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Parental Discriminatory Experiences and Ethnic Minority Adolescent Adjustment: A Systematic Review of Family Perspectives

Jiaxuan Zhang¹ · Wen Wen² · Yayu Du² · Yishan Shen³ · Kiera M. Coulter² · Jinjin Yan⁴ · María Paula Yávar Calderón² · Su Yeong Kim²

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Abstract

Parental experiences of discrimination can impact ethnic minority adolescents' developmental outcomes. To explicate this link, this study reviewed 30 articles in which the research sample includes target adolescents in the age range of 10 to 18, examining the effect of parental discriminatory experiences on adolescent adjustment and how family factors (parenting, racial socialization, family relationships, parental mental health, familism, family economic factors) function in the association between parental discriminatory experiences and adolescent outcomes. Findings reveal that parental discriminatory experiences can have a direct effect on adolescent adjustment, most notably on psychological adjustment. Moreover, family factors (especially parenting, racial socialization, family relationships, and parental mental health) often function as mediators, and different family factors may work sequentially (e.g., from parental mental health to parenting) in the pathway from parental discriminatory experiences to adolescent outcomes. A few studies focused on the moderating role of family factors. When functioning as moderators, familism may be a protective factor and low family income may be a risk factor for ethnic minority adolescents whose parents experience discrimination. Study findings suggest that interventions focused on family factors may be effective at reducing the negative impact of parental discriminatory experiences on adolescent outcomes.

Keywords Parental discriminatory experiences · Adolescent adjustment · Family factors · Ethnic minority family

Introduction

Discriminatory experiences can have negative consequences (e.g., poor mental health, Pascoe & Smart Richman, 2009) for ethnic minority families (García Coll et al., 1996). Ethnic minority family members experience discrimination when they are treated with less respect or are insulted (Williams et al., 1997) for reasons that can be attributed to multiple sources (e.g., race, gender, immigrant status, socioeconomic

status). While existing literature has broadly examined the effects of ethnic minority children's own discriminatory experiences on their development, there is a relative lack of studies examining whether, and in what ways, parental discriminatory experiences could be associated with adolescent adjustment. Indeed, previous studies have documented that the negative effects of parental experiences of discrimination can spill over to their ethnic minority children. Parental discriminatory experiences can be directly related to ethnic minority adolescents' emotional and behavioral problems, given that observing other members of their ethnic group, including their parents, experience discrimination may be upsetting for children (Gibbons et al., 2004). Additionally, parental experiences of stressors such as discrimination can reduce positive family functioning (e.g., parenting, racial socialization, parental mental health), which can in turn impact adolescents. Thus, family factors can mediate the association between parental experiences of discrimination and adolescent adjustment (Bécares et al., 2015; Berkel et al., 2009; Lorenzo-Blanco et al., 2016b). Family factors can also buffer or exacerbate the impact of parental

✉ Su Yeong Kim
su.yeong.kim@utexas.edu

¹ School of Psychological and Cognitive Sciences, Peking University, No. 5, Yiheyuan Road, Haidian District, Beijing 100871, China

² Department of Human Development and Family Sciences, The University of Texas at Austin, Austin, TX, USA

³ School of Family and Consumer Sciences, Texas State University, San Marcos, TX, USA

⁴ Department of Psychology, Fordham University, Bronx, NY, USA

discriminatory experiences on adolescent outcomes, such that families with certain cultural values (e.g., familism, Wheeler et al., 2021) may provide more psychological resources for adolescents to cope with external stressors. In other words, family factors can moderate the association between parental experiences of discrimination and adolescent adjustment (Ford et al., 2013). To provide a comprehensive understanding of the current knowledge about the effects of parental discriminatory experiences from a family perspective, this study reviews empirical studies that examine the direct effects of parental discriminatory experiences on ethnic minority adolescent adjustment, as well as the potential mediating or moderating roles of different family factors in such associations. Multiple aspects of adjustment relevant to ethnic minority adolescents are highlighted: these encompass developmental tasks (e.g., self-regulation ability), psychological adjustment (e.g., sense of self-pride), and acculturative tasks (e.g., secure ethnic identity) (Suárez-Orozco et al., 2018).

In this study, a framework based on a family perspective is proposed to examine how parental discriminatory experiences affect adolescents' adjustment (see Fig. 1). The framework includes theoretical perspectives of family stressors such as the Family Stress Model (Conger et al., 1993) and ethnic minority children's development (García Coll et al., 1996). Using the proposed framework, this study demonstrates several ways in which parental discriminatory experiences affect adolescent adjustment outcomes (e.g., direct pathway P.a, Fig. 1), as well as how family factors function as mediating (path P.b to P.c, Fig. 1) or moderating factors (path P.d, Fig. 1). Several types of family factors (F1–F6,

Fig. 1) and adolescent outcomes (A1–A4, Fig. 1) that will be reviewed in this study are also listed within the conceptual framework. By examining specific mediating and moderating family factors, researchers can better understand the role of specific family factors and identify potential protective or risky family factors as intervention targets to reduce the harmful impact of parents' discriminatory experiences on the development of ethnic minority adolescents.

The family system is considered to be one of the most influential proximal systems to impact adolescent development (Bronfenbrenner, 1977). Discrimination experienced by ethnic minority parents may affect the family at different levels: parents as individuals, subsystems within the family (e.g., parent–child dyad), and the family system as a whole (e.g., family economic situation). According to Stress Proliferation Theory, “Stressors experienced by one individual often become problems for others who share the same role sets (e.g., parent–child)” (Pearlin, 1989, p. 247). From this perspective, parental discriminatory experiences can mirror a shared family experience, overlapping with what ethnic minority children themselves experience in everyday life. Thus, parents' experiences of discrimination can be directly related to adolescent adjustment by increasing the level of shared stress faced by ethnic minority family members.

Turning to family factors that may impact the association between parental discriminatory experiences and adolescent adjustment, the Family Stress Model (Conger et al., 1993) suggests that parental stressful experiences in daily life affect parents' behaviors and emotions, which in turn impact their children's well-being. This theory was first used to examine the association between family economic stress (i.e., F6,

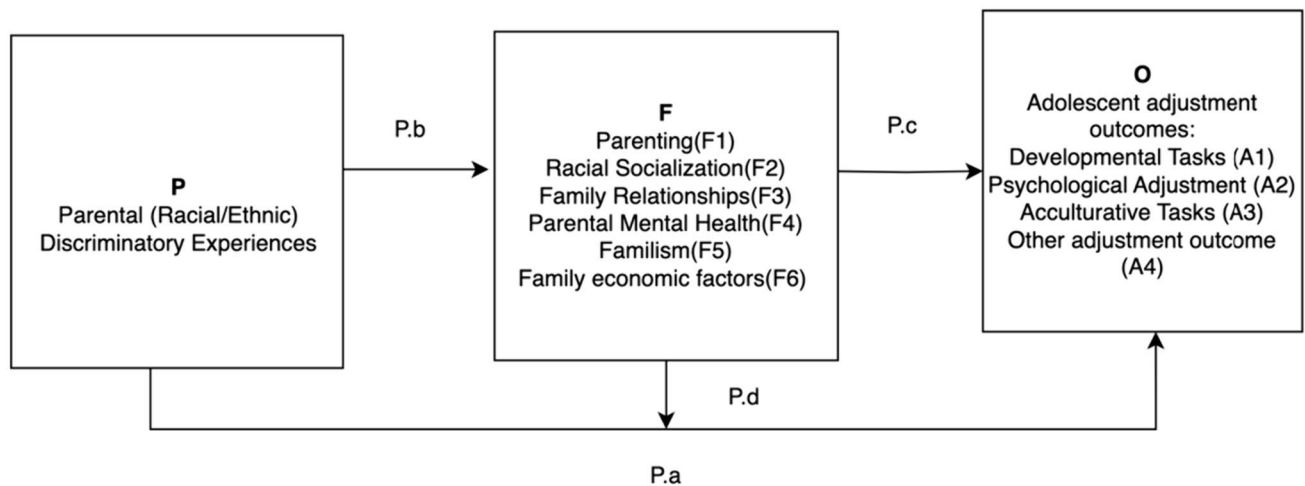


Fig. 1 Conceptual framework for the review. *P* refers to parental discriminatory experiences; *F* refers to family factors, *F1–6* refer to components related to family factors, *O* refers to adolescent adjustment outcomes, *A1–4* refer to components related to adolescent adjustment outcomes, *P.a* refers to the direct pathway between parental perceived discrimination and adolescent adjustment outcomes, *P.b*

refers to the association between parental perceived discrimination and family perspectives, *P.c* refers to the association between family factors and adolescent adjustment, *P.d* refers to family factors moderating the link between parental perceived discrimination and adolescent adjustment outcomes

Fig. 1) and adolescent adjustment problems, which can be mediated by parental mental health and parenting behaviors sequentially. This model, which originally focused on family economic stressors impacting the whole family system, can be extended to examine the impact of other stressors faced by individual family members, such as parents' exposure to discriminatory experiences. Thus, at the individual level, parental mental health (F4, Fig. 1) and parenting behaviors (F1, Fig. 1) may be family factors linking parental discriminatory experiences to adolescent adjustment. Family Systems Theory (Cox & Paley, 2003) emphasizes the existence of different subsystems in the family, such as parent–child dyads. As such, parental discrimination can affect relationships between family members (i.e., family relationships, F3, Fig. 1), subsequently becoming linked to adolescent adjustment.

