2)</i> found that among those students who were not current smokeless tobacco users at pretest, nearly 92% of intervention students remained nonusers at posttest, compared with 82% in the control group ($p = .001$). Few intervention students thought they would ever use smokeless tobacco, whereas a larger proportion of control students continued to think they would use it or were unsure at posttest. However, for Pathways to Health there was no statistically significant difference found among fifth graders' self-reports of smoking or intention to smoke. <i>Evaluation of Native FACETS (P3)</i> showed that knowledge of negative effects of smoking, knowledge of effects of smokeless tobacco, and awareness of objectives and methods of tobacco advertising all significantly increased. Additionally, the researchers found statistically significant increases in students' ability to resist peer pressure to use tobacco and their willingness to refuse offers from friends after the program. However, positive results were reported more often in the mixed tobacco and dietary change group rather than the tobacco-only group. <i>Evaluation of KATPP (P4)</i> found that 1 year after delivery of the additional sessions, youth in the intervention group had lower 24-hour, 7-day, and 30-day smoking compared with youth in the control group. However, there were no significant changes in use of smokeless tobacco in the intervention group.

Students who attended more *Sembrando Salud* sessions (P5) were less susceptible to using tobacco and alcohol. Additionally, those that took part in the program also reported better communication among family members. Thirty-day smoking and drinking rates did not change significantly, but they remained at low levels. Overall, the program appeared to make a short-term change in smokers' perceived effects of tobacco use; however, it tended to be more effective when there were fewer siblings. Thus, the authors concluded that more attention is needed on larger families.

Secondary Outcomes: The NCI ranked all the programs on a scale from 1 to 5 based on dissemination capability, cultural appropriateness, age appropriateness, gender appropriateness (if applicable), research integrity, and intervention impact. Native FACETS received the highest overall rating of 4.7, followed by TNT with 4.4 and *Sembrando Salud* with 4.2. Pathways to Health and KATPP both received a score of 3.6. These latter 2 programs received somewhat lower mean scores because Pathways to Health received 2 in research integrity and 3 in dissemination capability and intervention impact. The KATPP received scores of 3 in dissemination capability and cultural appropriateness.

Review's conclusion: Studies have shown that antismoking programs should begin when students are young due to the important social, cognitive, biological, and emotional changes that take place during this time. Furthermore, because empirical studies show that 90% of those who eventually die from smoking begin before age it would seem that the majority of programs should focus on smoking prevention during adolescence; it is also valuable to note that the majority of the successful programs were aimed at a certain demographic; new tobacco prevention programs may have to be more specifically targeted at those of particular demographic or psychographic profiles; more attention is needed on larger families