In addition to family theories, studies on ethnic minority adolescent adjustment must also consider theories that recognize the unique experiences of ethnic minorities. According to the integrative model for the study of ethnic minority children, ethnic minority families' social position and characteristics (i.e., social class, culture, ethnicity, and race) can differ from those of mainstream families (García Coll et al., 1996). These characteristics position ethnic minority families to be the target of discriminatory treatment, especially racial/ethnic discrimination. Moreover, this integrative model (García Coll et al., 1996) focuses on children's experiences and emphasizes that research targeting ethnic minority adolescents needs to consider the developmental impact of exposure to racial/ethnic discrimination. However, it is worth noting that racial/ethnic discrimination can be experienced not only by children, but also by any family member, such that parental discriminatory experiences can also be a stressor that impacts child outcomes through family processes. To cope with the potential racial/ethnic discrimination experienced by ethnic minority families, parents often teach their children how to cope with possible discrimination from the mainstream society and also how to have positive attitudes towards their own racial/ethnic group, a process known as racial/ethnic socialization (Hughes et al., 2006) (F2, Fig. 1). Studies have found that parents' racial socialization practices can also be significantly impacted by parental discriminatory experiences (e.g., Holloway & Varner, 2021b; Saleem et al., 2020). In addition, some ethnic minority families, such as Latino families, display family values like familism, a value which emphasizes family obligations, family support, and respect for the family (Knight et al., 2010). Familism (F5, Fig. 1) is an important family factor, as it can function as a protective buffer (i.e., moderator) between discrimination and adolescent outcomes (Wheeler et al., 2021). Familism can also function as a mediating factor that can be negatively affected by discriminatory experiences. For example, previous studies have found

that parental discriminatory experiences can reduce parents' familism, which in turn can impact adolescent adjustment in multiple domains, such as by increasing smoking behaviors (Lorenzo-Blanco et al., 2016b) and internalizing problems (Ayón et al., 2010).

In examining different aspects of ethnic minority adolescent adjustment, a risk and resilience model for immigrant-origin children and youth (Suárez-Orozco et al., 2018) identifies three types of adaptation indices: (1) developmental tasks; (2) psychological adjustment; and (3) acculturative tasks. Developmental tasks refer to the expectations and standards of behavior and achievement set for individuals at a certain age. Key developmental tasks in the adolescent years, for example, include developing language competency, resisting the use of alcohol and cigarettes, and doing well in school. Psychological adjustment refers to perceived psychological well-being (e.g., self-esteem, internalizing and externalizing problems). Lastly, acculturative tasks refer to cultural competencies in both the culture of origin and the receiving community's culture (e.g., secure ethnic and national identities). These three types of adaptation include normative developmental issues that are common for most adolescents, as well as acculturation issues that are specific to ethnic minority adolescents. The current study aims to provide an overview of how parental discriminatory experiences affect these three major indices of adjustment in ethnic minority adolescents and how family factors play a role in these associations.

The Present Study

There is a need for an updated and comprehensive understanding about the impact of parental discriminatory experiences on ethnic minority adolescents' development from a family perspective. This study reviews journal articles that examine parental experiences of discrimination, family factors, and adolescent adjustment outcomes. Guided by the conceptual framework (see Fig. 1), this study aims to understand: (1) how parental discriminatory experiences directly affect adolescent adjustment; (2) how different types of family factors (parenting, racial socialization, family relationship, parental mental health, familism, family economic factors) function in this association as mediators or moderators; and (3) the types of adjustment indices (i.e., developmental tasks, psychological adjustment, acculturative tasks, and other kinds of outcomes) that are most influenced by various family processes.

Method

Initial Search and Abstract Screening

On October 2, 2022, EBSCO PsycINFO was used to conduct the search. The following terms were used in the "All Text" search field, one at a time: "family AND children AND discrimination," "family AND youth AND discrimination," "family AND adolescent AND discrimination," and "family AND young adult AND discrimination." Stem word was used to get variations of words for all these terms (e.g., "family" was searched as "famil*"). The literature search included studies published from 2000 to 2022 in order to examine the latest findings of recent research. Studies were excluded if they were not empirical quantitative studies, such as qualitative studies and literature reviews. Specific age groups classified by EBSCO PsycINFO were searched as well: childhood (birth–12 years), adolescence (13–17 years), school age (6–12 years), adulthood (18 years & older), and young adulthood (18–29 years). These age categories were used because they overlapped with adolescence and young adulthood, covering the ages of 10 to 24. For source type, the search was limited to articles appearing in academic journals. Articles not written in English were removed. Any duplicates were eliminated using the Endnote bibliographic manager program, yielding 2422 total records.

The abstracts of the 2422 articles were screened by two coders based on five standards to select articles that addressed discriminatory experiences of ethnic minority individuals and family factors generally: (1) the article was an empirical quantitative study; (2) the study measured at least one aspect of discrimination experienced by ethnic minority individuals in the U.S. or internationally; (3) participants included children and their parents or family members, or children reported on experiences with parents or family members; (4) the ages of the focal children were primarily between 0 to age 24; and (5) the study included a child, adolescent, or young adult outcome, or a parent's experiences, such as parenting, with implications for child

developmental outcomes. Any discrepancies across coders were resolved with the last author. This process resulted in 602 abstracts. The full-text PDFs of abstracts that met the initial five standards were then obtained for further coding by two coders and discrepancies were resolved with the last author. Upon reviewing the full text, only 271 articles met the initial five standards.

Coding for Family Factors and Age Groups

Upon reviewing the 271 articles that met the initial five standards, the coders and the last author generated the top emerging family factors in the articles. These family factors include parenting, racial socialization practices, family relationships, parental mental health, familism, and family economic factors. The 271 articles were then coded for the presence of family factors in the studies. The age categories to code the 271 articles were as follows: children aged 0–9, early adolescents aged 10–12, adolescents aged 13–18, and young adults aged 18–24. All coding was completed by an initial coder and verified by a second coder, and the remaining questions from the second coder were resolved with the last author.

Assessment for Inclusion

Given the focus of this study, the articles were further screened for three additional inclusion criteria: (1) the study had any form of parental discriminatory experience (including racial/ethnic discrimination) as an independent variable; (2) the study contained one of the following family factors: parenting, racial socialization practices, family relationship, parental mental health, familism, family economic factors; and (3) the ages of the focal children were primarily between 10 and 18. Upon identifying articles that included at least one parental discriminatory experience (including racial/ethnic discrimination) as a predictor variable, 55 articles appeared to be eligible for inclusion in this study. The decision to consider only ages 10–18 (early adolescence and late adolescence) rather than 10–24 was due to too few articles meeting the additional inclusion

Table 1 Number of articles for different age groups

	Parenting	Racial socialization practices	Family relationships	Parental mental health	Familism	Family economic factors	Total
Children aged 0–4	5	3	0	3	0	2	13
Children aged 5–9	5	8	1	8	0	4	26
Early adolescents aged 10–12	17	17	6	16	1	11	68
Adolescents aged 13–18	15	22	11	18	6	11	83
Young adults 18–24	5	4	6	7	3	2	27

Categories are not mutually exclusive. Articles used in this study are bolded

criteria in the age range of 18–24 (See Table 1). Further identification of articles in which adolescent participants were between the ages of 10 and 18 and in which at least one family factor was included resulted in 30 articles eligible for review. Although it would have been ideal to discuss ages 10–12 and 13–18 separately in this study,

most of the studies included both age categories; therefore, studies covering both age groups were combined for analysis in this study. Ultimately, only 30 articles met the inclusion criteria for this study and are described in the results section (see Fig. 2 for the flow diagram, beginning

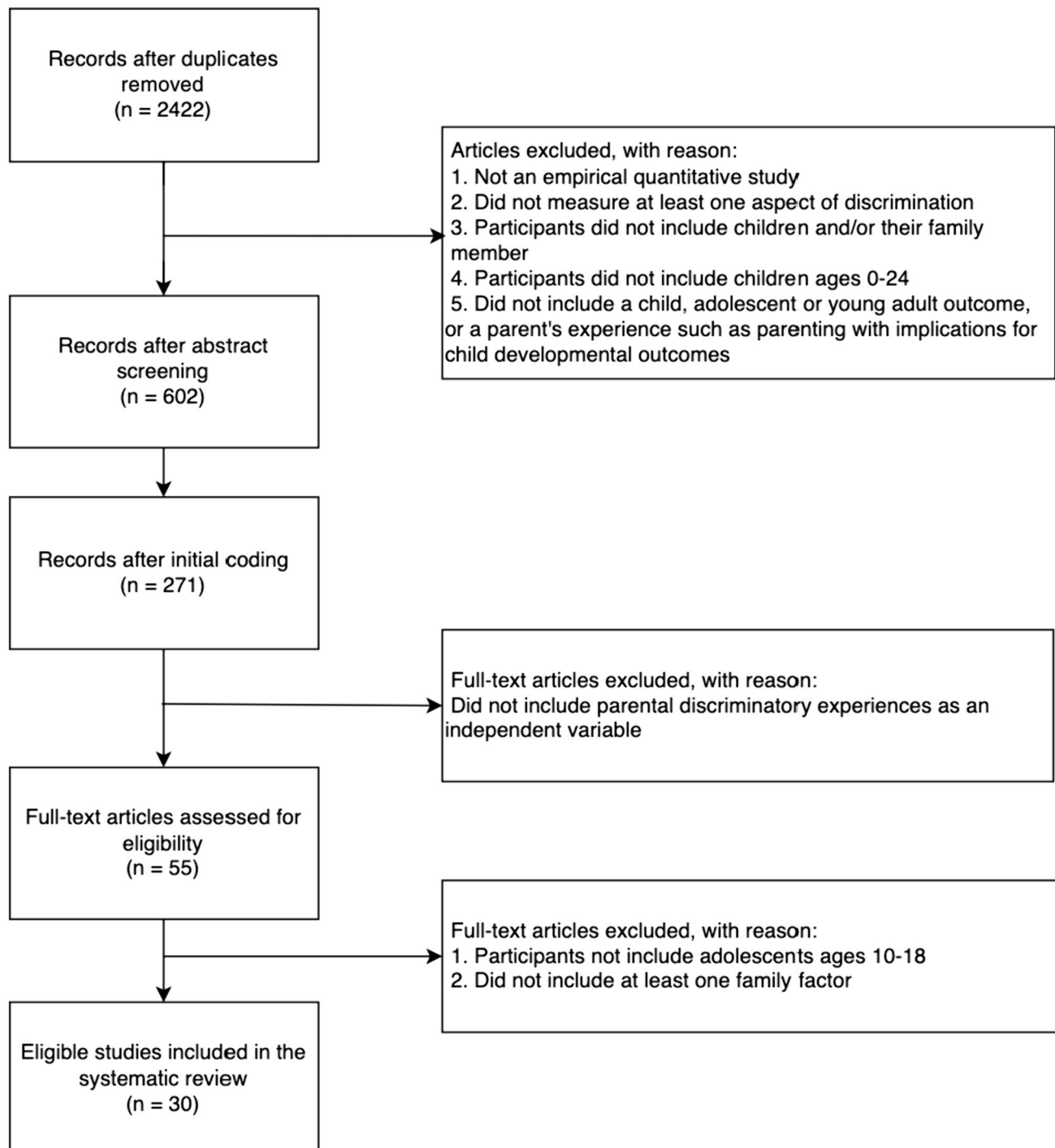


Fig. 2 Flow diagram of search results

with selecting articles for the initial search to arriving at the final set of articles that met all inclusion criteria).

Quality Assessment

The quality of all 30 included articles were assessed using the NICE (National Institute for Health and Care Excellence, United Kingdom) Appendix G Quality appraisal checklist (National Institute for Health Care and Excellence, 2012) based on 'Graphical appraisal tool for epidemiological studies (GATE)' (Jackson et al., 2006). The goal of the checklist is to assess both the external and internal validity of studies reporting correlations and associations. The checklist has five sections (Population, Method, Outcomes, Analyses, and Summary) with multiple questions in each section (see Table 2). The first section (i.e., Population) assesses the external validity and the remaining four sections (i.e., Method, Outcomes, Analyses, and Summary) assess internal validity of the studies. Questions 2.1 (Selection of exposure (and comparison) group. How was selection bias minimized?), 2.3 (Was the contamination acceptably low?), and 3.4 (Was there a similar follow-up time in exposure and comparison

groups?) were deleted as they were not applicable to any of the 30 articles. One question (i.e., Q 2.5) that asks “*Is the setting applicable to the UK?*” was adapted to “*Is the setting applicable to the country it was conducted in?*”. For each question, studies were rated as “++” (i.e., minimal risk of bias), “+” (i.e., potential sources of bias), “−” (i.e., significant sources of bias may persist), “NR” (i.e., Not reported), or “NA” (i.e., Not applicable”). The two “cumulative” columns show the percentage of criteria which fulfilled external (cumulative 1 for Q1.1–Q1.3) and internal validity (cumulative 2 for Q2.2–Q4.4). Each study was awarded an overall quality rating in Q5.1 (i.e., internal validity) and Q5.2 (i.e., external validity) as “++” if the study was rated as “++” or “+” for all or most (i.e., 75% or more) of the criteria, “+” if the study was rated as “++” or “+” for some (i.e., 50% to 75%) of the criteria, or “−” if the study was rated as “++” or “+” for few (less than 50%) of the criteria. Results of the quality assessment for each study can be found in Table 3. All of the studies are rated as “++” for both external and internal validity and therefore are considered as having good quality. As no studies had a significant source of bias, all 30 articles are included in this study.

Table 2 Quality assessment checklist

Section 1	Population
Q1.1	Is the source population or source area well described?
Q1.2	Is the eligible population or area representative of the source population or area?
Q1.3	Do the selected participants or areas represent the eligible population or area?
Section 2	Method
Q2.1	Selection of exposure (and comparison) group. How was selection bias minimized?
Q2.2	Was the selection of explanatory variables based on a sound theoretical basis?
Q2.3	Was the contamination acceptably low? (Did any in the comparison group receive the exposure? If so, was it sufficient to cause important bias?)
Q2.4	How well were likely confounding factors identified and controlled?
Q2.5	Is the setting applicable to the country it was conducted in?
Section 3	Outcome
Q3.1	Were the outcome measures and procedures reliable?
Q3.2	Were the outcome measurements complete?
Q3.3	Were all the important outcomes assessed?
Q3.4	Was there a similar follow-up time in exposure and comparison groups?
Q3.5	Was follow-up time meaningful?
Section 4	Analyses
Q4.1	Was the study sufficiently powered to detect an intervention effect (if one exists)?
Q4.2	Were multiple explanatory variables considered in the analyses?
Q4.3	Were the analytical methods appropriate?
Q4.4	Was the precision of association given or calculable? Is association meaningful?
Section 5	Summary
Q5.1	Are the study results internally valid (i.e. unbiased)?
Q5.2	Are the findings generalizable to the source population (i.e. externally valid)?

Q2.1, Q2.3, and Q3.4 were removed as they were not applicable to any of the 30 articles

Table 3 Quality assessment of studies

Article	Q1.1	Q1.2	Q1.3	Cumulative 1 (%)	Q2.2	Q2.4	Q2.5	Q3.1	Q3.2	Q3.3	Q3.5	Q4.1	Q4.2	Q4.3	Q4.4	Cumulative 2	Q5.1	Q5.2
Arshanapally et al. (2018)	+	++	+	100	-	++	++	++	++	++	NA	NA	+	+	++	90	++	++
Ayón et al. (2010)	++	++	++	100	+	+	++	++	+	++	NA	-	+	+	++	80	++	++
Bécares et al. (2015)	+	+	+	100	+	+	+	++	+	++	+	NA	+	+	++	100	++	++
Benner and Kim (2009)	++	+	+	100	+	+	+	++	+	++	+	+	+	-	++	90	++	++
Berkel et al. (2009)	+	+	+	100	++	-	+	++	+	++	NA	NA	++	+	+	90	++	++
Brody et al. (2008)	++	++	++	100	++	+	++	++	+	++	+	NA	+	-	++	90	++	++
Choi et al. (2014)	++	++	++	100	++	+	++	++	+	++	++	NA	++	-	++	90	++	++
Ford et al. (2013)	+	++	++	100	++	-	++	++	+	++	++	-	+	+	++	80	++	++
Gibbons et al. (2004)	++	++	++	100	++	++	++	++	+	++	++	NA	++	++	+	100	++	++
Gibbons et al. (2007)	++	++	++	100	++	++	++	++	+	++	++	NA	++	++	+	100	++	++
Hart et al. (2021)	++	+	++	100	+	-	+	++	+	++	++	NA	+	+	++	90	++	++
Hill et al. (2019)	++	++	++	100	+	+	++	++	+	++	NA	NA	++	+	+	100	++	++
Holloway and Varner (2021a)	+	++	+	100	++	++	++	++	+	++	NA	NA	++	+	++	100	++	++
Holloway and Varner (2021b)	+	++	+	100	++	+	++	++	+	++	NA	-	+	+	++	90	++	++
Hou et al. (2017)	++	++	++	100	++	++	++	++	+	++	++	NA	++	+	++	100	++	++
Juang and Alvarez (2011)	++	++	++	100	+	-	++	++	+	++	NA	+	++	+	+	90	++	++
Kulish et al. (2019)	+	++	+	100	-	-	++	++	+	++	NA	NA	++	+	++	80	++	++
Lee and Minnesota International Adoption Project (2010)	++	++	++	100	++	+	++	++	+	++	NA	NA	++	+	++	100	++	++
Lorenzo-Blanco et al., (2016a)	++	++	++	100	++	++	++	++	+	++	++	NA	++	+	++	100	++	++
Lorenzo-Blanco et al., (2016b)	++	++	++	100	++	++	++	++	+	++	++	NA	++	+	++	100	++	++
McNeil et al. (2014)	++	+	+	100	+	++	+	++	+	++	NA	NA	-	+	++	90	++	++
McNeil Smith et al. (2016)	+	+	++	100	+	++	+	++	+	++	NA	-	+	+	++	90	++	++
Murry (2019)	++	++	++	100	++	+	++	++	+	++	++	NA	+	+	++	100	++	++
Nair et al. (2022)	++	++	++	100	++	++	++	++	+	++	++	NA	++	+	++	100	++	++
Park et al. (2018)	++	+	++	100	++	++	+	++	+	++	NA	NA	+	+	++	100	++	++
Sim and Georgiades (2022)	++	++	+	100	-	+	++	++	+	++	NA	NA	++	+	+	90	++	++
Tran (2014)	++	++	+	100	+	++	++	++	+	++	NA	NA	++	+	++	100	++	++
Wheeler et al. (2021)	+	++	++	100	++	+	++	++	+	++	++	-	++	+	++	90	++	++
Witherspoon et al. (2021)	++	++	+	100	+	++	++	++	+	++	NA	NA	++	+	++	100	++	++
Woo et al. (2020)	++	+	+	100	++	++	+	++	+	++	++	NA	++	+	++	100	++	++