Methodological Problems: -

Author Year: Liu 2012
Full Citation: –
Cultural adaptation is the main focus of the review: yes
Included studies: all in all 7 reviews and 107 primary studies included: 2 reviews on smoking, 2 PA, one Type 2 diabetes (secondary prevention), 1 CVD and 1 obesity. 23 of primary studies were on smoking, 10 PA, 57 PA & diet, 16 PA and 1 all 3. Children/adolescents as well as adults focused on.
Settings: schools, community, churches etc.
Population: 91/107 primary studies focused on AA, 7 on Chinese, 8 on South Asians and 1 was multiethnic. CVD and obesity reviews focused on AA (diabetes on children), 1 smoking on AA and other on Asian American and both PA reviews on AA, one of them only women.
Designs of the included studies: 7 systematic reviews, all types of study designs, including experimental studies (controlled and uncontrolled studies), observational studies (prospective cohort studies), and evaluation studies using qualitative methods. Interventions at any level, ranging from individual to organizational, institutional and environmental, were eligible for inclusion.
Intervention components: Diverse, hence focus only on those with <i>Direct comparison of adapted with non-adapted/standard interventions</i> – S1 – A self-help intervention trial conducted by Orleans et al. 1998 for African American adult smokers ($n = 1422$) compared those who received tailored counselling and a targeted guide with those who received standard counselling and a guide. The tailored guide was called Pathways to Freedom: Winning the Fight against Tobacco and was written at a sixth-grade reading level and featured only images of African American smokers and quitters. It presented information matched to the pattern of smoking observed in African American populations (low daily smoking rate, smoking mentholated and/or high tar/nicotine cigarettes) and addressed unique barriers faced by African American smokers. The control group received standard quit smoking counselling and a guide called Clearing the Air (produced by the National Cancer Institute). This guide was written at an eighth-grade reading level and featured images of ethnically diverse smokers and quitters. The one-off counselling offered to the comparison group was standard stage-based counselling, whereas the tailored counselling utilized an interactive style, reflecting a communication preference of African Americans. S2 – Webb 2008 conducted a RCT with African American adult smokers ($n = 260$) comparing a culturally sensitive (adapted) smoking cessation guide compared with a standard guide. The guide was the same Pathways to Freedom used in the Orleans et al. trial which featured statistics specific to African Americans and emphasized collectivism, African American history, and religious and spiritual elements. In contrast to the Orleans et al. trial however, the comparison group received the same guide, but with all of the culturally sensitive elements removed and replaced with more generic messages and images (e.g. cartoon images; race-neutral images instead of African American images; motivational quotations instead of cultural or religious quotations; epidemiological information for the general population rather than specifically addressing African American smoking issues; discussion of light cigarettes instead of menthol cigarettes; and with no emphasis on African American history). Participants completed an African American Acculturation Scale prior to the intervention. S3 – The third study conducted by Ma et al. 2004 was a small RCT to help Chinese male adolescents (aged 14–19 years, $n = 31$) quit smoking. The trial compared a 10-session (one session per week) culturally modified (adapted) program with a standard program. The adapted program was conducted at a community-based organization and addressed themes that were thought to be relevant to Asian populations, such as collectivism and harmony, persistence and hard work, Asian pride and social norms. The standard program also consisted of 10 sessions (one session per week), but it was poorly described. S4 – The fourth study was a RCT ($n = 500$) conducted by Nollen et al. 2007 for African American smokers. At randomization, both groups received 8 weeks of nicotine replacement patches. Intervention participants received a culturally targeted smoking cessation program with a video (The Harlem Health Connection's Kick-It!) and print guide (Pathways to Freedom). Both materials were developed by and for African Americans, with an emphasis on communalism, religion/spirituality and African American ancestry and history, along with appropriate graphics and an orientation towards a communication style of experience-based storytelling. Standard care participants received a videotape (How to Quit) produced by the American Medical Association and a print guide (Freedom from Smoking) produced by the American Lung Association.

Both included images of African Americans but neither was specifically designed for use with African American smokers. Both groups received reminder telephone calls and postcards.
Cultural adaptation: 46-item Typology of Adaptation reported in all 107 primary studies included in review (this includes smoking cessation as well as some secondary prevention studies) with examples presented on pg 66 of manuscript (p83 of pdf).
<p>Main Outcomes: Systematic reviews included: Focus smoking - Chen and Tang 2007: reviewed smoking cessation research in Asian American populations (including South-East Asian, Chinese, Korean and Vietnamese populations). The review identified 4 studies. Cultural adaptations included adapting intervention materials for language and cultural specificity, the use of lay health workers utilizing community events for health promotion presentations. The authors commented that the interventions had differing degrees of success and they related this in some cases to levels of acculturation within the population. They concluded that further research is needed in this area and also cautioned that, because of the high degree of heterogeneity within the Asian American population, intervention results are not readily generalizable. Webb 2008 – conducted a systematic review and meta-analysis of the treatment of tobacco dependence among African Americans. This review identified 20 published and unpublished studies. Eleven of these studies had adaptations for cultural specificity, which included tailored print materials and the use of church settings for the delivery of the intervention. When the culturally specific intervention results were pooled, the odds ratio (OR) was 1.47 post treatment [95% confidence interval (CI) 1.12 to 1.91] compared with an OR of 1.34 (95% CI 0.99 to 1.82) for the standard intervention. However, the author reported that the culturally specific interventions were not effective at follow-up whereas the standard interventions retained a significant effect. The authors concluded that both culturally adapted and standard interventions are effective, but that adaptation was particularly effective in the short term (perhaps in relation to increasing enrolment and reducing attrition) and the effect then declined with time. Primary studies: Direct comparison of adapted with non-adapted/standard interventions - S1 - At 6 months, significantly more quit attempts ($p = 0.007$), a greater reduction in the number of cigarettes smoked ($p = 0.002$), more quit dates set ($p < 0.001$), greater switching to a lower nicotine brand of cigarettes ($p < 0.001$) and greater use of pre-quitting strategies ($p < 0.05$) were observed among participants who received the tailored intervention than among those who received the standard intervention. However, differences in self-reported 1-week abstinence (16.2% tailored vs. 14.4% standard) and quit rates (10.1% tailored vs. 9.1% standard) were not statistically significant between the two groups. A subset of participants was selected for follow-up at 12 months and those in the tailored group reported higher self-quit rates than those in the comparison group, and this difference was significant (25.0% tailored vs. 15.4% standard, $p = 0.034$). This difference, however, was detected only in a much smaller, opportunistic cohort and must therefore be interpreted with caution. S2: At 3 months' follow-up and following an intention-to-treat analysis, the 24-hour self-reported point prevalence abstinence (PPA) was 13.7% adapted compared with 14.7% standard, and the 7-day PPA was 10.7% adapted compared with 9.4% standard. Surprisingly, those who were less acculturated (i.e. greater ethnic group affiliation or identification) and received the standard, generic intervention were more likely to report 24-hour PPA, whereas those who were less acculturated and received the adapted intervention were less likely to report 24-hour PPA. Despite those who were less acculturated reporting a preference for the adapted guide and greater readiness to quit, this was not reflected in 24-hour PPA at the 3-month follow-up. S3: At the 3-month follow-up the quit rate was comparable among participants in the adapted program and those in the standard program (18.2% adapted vs. 23.1% standard). Among continued smokers there was a difference in the reported number of cigarettes smoked between participants in the adapted program and those in the standard program (mean 13.9 cigarettes on weekdays and 20.8 at the weekend for those who received the adapted intervention vs. mean 7.4 weekdays and 10 weekends for those who received the standard intervention; $p < 0.05$). S4 - At the 6-month follow-up, intervention participants reported greater usage of the targeted guide (68.8% vs. 59.6%, $p < 0.05$); however, this did not translate into improved outcomes. No significant differences were detected between groups for any smoking outcomes (7-day PPA, smoking reduction and readiness to quit). Although not significant, there was an indication that the adapted intervention material was more effective for African Americans who scored highly on a racial identity scale (higher scores suggesting greater Afrocentricity).</p>

Secondary Outcomes: Regarding all 7 systematic reviews: Overall, there were mixed results from systematic reviews on the topic of adapted interventions for smoking cessation, increasing physical activity and improving healthy eating in African-, Chinese- and South Asian-origin populations. The majority of the authors recommended further research in this area. There was also a recurrent comment with regard to the physical activity- and healthy eating-based interventions that the intervention data were on the whole short term and that longer-term outcomes were unknown and needed further exploration. *Primary studies – feasibility:* smoking cessation interventions using pharmacotherapy had less scope for adaptation than settings-based interventions for physical activity or healthy eating. Feasibility of interventions was primarily dependent on resources, including both funding and infrastructure (workforce, materials and venues). Examples of interventions for which the resource requirements may have affected feasibility include an internet-delivered weight loss intervention in which all participants were provided with part funding for the purchase of home computers. *Acceptability:* Increasing acceptability was frequently cited as a rationale for undertaking adaptation. The adapted interventions were often rated by participants as more appropriate and measurements of perceived cultural relevance of the intervention were shown to be associated with program satisfaction and attendance. However, other elements contributing to acceptability also emerged including study and intervention design, incentives, costs and relationships with the target community. Authors also focus on equity etc.

Review's conclusion: Overall, these studies suggested that adaptation could increase the salience and acceptability of studies, this translating into improved recruitment. However, many studies showing positive outcomes lacked comparable conditions and relied on self-reported measures. Of the 107 studies, only nine were designed to directly compare the effectiveness of adaptations for interventions and these too yielded mixed findings. Equally, there was no direct evidence found for the cost-effectiveness of adapted interventions with only a handful of studies reporting on cost data and none carrying out formal cost-effectiveness analyses. Some of our conclusions support those of other research groups; for example, the systematic review by Chen and Tang (2007 – review on smoking) also found varying degrees of success of adapted interventions related to the degree of acculturation within the population. The overarching themes from the review of the relevant theoretical literature (see Box 5) were observed in the kinds of adaptations undertaken and are reflected in our 46-item Typology of Adaptation. Adaptations such as 'Intervention goals and outcomes for participants are culturally appropriate' (number 23) suggest that the goals for behaviour change for ethnic minority groups should be framed around psychological community and family gains, rather than individual personal gains. Adaptations such as 'Present a pro-ethnic/race approach' (number 37) and 'Maintaining cultural significance of food' (number 43) emphasize that cultural elements are protective assets rather than pathologies.