Q1.1–Q1.2 corresponding to Section 1 (Population), Q2.2 – Q2.5 corresponding to Section 2 (Method), Q3.1 – Q3.5 corresponding to Section 3 (Outcome), Q4.1 – Q4.4 corresponding to Section 4 (Analyses), Q5.1–Q5.2 corresponding to Section 5 (Summary)

The two “cumulative” columns show percentage of criteria which fulfilled external (cumulative 1 for Q1.1–Q1.3) and internal validity (cumulative 2 for Q2.2–Q4.4). For each question, studies were rated as “++” (i.e., minimal risk of bias), “+” (i.e., potential sources of bias), “-” (i.e., significant sources of bias), “NR” (i.e., Not reported), or “NA” (i.e., Not applicable)

Results

For the 30 articles that met the inclusion criteria, studies examining the direct association between parental discriminatory experiences and adolescent adjustment are first presented (path P.a, Fig. 1). Results are then organized by discussing each of the six family factors (F1 to F6, Fig. 1) about how they function as mediating (path P.b to P.c, Fig. 1) or moderating (path P.d, Fig. 1) factors in the association between parental discrimination and different domains of adolescent adjustment using specific examples from the reviewed articles. It is worth noting that some of the articles have family factors that are related to parental experiences (i.e., parenting, parental racial socialization practices, parent–child relationship, parental mental health) as the outcome variable, and only examine the association between parental discriminatory experiences and these family factors (Path P.b, Fig. 1). These kinds of results have also been reviewed in the following section because understanding how parental experiences of discrimination affect family factors is important when examining the role family factors play in the association between parental discriminatory experiences and adolescent adjustment. In addition, some of the articles examine the direct effects of parental discrimination experiences and family factors on adolescent adjustment at the same time (i.e., path P.a and path P.c together, Fig. 1). These articles were grouped based on the specific family factor examined. All information about the 30 articles can be found in the summary table (See Table 4).

Participants and Measures of Parental Discriminatory Experiences

Most of the reviewed studies sampled African American youth ($n = 12$) or Latino youth ($n = 11$) whose mean ages were within the range of 10–18, or, in the case of longitudinal studies, assessed youth whose mean ages were within the 10–18 range in at least one wave. One article did not report the mean age of participants, but all youth participants were assessed in seventh or eighth grade (Kulish et al., 2019). Turning to Asian American adolescents, three of the 30 articles included Chinese American adolescents (Benner & Kim, 2009; Hou et al., 2017; Juang & Alvarez, 2011), two articles included Korean adolescents (Choi et al., 2014; Woo et al., 2020), and one included Filipino adolescents (Woo et al., 2020). Some articles included adolescents from multiple ethnic groups in the U.K. (Bécares et al., 2015), Canada (Sim & Georgiades, 2022), and United States (Lee & Minnesota International Adoption Project, 2010; Tran, 2014).

The majority of the reviewed studies measured parental discriminatory experiences using well-developed,

pre-existing scales, and most of the studies focused on racial discrimination. The scales most often used to assess parental discriminatory experiences are the Everyday Discrimination Scale (5 out of 30) (Williams et al., 1997), Perceived Discrimination Scale (4 out of 30) (Phinney et al., 1998), and Schedule of Racist Events Scale (4 out of 30) (Landrine & Klonoff, 1996). Two articles used specific items to measure parental discriminatory experiences rather than using scales. In the study by Juang (2011), Chinese American parents were asked, “How often have you been treated unfairly because you are Asian?”, “How often do people dislike you because you are Asian?”, and “How often have you seen friends or family be treated unfairly because they are Asian?”. Additionally, parents were asked, “How often do the following people (strangers, family members, teachers, the child's peers, coworkers, friends, and neighbors) make inappropriate or intrusive racial [or adoption] comments concerning your child and/or family?” in Lee and Minnesota International Adoption Project (2010). Only one article used questions developed by the authors of the study to measure parental discriminatory experiences (Bécares et al., 2015).

Direct Association Between Parental Discrimination and Adolescent Adjustment

Summary

Around 17% of the articles (6 out of 30) examine the direct association between parental discriminatory experiences and adolescent adjustment (path P.a, Fig. 1). Four of the five articles focus on adolescents' psychological adjustment (A2), and another two of the five articles focus on other youth outcomes (A4), such as children's perception of discrimination. Only one of the six articles adopt a longitudinal study design (Nair et al., 2022), and the remaining five articles adopt a cross-sectional study design. Moreover, three articles only examine the effect of maternal discriminatory experiences, while three others examine either a father's or mother's experiences of discrimination.

Specific Findings

Studies find that parental discriminatory experiences can negatively impact adolescent's psychological well-being (A2). African American mothers' experiences of racial discrimination directly predict more adolescent internalizing and externalizing problems (A2), as adolescents may withdraw or act out in response to their awareness of their mother's personal discriminatory experiences (Holloway & Verner, 2021a). Similarly, even after controlling for adolescents' own experiences of discrimination, parental discrimination continues to show a cross-sectional positive association with