Methodological Problems: S1 rated moderate quality, S2 & S4 strong, and S3 weak.

Author Year: Mosdol 2017
Full Citation: –
Cultural adaptation is the main focus of the review: yes
Included studies: Total n= 6; of interest n=3
Settings: community, mailing at home (S3)
Population: African American
Designs of the included studies: S1 – cluster RCT; S2- Interrupted Time Series study (IST); S3 – individual RCT
Intervention components: S1 & S2 compared targeted mass-media interventions versus no intervention: Entire populations in geographical areas were exposed to radio advertisements targeted towards African American communities. The campaign message was to call smoking quit lines. S3 assessed the effect of a targeted mass-media intervention versus a mass-media intervention intended for the general population. Intervention: targeted mass-media intervention (print material mailed home); Comparison: general population mass-media intervention.
Cultural adaptation: <i>Adaptations to modify reach:</i> S1 (Boyd 1998) & S2 (Kennedy 2013) – selected media channels/small media in residential areas/outreach packets distributed through community networks/media content conveyed by people from target group. <i>Adaptations to modify message appropriateness:</i> S3 (Webb 2009) – context of message culturally adapted; S1 & S2 – selected images and cultural expressions/user testing in target group; All 3 – addressed unique barriers and facilitating factors for change in target group
Main Outcomes: Findings categorised into three comparisons. The first comparison examined mass-media interventions targeted at ethnic minorities versus an equivalent mass-media intervention intended for the general population. The one study in this category (S3) (255 participants of African descent) found little or no difference in effect on self-reported behavioural change for smoking and only small differences in attitudes to change between participants who were given a culturally specific smoking cessation booklet versus a booklet intended for the general population. The second comparison assessed targeted mass-media interventions versus no intervention (S1 & S2). After one year, S1 reported 18 calls per estimated 10,000 targeted smokers from the intervention communities (estimated target population 310,500 persons), compared to 0.2 calls per estimated 10,000 targeted smokers from the control communities (estimated target population 331,400 persons) (moderate quality evidence). S2 study also reported an increase in the number of calls from the target population during campaigns (low quality evidence). The proportion of African American callers increased in both studies (low to very low quality evidence). No study provided data on knowledge and attitudes for change and adverse effects. Information on costs were sparse. None of the studies on smoking were included in the third comparison category that assessed targeted mass-media interventions versus a mass-media intervention plus personalised content.
Secondary Outcomes: –
Review's conclusion: The available evidence is inadequate for understanding whether mass-media interventions targeted toward ethnic minority populations are more effective in changing health behaviours than mass-media interventions intended for the population at large. When compared to no intervention, a targeted mass-media intervention may increase the number of calls to smoking quit line, but the effect on health behaviours is unclear. These studies could not distinguish the impact of different components, for instance the effect of hearing a message regarding behavioural change, the cultural adaptation to the ethnic minority group, or increase reach to the target group through more appropriate mass-media channels. New studies should explore targeted interventions for ethnic minorities with a first language other than the dominant language in their resident country, as well as directly compare targeted versus general population mass-media interventions.
Methodological Problems: –

Author Year: Gould 2013
Full Citation: –
Cultural adaptation is the main focus of the review: yes
Included studies: N=21
Settings: community settings covering a range of urban, rural and remote locations.
Population: Seven of the studies described the impact of media interventions among youth, and two addressed women, with one of these aimed at pregnant women. Two studies included health staff or health professionals.
Designs of the included studies: 4 RCTs, 1 database analysis, 2 post-intervention surveys, 2 before and after studies (BAS), remaining 12 studies were mixed-methods or qualitative studies, including 4 with a BAS design.
Intervention components: Eight (S1–S8) evaluated anti-tobacco TV or radio campaigns; two (S9, S10) assessed US websites; three New Zealand studies examined mobile phone interventions (S11–S13); five evaluated print media; (S14–S18) three evaluated a CD-ROM, a video and an edutainment intervention (S19–S21). S1–S3 are three New Zealand studies examined the effect of the collaboratively developed, 'it's about whanau' (IAW) television campaign, targeting Maori smokers. S1 & S2 used a cross-sectional New Zealand-wide survey and Quitline data from two waves, S3 used a focus group of Maori women to elicit their views on a range of smoking-cessation initiatives including the IAW campaign. S4–S7 measured the response of Aboriginal or Torres Strait Islander Australians to television and radio campaign and S8 focussed on American Indian students.
Cultural adaptation: Maori specific TV media campaign/mobile phone video message/mobile phone text message; American Indian specific Program curriculum and printed resources/health promotional pamphlets/internet website; Native calendar, American Indian/Alaska Native specific; Indigenous specific CD-ROM and other community interventions; Pacific Islander/Native specific Education-entertainment drama; Alaska Native specific Video and educational materials.
Main Outcomes: TV or radio adverts: S1 – More calls to Quitline after generic graphic advert compared to holistic Maori adverts; S2 – Increased recall of adverts and calls by Maori to Quitline; S3 – Positive feedback to IAW campaign compared with generic graphic TV advert. S4 to S8 (generic campaigns) – high recall of adverts, strong graphic adverts rated highly by indigenous smokers; S9 – No significant difference in cessation rates between ethnic groups; S10 – Favourable response to targeted website; S11 – No significant difference in response between Maori and non-Maori; S12 – Favourable attitudes to content. High self-reported quit rate; not stratified to population group; S13 – No significant difference in cessation rates between intervention and control; results not reported by ethnic group; S14/S15 – Modifications provided for the 'Second Wind' smoking cessation program to improve pan-tribal cultural suitability; S16 – Scientific and cultural content, and readability scores appropriate: minor changes advocated; S17 – Calendar with health messages did not increase smoking cessation related outcomes compared to calendar without message; S18 – Significant increase in Quitline number recognition from improved PHWs (pack health warnings); S19 – No change in smoking behaviour, increased knowledge, CD favourably viewed; S20 – Evidence of high-level engagement of viewers. Participants' knowledge increased and intentions to smoke decreased; S21 (pregnant women – edutainment materials Alaska Native specific) – intervention deemed not acceptable or feasible as low interest and recruitment. No significant difference between intervention and control group. The qualitative studies revealed a preference for culturally targeted messages. This held true across the populations studied. US participants from pan-tribal Nations recommended that resources should become more inclusive of other Nations' views by: use of appropriately diverse cultural design elements; depicting a broader range of tribal customs; and increasing education about ceremonial tobacco use (S14, S15). American Native youth preferred using a website with a more 'Native' look and advised how to adapt a generic site by incorporating Native design features (S10).

In Australia, health and welfare staff, working with Indigenous communities, favoured culturally appropriate messages and suggested that modifications were required for an Indigenous audience (S6). S7 tested one Indigenous targeted TV advertisement that was rated significantly higher by Indigenous compared to non-Indigenous smokers, for message acceptance and personalised effectiveness. Indigenous viewers related more to the advertisement and were more likely to discuss it than non-Indigenous viewers.

Secondary Outcomes: There is weak evidence from five studies (S4, 5, 8, 14 &18) that generic messages (devised for the wider population), can be as effective in terms of recall for the Indigenous population as the general population, when tested in Aboriginal or Torres Strait Islanders and NZ Maori. Several studies compared culturally targeted content for the Indigenous population with generic (non-targeted) content for the rest of the population. In these cases there is evidence from two level-1 studies using culturally targeted content demonstrating the approaches were equally effective on quit rates in the short term (6e12 weeks) when comparing responses of the Indigenous samples to the general population samples (S9, S11). The New Zealand text messaging study, which deliberately over-recruited Maori to eliminate health inequality bias (21% Maori participants compared with 14.7% Maori in the New Zealand population), had equivalent Maori to non-Maori self-reported quit rates (S11). In contrast, the US study of an automated website with video content had only a small percentage of American Indian participants (2% n=47), however it found no significant interactions between ethnicity for any of the ethnic subgroups, including American Indians, and treatment or control condition on logistical regression (S9). When a generic threat campaign was measured head-to-head with a targeted holistic Maori campaign, in regard to calls to the Quitline, it appeared the generic threat campaign was more effective.

Review's conclusion: Media based research in Indigenous people is diffuse and hindered by a diversity of study approaches and lack of agreed outcome measures. There is limited evidence supporting the need for culturally targeted messages. Preference for culturally targeted messages by Indigenous peoples is acknowledged. Where culturally targeted messages have been trialled campaigns have been shown to be effective in terms of change of knowledge, attitude and behavior.