Table 4 Summary for the 30 articles meeting inclusion criteria

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Arshanapally et al. (2018)	African American adolescents in U.S.A., mean age = 17.9, 50% female. Only mothers participated in the study	Experience of Discrimination scale Krieger et al. (2005)	None*	Cross-Sectional	P.a	P.a	none	Suicidality (A4)	Maternal racial discrimination is related to offspring suicidality of male adolescents (OR 3.19, 95% CI 1.30–7.84), but not female adolescents (OR 1.41, 95% CI 0.72–2.78, $p=0.316$)
Ayón et al. (2010)	Latino adolescents in U.S.A., age 14–18, 60% female. Parents were 94% female (Mexican-origin 83.3%, Other Latino Origin 4%, U.S.-born 12.6%)	A three-items scale used by Finch et al. (2000)	Familism (F5)	Cross-Sectional	P.a and P.c	P.c	P.a	Internalizing problems (A2)	Youth familism ($\beta=-0.406$, $p<.001$) can directly and negatively affect their internalizing behaviors
Bécares et al. (2015)	Ethnic minority adolescents in U.K., age 5 (Wave 3) 7 (Wave 4) 11 (Wave 5). Mothers participated in the study (Asian Indian 18%, Pakistani 28%, Other 19%)	Questions developed by the authors	Parenting (F1)/ Parental Mental Health (F4)	Longitudinal	P.b to P.c	P.b, P.c	none	Socio-emotional development (A2)	Maternal and family experiences of racial discrimination (Wave 3) indirectly affect children's socioemotional difficulties (Wave 5) through worsening maternal mental health (Wave 4) (Path P.b to P.c); maternal experiences of racist insults and family experiences of being treated unfairly (Wave 3) indirectly affect children's socioemotional difficulties (Wave 5) through increased harsh parenting practices (Wave 4) (Path P.b to P.c)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Benner and Kim (2009)	Chinese American adolescents in U.S.A., mean age = 13.0 at Wave 1 and mean age = 17.1 at Wave 2; 54% female. Both mother and father participated in the study	Measure of chronic daily discrimination Kessler et al. (1999)	Racial Socialization (F2)	Longitudinal	P.b to P.c	P.b, P.c	none	Cultural Misfit (A3)	Racial socialization practices (Wave 2) function as a mediator in the association between paternal experiences of discrimination (Wave 1), not maternal experiences of discrimination and adolescents' cultural misfit (Wave2) (Sobel test: $z = 2.00, p < .05$) (Path P.b to P.c)
Berkel et al. (2009)	African American adolescents in U.S.A., mean age = 13, 50% female. Parents are all mothers	Schedule of Racist Events Scale Landrine and Klonoff (1996)	Racial Socialization (F2)	Cross-Sectional	P.b to P.c	P.b, P.c	none	Self-Pride (A2)	Primary caregivers' racial discrimination relates to their greater use of racial socialization (Path P.b), which in turn links to youth higher self-pride. (Sobel test: $z = 2.66, p < .05$) (Path P.c)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Brody et al. (2008)	African American adolescents in U.S.A., mean age = 13 at Wave 1, mean age = 14 at Wave 2, mean age = 15 at Wave 3, 52% female. Parents are all mothers	Interpersonal Racism and Vicarious Racism subscales of the Index of Race-Related Stress Utsey and Ponterotto, (1996)	Parenting (F1)/ Parental Mental Health (F4)	Longitudinal	P to F4 to F1	P to F4, F4 to F1	none	none	Maternal perceived discrimination is linked to increase in mothers' stress-related health problems from Wave 1 to Wave 2 ($\beta = 0.22, p < .05$), which in turn links to increase in depressive symptoms ($\beta = 0.20, p < .05$) (Path P to F4). Maternal depressive symptoms then forecast a decline in mothers' provision of competence-promoting parenting from Wave 1 to Wave 3 ($\beta = -0.43, p < .05$) (Path F4 to F1)
Choi et al. (2014)	Korean American adolescents in U.S.A. age 11–14. Both mothers and fathers participated in the study	Perceived Discrimination Scale Phinney et al., (1998)	Racial (Cultural) Socialization (F2)	Cross-Sectional	P.a and P.c	P.c	P.a	English language competency (A1)/ Depressive symptoms (A2)	Parental reported cultural socialization can influence youth English language competency ($\beta = 0.696, p < .05$), which is further linked to youth depressive symptoms ($\beta = -0.208, p < .001$) (Path F2 to A1 to A2). Thus, parental report of cultural socialization indirectly influences youth depressive symptoms via youth English language competency ($\beta = -0.146, p < .05$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Ford et al. (2013)	African American adolescents in U.S.A. age 12–17, 57% female. Caregivers are 78% mothers, 10% fathers, and 6% grandmothers	Racism and Life Experience Scales Harrell (1997)	Family Economic Factors (F6)	Longitudinal	P _d	P _d	none	Psychological Well-being (A2)	At age 13 years, adolescents from lower income families report similar levels of well-being, $x = .02$ (.07), $t = 0.30$, $p = .77$ with either lower or higher parental discriminatory experiences. At age 17 years, adolescents from lower income families with lower parental discrimination report significantly higher levels of well-being than adolescents from lower income families with higher parental discrimination, $x = .24$ (.10), $t = 2.34$, $p = .02$
Gibbons et al. (2004)	African American adolescents in U.S.A. age 10–12 at Wave 1, 54% female. Parents are 93% female	Schedule of Racist Events Scales Landrine and Klonoff (1996)	Parenting (F1)	Longitudinal	P _a and P _c	P _a , P _c	none	Distress (A2)/ Substance Use (A1)	Parents' discrimination at Wave 1 has a significant direct effect on their children's distress at Wave 1, $p < .001$ (Path P _a), while effective parenting has an inhibitory effect for children's substance use at Wave 2, t (559) = 2.62, $p < .01$ (Path P _c)
Gibbons et al. (2007)	African American adolescents in U.S.A. age 10–12 at Wave 1, 54% female. Parents are 93% female	Schedule of Racist Events Scales Landrine and Klonoff (1996)	Parental Mental Health (F4)	Longitudinal	P _a and P _c	P _c	P _a	Conduct Disorder (A1)	Higher parent distress at Wave 1 lead to increase in adolescents' conduct disorder diagnoses at Wave 2 ($b = -0.18$, $p = .04$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Hart et al. (2021)	Black American adolescents in U.S.A. age 9–14 at Wave 1, 46% female. Both mothers and fathers participated in the study	Racism and Life Experience Scales Harrell (2007)	Parental Mental Health (F4)	Longitudinal	P b	P b	none	none	Racial discrimination at Wave 1 is positively associated with depressive symptoms at Wave 1 and Wave 2 (T1: $b=0.32, p<.001$; T2: $b=0.32, p<.001$) for fathers, and is positively associated with depressive symptoms at Wave 1 (T1: $b=0.18, p=.04$) for mothers
Hill et al. (2019)	Latino adolescents in U.S.A. age 10–16. Only mothers participated in the study (88.6% Mexican-origin)	Foreigner Objectification Scale Armenta et al. (2013)	Family Economic Factors (F6)/ Parental Mental Health (F4)/ Family Relationships (F3)	Cross-Sectional	P b , F6 to F4, F3 to F4	F6 to F4, F3 to F4	P b	none	Both economic hardship ($\beta=0.33, p<.01$) and parent–child conflict ($\beta=0.27, p<.01$) are significantly related to higher levels of maternal depressive symptoms

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Holloway and Varner (2021a)	African American adolescents in U.S.A. age 11–18, 53.7% females. Only mothers participated in the study	Everyday Discrimination Scale Williams et al. (1997)	Parenting (F1)/ Parental Mental Health (F4)	Cross-Sectional	P.b to P.c	P.b, P.c	none	Internalizing and Externalizing Problems (A2)	Maternal personal racial discrimination experiences directly relate to adolescents' externalizing ($\beta=0.16, p=.036$) and internalizing problems ($\beta=0.20, p=.002$). Additionally, there are significant indirect effects presented between mothers' personal racial discrimination experiences and adolescents' internalizing problem behaviors ($\beta=0.10, p=.001$) and externalizing problem behaviors ($\beta=0.08, p=.001$), via mothers' depressive symptoms (Path P.b to P.c)
Holloway and Varner (2021b)	African American adolescents in U.S.A. age 11–18, 50.4% female. Parents were 56.1% female	Everyday Discrimination Scale Williams et al. (1997)	Racial Socialization (F2)	Cross-Sectional	P.b	P.b	none	none	There is an interaction between personal racial discrimination and parent gender ($\beta=-0.12, p=.03$), indicating that paternal, not maternal, racial discrimination is linked to increase in preparation for bias ($b=0.51, p<.001$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Hou et al. (2017)	Chinese American adolescents in U.S.A. age 12–15 at Wave 1, 54% female. Both mothers and fathers participated in the study	Everyday Discrimination Scale Williams et al. (1997)	Family Relationships (F3)	Longitudinal	Pb to Pc	Pb, Pc	none	Depressive Symptoms and Delinquent Behaviors (A2)	Paternal discriminatory experiences (Wave 1) can impact child depressive symptoms and delinquent behaviors (Wave 2) through paternal depressive symptoms (Wave 1) and mother–child hostility (Wave 2) sequentially (P to F4 to F3 to A2). Discrimination to depressive symptoms: $b=0.27, p<.001$; depressive symptoms to mother–child hostility: $b=0.18, p<.05$; mother–child hostility to child depressive symptoms: $b=0.29, p<.001$; mother–child hostility to child delinquent behaviors: $b=0.20, p<.05$
Juang and Alvarez (2011)	Chinese American adolescents in U.S.A. age 15–19, 58% female. Both mothers and fathers participated in the study	“How often have you been treated unfairly because you are Asian?” “How often do people dislike you because you are Asian?” and “How often have you seen friends or family be treated unfairly because they are Asian?”	none	Cross-Sectional	Pa	Pa	none	Adolescents’ perception of discrimination (A4)	Parent discrimination predicts adolescents’ greater perception of discrimination, $\beta=0.16, p<.05$

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Kulich et al. (2019)	Latino adolescents in U.S.A. (7th and 8th grades), 51.4% female. Only mothers participated in the study (88% Mexican-Origin, 1.7% were born in mainland U.S.)	Brief Discrimination Scale Pituc et al. (2009)	Racial Socialization(F2)	Cross-Sectional	F2 to A4, P.b	F2 to A4	P.b	Youth Familism (A4)	Maternal private regard is linked to higher youth familism socialization ($b = .27, p < .05$), which in turn is linked to higher familism endorsement by youth ($b = .31, p < .001$) (F2 to F5)
Lee & Minnesota Adoption Project (2010)	Adolescents between 5 and 18 years old who were adopted from countries in Asia ($n = 863$), Latin America ($n = 469$), and Eastern Europe ($n = 247$) in United States, 60% female. Caregivers are mostly mothers/stepmothers ($n = 1380$), only 191 fathers	“How often do the following people make inappropriate or intrusive racial [or adoption] comments concerning your child and/or family?” Parents reported on the frequency with which strangers, family members, teachers, the child's peers, coworkers, friends, and neighbors made these types of comments	none	Cross-Sectional	P.a	P.a	none	Internalizing and Externalizing Problems (A2)	Adolescents from Latin America whose parents reported more perceived discrimination show greater internalizing problem behaviors, $t(455) = 6.13, p < .001$; Latin American adolescents whose parents reported more perceived discrimination also show greater externalizing problem behaviors, $t(445) = 5.42, p < .001$