Methodological Problems: -

Author Year: Carr 2011
Full Citation: -
Cultural adaptation is the main focus of the review: yes
Included studies: on smoking n=4, of interest n=1
Settings: The intervention was delivered in people's homes via visits and telephone calls
Population: Latino adult smokers
Designs of the included studies: RCT
<p>Intervention components: Study evaluated efficacy of the community LAs for smoking cessation. Buddy (peer)-based intervention based on social cognitive principles, including positive reinforcement, stimulus control, modelling, social support, problem-solving, and practical skills and techniques for quitting. Mainly information-giving approaches with some support – The promotora and participant reviewed past quit attempts, discussed the pros and cons of smoking and quitting, discussed self-monitoring to identify smoking patterns, identified potential reinforcements and substitute behaviours and discussed appropriate coping strategies, set a quit date, discussed experiences while quitting and relapse prevention, and talked about overall lifestyle change. The support was delivered via face-to-face meetings in addition to telephone calls. The contacts were supported with videos and pamphlets. Intervention provided four home visits, each 1–2 hours long, as well as three telephone calls, typically 15–30 minutes long, over 78 days. So, between 4 hours 45 minutes and 9 hours 30 minutes of support was provided over 3 months. The control groups received no community health advisor input.</p>
<p>Cultural adaptation: 11 trained recruiters, who worked at community events, popular neighbourhood shopping centres, and within their own social networks used to identify Latino smokers. Peers from a shared community (Latino community) used.</p>
<p>Main Outcomes: According to review: reports that 20.3% of the intervention group had quit at 3 months compared with 8.7% of the comparison group, the comparison group being a statistically significant 2.5 times more likely than the intervention group to be smoking at the 3-month assessment after adjusting for gender and amount smoked per day at baseline. However, these results are based on a peer-protocol analysis that ignores differential attrition in the intervention arm. Applying a more conservative intention-to-treat analysis, and assuming that all of those lost to follow-up have relapsed, gives a quit rate of 17.3% in the intervention group and 8.3% in the control group.</p>
<p>Secondary Outcomes: Attrition rates were significantly different by condition, with 4.5% of comparison group participants dropping out versus 15.4% of the intervention participants ($\chi^2 [1] = 10.47$, $p < 0.001$) (effect size 0.18). Participation in the intervention varied from zero to seven sessions with an average of 3.44 sessions. In total, 24% of the control group reported using the smoking cessation helpline.</p>
<p>Review's conclusion: According to review health status and measures of participation not assessed in the study. Also no information on costs given. The study did not measure if LHAs had any effect in general health or QoL, the review's primary outcomes. The study claimed an improved rate on smoking cessation as their primary outcome, which did change significantly in the groups in receipt of the intervention.</p>
Methodological Problems: 1 study relevant

Author Year: Nierkens 2013
Full Citation: Nierkens V, et al. (2013) Effectiveness of cultural adaptations of interventions aimed at smoking cessation, diet, and/or physical activity in ethnic minorities. A systematic review. PloS one 8(10):e73373 doi:10.1371/journal.pone.0073373
Cultural adaptation is the main focus of the review: yes
Included studies: n=17; of interest n=5
Settings: Inner-city health centres, home environment, Chinese, AA churches, community center
Population: 3 targeted AAs, 2 Latinos
Designs of the included studies: All RCTs
<p>Intervention components: The adaptations were all added to standard telephone counseling that had been adapted for language and culture. <i>Nollen et al 2007 (S1)</i> – Basic intervention with adaptation of video and self-help guide: The Harlem Health Connection's 'Kick-It' video incorporated core African-American cultural values (communalism, religion/spiritualism, connection to ancestors and history, storytelling). <i>Orleans et al. [S2]</i> adapted standard telephone counseling and a self-help guide. Telephone counseling was tailored to motives and barriers specific for African Americans (deep-structure adaptations). The self-help guide used African-American models and provided information about smoking among African Americans (surface-structure adaptations) as well as incorporating African-American values (deep-structure adaptations). <i>Wetter et al. [S3]</i> provided proactive telephone calls in the adapted intervention. These focused on practical counseling and social support as well as Hispanic values like 'culture of respect' and 'pleasant and agreeable family' (deep-structure adaptations). <i>Woodruff et al. [S4]</i> replaced three of the six standard telephone consultations by four home visits. In the sessions the communication style was adapted and social cognitive principles were congruent with Latino smokers. In addition they focused on family concerns (deep- and surface-structure adaptations).: <i>All three behaviours: Becker et al 2005/Cene et al 2008 (S5)</i> – IG – Care took place at a nonclinical site in the community. Physical assessment, evaluation for pharmacotherapy and monitoring adherence done by nurse practitioner. Smoking cessation and exercise counseling by community health worker. All siblings received pharmacy card for free pharmacotherapy, CG – individually tailored recommendations specific to the individual's risk factor status.</p>
<p>Cultural adaptation: S1 – 'Pathways To Freedom: Winning the Fight Against Tobacco' addresses issues specific to African Americans (AA role models, stronger smoking norm, AA specific smoking pattern, AA targeted advertising, cultural and socioeconomic influences); S2 – Telephone counseling was tailored to motives and barriers specific for African Americans (deep-structure adaptations). The self-help guide used African-American models and provided information about smoking among African Americans (surface-structure adaptations) as well as incorporating African-American values (deep-structure adaptations); S3 – proactive phone calls focussing on practical counseling and social support as well as Hispanic values like 'culture of respect' and 'pleasant and agreeable family' (deep-structure adaptations). S4: three of the six standard telephone consultations by four home visits. In the sessions the communication style was adapted and social cognitive principles were congruent with Latino smokers. In addition they focused on family concerns (deep- and surface-structure adaptations); S5 – Smoking cessation and exercise counseling by community health worker.</p>
<p>Main Outcomes: S2 – At 12 months follow-up abstinence in intervention group was statistically significantly higher (25% vs. 15.4%). S3 – The adapted intervention resulted in statistically significant higher abstinence rates after 12 weeks (27.4% vs. 20.5%) after controlling for demographic and tobacco related variables. S4 – At three months, seven day abstinence rates were statistically significantly higher in the intervention group (20.5% vs. 8.7%).</p>

Secondary Outcomes: Five broad categories of adaptations distinguished: level of adaptation, i.e. surface-vs. deep-structure; cultural values vs. interventions involving community-health workers or lay health advisors; incorporating family vs. religious values; interventions employing intensive vs. non-intensive strategies; and use of a package of adaptations vs. one type of adaptation. *Surface- vs. deep-structure adaptations* – All in all authors found no indication that the level of adaptations influenced effectiveness. *Adaptations based mainly on cultural values vs. involvement of lay health advisors/community-health workers* – no pattern of effectiveness when we distinguished the studies on the basis of adaptations that involved community-health workers or lay health advisors versus adaptations mainly based on incorporating cultural values into intervention materials or in the counseling conducted by professionals observed. *Distinguishing incorporating family versus religious values* – topics used in the cultural adaptations, i.e. religious values, family values and/or family involvement and other cultural values which were not further specified could be distinguished. Statistically significant effects on primary outcomes were found by three interventions (of four – all on smoking) that incorporated family values and/or involved family members and by none interventions (of five) that incorporated religious values. *Intensity of the adaptation* – In 9 of the 17 studies, the cultural adaptation implied an increase of the intervention's intensity (e.g. extra sessions with a lay health advisor). This was the case in all studies that reported statistically significant effects on primary outcomes. *Number of adaptations tested* – Some of studies that incorporated a package of adaptations, e.g.; additional proactive calls together with tailoring to cultural values reported statistically significant effects. Studies using one type of adaptation, e.g. use of homogeneous groups, didn't show statistically significant effects (n= 8).

Review's conclusion: In five studies the adapted intervention had a positive statistically significant effect on the primary outcomes. These were mainly interventions that targeted smoking cessation. Twelve studies showed no statistically significant effects on primary outcomes, although some studies presented trends favorable for cultural adaptations. Authors observed that interventions incorporating a package of cultural adaptations, cultural adaptations that implied a higher intensity and those incorporating family values were more likely to report statistically significant effects. The results of our review indicate that: 1) Culturally targeted interventions may be more effective if cultural adaptations are implemented as a package of adaptations, the adaptation addresses family influences, and where the adaptation implies a higher intensity of the intervention; 2) Adaptations in smoking cessation interventions seem to be more likely to be effective than adaptations in interventions aimed at diet and PA; 3) More systematic experiments are needed in which the aim is to gain insight in the best mix of cultural adaptations among diverse populations in various settings, particularly outside the US.

Methodological Problems: –



GKV-Bündnis für
GESUNDHEIT



Gefördert durch die BZgA im Auftrag und mit Mitteln der gesetzlichen Krankenkassen nach § 20a SGB V