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Lorenzo-Blanco et al., (2016a)	Latino adolescents from L.A. and Miami (Miami families are 61% from Cuba, L.A. families are 70% from Mexico), mean age = 14.51 at wave 1, 47% female. Caregivers are 74% mothers and 22.1% fathers and other relatives	Perceived Discrimination Scale Phinney et al. (1998)	Family Relationships (F3)	Longitudinal	Pb to P.c	P.b, P.c	none	Self-esteem (A2)/ Aggression (A1)/ Cigarette and alcohol use (A1)	Higher parent acculturation stress at Wave 4 predicts lower adolescent-reported family functioning at Wave 5, which in turn leads to lower adolescent self-esteem ($\beta = -0.02, p < .05$) and more aggression ($\beta = 0.01, p < .05$) at Wave 6 (Path P.b to P.c). Moreover, higher parent acculturation stress at Wave 4 predicts lower parent-reported family functioning, which in turn leads to greater odds of adolescent cigarette, OR = 1.1, $p < .05$, and alcohol use, OR = 1.06, $p < .05$, at Wave 6 (Path P.b to P.c)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Lorenzo-Blanco et al., (2016b)	Latino adolescents from L.A. and Miami (Miami families are 61% from Cuba, L.A. families are 70% from Mexico) in U.S.A., mean age = 14.51 at wave 1, 47% female. Parents include 70% mothers and 25% fathers and other relatives	Perceived Discrimination Scale Phinney et al. (1998)	Parenting (F1)/ Familism (F5)	Longitudinal	P to F5 to F1 to A1	P to F5; F5 to F1; F1 to A1	none	Youth past-30-day smoking (A1)	Perceived discrimination at Wave 1 links to lower levels of familism at Wave 2 ($\beta = -0.26, p = 0.04$) (Path P to F5), which in turn links to higher levels of positive and involved parenting at Wave 3 ($\beta = 0.42, p < 0.001$) (Path F5 to F1). Finally, involved parenting at Wave 3 predicts less youth-reported smoking at Wave 4 ($\beta = -0.45, p = 0.02$) (Path F1 to A1)
McNeil et al. (2014)	African American adolescents in U.S.A. age 7–14, 49.2% female. Only mothers participated in the study	Perceived Racial Discrimination scale (Murry et al. (2001))	Parental Mental Health (F4)	Cross-Sectional	P.b to P.c	P.b, P.c	none	Externalizing Behaviors (A2)	Maternal discrimination can lead to greater maternal depression ($\beta = 0.21, p < .05$) (Path P.b), which in turn leads to higher levels of child externalizing behavior ($\beta = 0.14, p < .05$) (Path P.c); Thus, the indirect pathway from maternal discrimination to child externalizing behavior through maternal depression is significant, $\beta = 0.03$ SE = 0.03 BC 95% CI [.002, .115] (Path P.b to P.c)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
McNeil Smith et al. (2016)	African American adolescents in U.S.A. age 9–17, 52% female. Both mothers and fathers participated in the study	Perceived Racial Discrimination scale Murry et al. (2001)	Racial Socialization (F2)	Cross-Sectional	P b	P b	none	none	Mothers' experiences of discrimination are positively associated with preparation for bias for their daughters ($\beta = 0.41, p < .001$) and less strongly related to preparation for bias for their sons ($\beta = 0.24, p < .01$). Fathers' experiences of discrimination, however, are positively associated with preparation for bias for their sons ($\beta = 0.23, p < .01$), but is not significantly related to preparation for bias for their daughters ($\beta = 0.11, p > .05$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Murry (2019)	African American adolescents in U.S.A. age 10–13, 400 boys and 467 girls. Only mothers participated in the study	Schedule of Racist Events Scales Landrine and Klonoff (1996)	Family Relationships (F3)/ Parental Mental Health (F4)	Longitudinal	P to F4 to F3 to A2	P to F4; F4 to F3; F3 to A2	none	Self-pride (A2)	Stressful life events (including discrimination, Wave 1) lead to an increase in depression and anxiety (Wave 1) among mothers ($\beta = 0.48, p = .03$) (Path P to F4), which in turn is linked to poorer mother–child relationship quality (Wave 2) ($\beta = -0.11, p < .05$) (Path F4 to F3); poor mother–child relationship quality ($\beta = 0.13, p = .05$) then can further reduce youth self-pride (Wave 2) (Path F3 to A2)
Nair et al. (2022)	Latino adolescents in U.S.A., mean age = 12.80 at wave 1, 55.4% female. Mothers are 53% Mexican-origin, 15% are born in U.S.A., 13.2% are born in South America	Perceived Ethnic Discrimination Scale-Community Version Brondolo et al. (2005)	Parenting (F1)	Longitudinal	P.a and P.c; P to F1 (P.b)	P.a, P.c	P to F1	Internalizing and Externalizing Problems (A2); GPA (A1)	Maternal Warmth at Wave 1 leads to adolescents' higher GPA ($\beta = 0.12, p < .05$) and lower internalizing problems ($\beta = -0.14, p < .01$) at Wave 2; maternal discrimination at Wave 1 can directly relate to adolescent's higher internalizing problems at Wave 2 ($\beta = 0.17, p < .01$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Park et al. (2018)	Mexican-origin adolescents in U.S.A. age 12–17 at wave 1, 57% female. Both mothers and fathers participated in the study	Everyday Discrimination Scale Williams et al. (1997)	Parental Mental Health (F4)	Cross-Sectional	P.b	P.b	none	none	Parental discrimination experiences are positively linked to parents' anxiety ($b = 2.89, p = .005$) and depression ($b = 2.04, p = .022$), even after controlling for covariates (i.e., age, nativity status, and SES)
Sim and Georgiades (2022)	Immigrant Canadian adolescents age 9–15, 52.5% female. Both mothers and fathers participated in the study	Experiences of Discrimination (EOD) Scale Krieger (1990)	Parenting (F1)	Cross-Sectional	P.a and P.c	P.c	P.a	Internalizing and Externalizing Problems (A2)	Greater child-reported positive parenting is related to fewer self-reported internalizing ($b = -0.31, p = 0.084$) and externalizing ($b = -0.22, p = 0.001$) problems, while child reports of more negative parenting are related to higher levels of self-reported internalizing ($b = 1.30, p < 0.001$) and externalizing problems ($b = 1.65, p < 0.001$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Tran (2014)	Adolescents aged 4–18 in U.S.A. 16.2% Asian or Pacific Islander, 50.7% Black or African American, 3.1% Native American/Alaskan Native, 17.0% Hispanic/Latino, and 13.1% Multiracial. The White sample included 574 cases, 49.48% female in white sample and 47.52% female in ethnic minority sample. Parents are 70.6% female in white sample, 81.2% in ethnic minority sample	The adult SHAPE questionnaire included an adapted version of the Experiences of Discrimination (EOD) scale Krieger (1990), Krieger and Sidney (1996)	Parental Mental Health (F4)	Cross-Sectional	P b to P c	P b , P c	none	Internalizing and Externalizing Problems (A2)	Greater parental experiences of past-year discrimination lead to greater parent mental health concerns (Path P b), which in turn are linked to greater children's internalizing and externalizing symptoms (Path P c) (a x b estimates = 0.02–0.07, all bias corrected 95% confidence intervals did not overlap with 0)
Wheeler et al. (2021)	Mexican-origin adolescents in U.S.A., mean age = 17.72 at Wave 2, 51% female. 180 mothers and 152 fathers participate in the study at Wave 2, 162 mothers and 138 fathers at Wave 3	Measures of Institutional Discrimination Hughes and Dodge (1997)	Familism (F5)/ Parental Mental Health (F4)	Longitudinal	F5 moderates P to F4	F5 moderates P to F4	none	None	The association between parental discrimination (Wave 2) and depressive symptoms (Wave 3) is only significant under low levels of familism (Wave 2), $b = 5.24$, $SE = 1.20$, $p < .001$, but not high levels of familism, $b = 2.01$, $SE = 1.31$, $p = .125$

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Witherspoon et al. (2021)	Latino adolescents in U.S.A. age 11–17, 50.7% female. Parents are mainly mothers (72.7%) Most parents are of Puerto Rican (45.5%), Mexican (22.7%), or Dominican (21.2%) heritage	Everyday Discrimination Scale Williams et al. (1997)	Racial Socialization (F2)	Cross-Sectional	P.a and P.c	P.c	P.a	Private Regard (A3)	Parents' ethnic-racial socialization beliefs are positively linked to youth-perceived cultural socialization ($\beta=0.40, p=.003$) and preparation for bias ($\beta=0.30, p=.01$). Youth perceptions of cultural socialization can in turn lead to higher private regard ($\beta=0.46, p<.001$)

Table 4 (continued)

Author	Demographics of participants	Measure of parental discrimination	Family factors	Study design	Tested path	Significant path	Non-significant path	Adolescent adjustment indices	Major findings
Woo et al. (2020)	In Wave 1, mean age = 15.27, 56% female (Filipino American adolescents in U.S.A.) and mean age = 14.76, 47% female (Korean American adolescents in U.S.A.). In Wave 2, mean age = 16.29 (Filipino American adolescents) and mean age = 16.07 (Korean American adolescents). Both fathers and mothers participated in the study	Items from the ML-SAAF project and Perceived Discrimination Scale Phinney et al. (1998)	Racial Socialization (F2)	Longitudinal	P.b to P.c	P.b, P.c	none	Ethnic identity/ American identity (A3)	Filipino parent-reported racial discrimination (Wave 1) shows an indirect effect on youth ethnic identity (Wave 2) via parental promotion of mistrust (Wave 1) ($b = -0.03, p = .06$) (Path P.b to P.c); Parent-reported racial discrimination is positively linked to parent-reported promotion of mistrust ($b = 0.21, p < .001$) (Path P.b), which in turn predicts weaker ethnic identity among youth ($b = -0.18, p = .03$) (Path P.c); Korean parent-reported racial discrimination (Wave 1) shows an indirect effect on youth American identity (Wave 2) via parental promotion of mistrust (Wave 1) ($b = 0.02, p = .08$) (Path P.b to P.c); Parent-reported racial discrimination is positively linked to parent-reported promotion of mistrust ($b = 0.14, p < .001$) (Path P.b), which leads to higher American identity among youth ($b = 0.19, p = .05$) (Path P.c)

*Family factors only include parenting, racial socialization, family relationships, parental mental health, familism, and family economic factors

African American adolescents' distress (A2) (Gibbons et al., 2004). Besides psychological adjustment, parental discriminatory experiences can also be associated with ethnic minority adolescents' behavior. For instance, parental experiences of discrimination contribute to more internalizing problems and externalizing problematic behaviors in Latinx-adopted children (A2) (Lee & Minnesota International Adoption Project, 2010). Additionally, mothers' reports of racial discrimination are found to be positively related to offspring suicidality in African American male adolescents (A4) (Arshanapally et al., 2018), demonstrating the intergenerational influences of maternal discriminatory experiences on adolescents' suicidality risk. Similarly, maternal discriminatory experiences directly relate to greater internalizing problems (A2) in Latino adolescents one year later (Nair et al., 2022).

Parental discrimination also affects adolescent children's perceptions of discrimination (A4). Specifically, Chinese American parents' perceptions of discrimination are positively and significantly associated with their adolescent children's perceptions of discrimination (A4), which may be due to the commonalities in discriminatory experiences between ethnic minority parents and adolescents, even after controlling for adolescents' own perceptions of the school environment and cultural resources (i.e., access to ethnic media, ethnic-based community centers, and ethnic-based churches) (Juang & Alvarez, 2011).

Family Factors

Parenting

Summary

Around 20% of the articles (6 out of 30) include parenting behaviors as a family factor. Among these articles, one (Brody et al., 2008) examines the association between parental discrimination and parenting behaviors (path P.b, Fig. 1) and two examine the indirect association between parental discrimination and adolescent adjustment through parenting behaviors (path P.b to P.c, Fig. 1). Another three articles examine the direct association between parental discrimination and adolescent adjustment, and the same study also examines the direct association between parenting and adolescent adjustment (path P.a and P.c, Fig. 1). None of these five articles examine the moderating effects of parenting. Among the six articles that investigate youth outcomes, two focus on adolescent developmental tasks (A1), two focus on adolescent psychological adjustment (A2), and two focus on both developmental tasks (A1) and psychological adjustment (A2). Five of the six articles adopt a longitudinal study design and the other article uses a cross-sectional design.

Moreover, two studies examine the effect of a mother's experiences of discrimination, while the other four examine either a father's or mother's experiences of discrimination.

Specific Findings

Parental experiences of discrimination can affect parenting behaviors among ethnic minority parents (Brody et al., 2008) (path P.b, Fig. 1). Specifically, parents' discriminatory experiences can increase African American parents' depressive symptoms (P to F4), as encountering racial discrimination can consume psychological resources required to cope with stress, which in turn influences multiple types and domains of parenting behavior one year later (i.e., involved-vigilant parenting, ineffective arguing, warmth-closeness) (F4 to F1) (Brody et al., 2008). Parenting behavior can also function as a mediator between parental discriminatory experiences and adolescent adjustment (path P.b to P.c, Fig. 1) across developmental periods, which is shown in two longitudinal studies (Bécares et al., 2015; Lorenzo-Blanco et al., 2016b). For example, as experiencing discrimination may hinder parents from providing a warm and caring environment for their children, maternal experiences of racist insults can increase mothers' use of harsh parenting practices two years later, which may lead to British ethnic minority children's socio-emotional difficulties four years later (path P.b to P.c, Fig. 1) (A2) (Bécares et al., 2015). Additionally, parental discriminatory experiences at Wave 1 can reduce parental familism at Wave 2 and positive parenting behavior at Wave 3 sequentially (P to F5 to F1), which can subsequently be related to an increase in the smoking behavior of Latino youth at Wave 4 (A1) (path P.c, Fig. 1) (Lorenzo-Blanco et al., 2016b). Turning to the direct effect of both parental discriminatory experiences and parenting (Path P.a and P.c, Fig. 1), a previous study (Gibbons et al., 2004) finds that while parental discrimination has a cross-sectionally significant association with African American adolescents' distress (A2) (Path P.a), effective parenting has a direct association with lower levels of substance use risk among children (i.e., vulnerability) (A1) at the same time (Path P.c), suggesting that parental support, warmth, and monitoring can lead to less willingness to engage in risky behavior for adolescents. Similarly, another study (Sim & Georgiades, 2022) examines the direct effect of parental discrimination on youth outcomes and also the direct effect of parenting on youth outcomes (Path P.a and P.c), and finds that only parenting behavior has a significant direct effect on Canadian immigrant adolescents' self-reported internalizing and externalizing problems (A2) (Path P.c). Moreover, a longitudinal study (Nair et al., 2022) finds that while maternal discriminatory experiences at Wave 1 directly relates to more internalizing problems (A2) in Latino adolescents at Wave 2, higher maternal warmth

at Wave 1 contributes to adolescent's fewer internalizing problems (A2) and higher GPA (A1) at Wave 2.

Racial Socialization

Summary

Around 27% of the articles (8 out of 30) include racial socialization as a family factor. There are different constructs related to racial socialization that are examined in the reviewed studies, such as preparation for bias messages (e.g., communications about potential racial barriers, Holloway & Varner, 2021b) and promotion of mistrust (i.e., how often they talk to their children about bias due to their race and ethnicity, Woo et al., 2020). Cultural socialization, as one aspect of racial socialization, refers to parental practices that promote cultural customs and traditions (Choi et al., 2014).

Among these articles, two examine the association between parental discrimination and racial socialization (path P.b, Fig. 1), while the other six articles also assess youth outcomes. Three of the six articles examine the indirect pathways from parental discrimination to adolescent adjustment with racial socialization as a mediator (path P.b to P.c, Fig. 1), and the remaining three articles examine the direct association between parental discrimination and adolescent adjustment (path P.a, Fig. 1) and the direct association between racial socialization and adolescent adjustment (path P.c, Fig. 1). None of the eight articles examine the moderating effects of racial socialization. Among the six articles that investigate youth outcomes, one focuses on adolescents' developmental tasks (A1), one focuses on adolescents' psychological adjustment (A2), one focuses on other adjustment outcomes (A4), and the other three focus on adolescents' acculturative tasks (A3). Additionally, studies examining the association between parental discrimination and racial socialization practices find a moderating effect of parent's gender. Two of the eight studies adopt a longitudinal study design, both examine the mediating role of racial socialization between parental discriminatory experiences and adolescents' acculturative tasks (A3), and the remaining six studies adopt a cross-sectional study design. Moreover, two articles specifically consider the differential effects of parent gender in the association between parental discriminatory experiences and youth outcomes.

Specific Findings

Studies suggest that parents may socialize adolescents differently based on both the child's and parent's gender. For example, African American mothers' experiences of discrimination are more strongly correlated with the racial socialization messages they transmitted to daughters, while African American fathers' experiences of discrimination are

more strongly correlated with the socialization messages they transmitted to sons (Path P.b, Fig. 1) (McNeil Smith et al., 2016). In addition, it has also been found that higher parental racial discrimination leads to more preparation for bias messages (e.g., communications about potential racial barriers) for African American fathers (Path P.b, Fig. 1), but there is no significant correlation for African American mothers (Holloway & Varner, 2021b). Such findings could suggest that, perhaps, mothers engage in more racial socialization practices than fathers, regardless of the extent of their discriminatory experiences.

Racial socialization can serve as a mediating variable in the indirect association from parental discrimination to adolescent adjustment (path P.b to P.c, Fig. 1). It was found that primary caregivers' racial discrimination would induce them to use more racial socialization strategies in the family, which would then increase African American adolescents' sense of self-pride (A2), possibly because adolescents learned to use more positive strategies to cope with racial discrimination (path P.b to P.c, Fig. 1) (Berkel et al., 2009). As for ethnic minority adolescents' acculturative outcomes (A3), there is evidence that parental discriminatory experiences can longitudinally predict youth outcomes. Specifically, paternal experiences of discrimination may increase Chinese American fathers' racial socialization practices, making it more difficult for Chinese American children to adapt to American culture, which in turn relates to greater feelings of cultural misfit four years later (A3) (path P.b to P.c, Fig. 1) (Benner & Kim, 2009). Additionally, the results of one longitudinal study (Woo et al., 2020) suggest that parent-reported racial discrimination can reinforce parent-reported promotion of mistrust in distinctive ways in Filipino American and Korean American adolescents, by increasing Korean adolescents' sense of American identity, but not their sense of ethnic identity, and by weakening Filipino adolescents' sense of ethnic identity, but not their sense of American identity (A3) (path P.b to P.c, Fig. 1).

Research on the direct effects of both parental discriminatory experiences and racial socialization showed that parent-reported cultural socialization (F2) can increase Korean American adolescents' English competency (A1), which can lead to lower depressive symptoms (A2) (path P.c, Fig. 1); however, there was no significant direct effect of parental discrimination in the same model (path P.a, Fig. 1) (Choi et al., 2014). Other research has also examined the influence of ethnic-racial socialization on adolescent acculturative tasks (A3). Specifically, while Latino parents' ethnic-racial socialization can increase adolescents' sense of private regard (how they view their own racial group) (A3) (path P.c, Fig. 1), parental discrimination does not show the same direct effect, suggesting that parental discrimination may not influence adolescents' sense of ethnic identity (A3) in a direct way (Witherspoon et al., 2021). Moreover, a previous

study (Kulish et al., 2019) finds that maternal private regard can increase youth familism (A4) (F2 to A4, Fig. 1) while maternal discriminatory experiences do not directly impact youth familism.

Family Relationships

Summary

Around 10% of the articles (3 out of 30) include family relationships as a family factor. Family functioning is also included in this section. These three articles examine the indirect pathway from parental discrimination to adolescent adjustment through family relationships (path P.b to P.c, Fig. 1) and all use a longitudinal study design. All three articles that investigate youth outcomes focus on adolescents' psychological adjustment (A2), and one of them (Lorenzo-Blanco et al., 2016a) also focuses on adolescents' developmental tasks (A1). None of the three articles examines the moderating effects of family relationships. One of the articles (Hou et al., 2017) also considers the specific effect of paternal discriminatory experiences on mother–child relationships.

Specific Findings

Family relationships can operate as a mediating variable in the pathway from parental discrimination to adolescent adjustment (path P.b to P.c, Fig. 1). These articles examine different indicators of family relationships, and one of them (Hou et al., 2017) focuses on the parent–child relationship. This longitudinal study considers the different roles of mothers and fathers in parenting and shows that greater paternal discriminatory experiences result in more hostility in the mother–child relationship four years later, which in turn leads to more depressive symptoms and delinquent behaviors among Chinese American children (A2) (path P.b to P.c, Fig. 1) (Hou et al., 2017). Another longitudinal study focusing on family functioning indicates that parental acculturative stress, including discrimination, can predict reports of worse family functioning by Latino parents and children alike (path P.b, Fig. 1) (Lorenzo-Blanco et al., 2016a). However, more positive youth-reported family functioning predicts higher self-esteem (A2) as well as a lower likelihood of aggressive and rule-breaking behavior among adolescents (A1) (path P.c, Fig. 1), and more positive parent-reported family functioning predicts less use of alcohol and cigarettes among youth (A1) (path P.c, Fig. 1) (Lorenzo-Blanco et al., 2016a). Moreover, there is one article (Murry, 2019) that focuses on the quality of family relations. Stressful life events, including parental discrimination (Wave 1), are found to increase maternal depression and anxiety (Wave 1), which contributes to poorer family relationship quality

(Wave 2) (F4 to F3), further reducing African American children's self-pride (Wave 2) about two years later (A2) (path P.b to P.c, Fig. 1) (Murry, 2019).

Parental Mental Health

Summary

Around 30% of the articles (9 out of 30) include parental mental health as a family factor, and most of them use parental depressive symptoms to assess parental mental health. Among these articles, four of them examine the association between parental discrimination and parental mental health (path P.b, Fig. 1), with one of these four (Hart et al., 2021) using a longitudinal study design; the other four studies examine the indirect pathway from parental discrimination to adolescent adjustment via parental mental health (path P.b to P.c, Fig. 1). Specifically, the ninth article is the only longitudinal study (Gibbons et al., 2007) examining the direct effects of both parental discrimination and parental mental health on African American adolescents' conduct disorder (A1), and finds that only parental distress significantly predicts more severe conduct disorder (path P.c, Fig. 1). None of the nine articles examine the moderating effects of parental mental health. All five articles that investigate youth outcomes focus on adolescent psychological adjustment (A2). Moreover, three articles examine the effect of maternal discriminatory experiences, while others examine either a father's or mother's experiences of discrimination.

Specific Findings

Parental discrimination is documented to be positively associated with parents' depressive symptoms (path P.b, Fig. 1). For instance, one longitudinal study (Hart et al., 2021) finds that African American parents' discriminatory experiences can affect their depressive symptoms. In addition, there are articles (Brody et al., 2008; Park et al., 2018) that focus only on the effect of maternal experience of discrimination. For instance, Brody et al. (2008) find that African American mothers' discriminatory experiences increase their depressive symptoms and stress-related physical health problems (Path P.b, Fig. 1). Similarly, Mexican-origin mothers' discriminatory experiences can increase their anxiety and depression (Path P.b, Fig. 1) (Park et al., 2018). Another study discusses the moderating role of familism in the association between experiences of discrimination and Mexican-origin parents' depressive symptoms, and indicates that strong levels of familism could weaken this relationship (F5 moderates P to F4) (Wheeler et al., 2021).

Studies consistently find that parental discrimination can have a negative impact on adolescent psychological well-being via worse parental mental health. All of these studies

use a cross-sectional study design. For example, parental discrimination can negatively impact parental mental health (i.e., past-month frequency of feelings of sadness, nervousness, or worthlessness), which can negatively impact ethnic minority children's mental health (A2) (Path P.b to P.c, Fig. 1) (Tran, 2014). Additionally, maternal mental health is a mediating variable in the longitudinal association between mothers' experiences of racial discrimination and ethnic minority British children's social-emotional development (A2) (Path P.b to P.c, Fig. 1) (Bécares et al., 2015). Similarly, mothers' greater experiences of discrimination can lead to higher maternal depression, which may contribute to more externalizing behaviors (A2) among African American adolescents (Path P.b to P.c) (McNeil et al., 2014). Moreover, one study (Holloway & Varner, 2021a) finds that, although parental discriminatory experiences have a significant influence on adolescents' emotional well-being (A2) through maternal depressive symptoms, they do not have a significant impact on adolescents' academic achievement (A1) (Holloway & Varner, 2021a).

Familism

Summary

Around 13% of the articles (4 out of 30) include familism as a family factor. One of the articles examines the mediating role of familism between parental discriminatory experiences and adolescents' developmental tasks (A1) (Path P.b to P.c, Fig. 1). Two of them examine the association between familism and adolescent adjustment (Path P.c, Fig. 1), with one focusing on psychological adjustment (A2), and another focusing on other adjustment outcomes (A4). One article examines the moderating effect of familism on the association between parental discriminatory experiences and parental mental health. Among these articles, three discuss familism along with other family factors such as parenting (F1), parental mental health (F4), and racial socialization (F2). Two studies use a longitudinal study design, with one documenting the mediating effect of familism between parental discriminatory experiences and youth outcome and another documenting the moderating effect of familism.

Specific Findings

Familism can function as a mediator between parental discriminatory experiences and adolescent adjustment. Parental experiences of discrimination predict lower familism (path P.b, Fig. 1), which can further influence parenting behaviors (F5 to F1), and in turn lead to more smoking behaviors in Latino adolescents two years later (A1) (path P.b to P.c, Fig. 1) (Lorenzo-Blanco et al., 2016b). Another longitudinal study (Wheeler et al., 2021) examines the moderating role

of familism in the association between parental discrimination and parental mental health (F4). For instance, higher parental familism reduces the strength of the association between parental workplace discrimination and parental depressive symptoms (F5 moderates P to F4) (Wheeler et al., 2021). Moreover, one study (Kulish et al., 2019) examines the association between racial socialization (F2) and adolescents' familism (A4). Specifically, higher maternal private regard can lead to higher familism in Latino youth (A4) (path P.c, Fig. 1) (Kulish et al., 2019). There is also a significant association between adolescents' familism and their psychological adjustment (A2). For example, higher adolescent familism is significantly associated with lower levels of internalizing problems among Latino youth (A2) (path P.c, Fig. 1) (Ayón et al., 2010).

Family Economic Factors

Summary

Around 17% of the articles (5 out of 30) are on family economic factors. Family economic factors (F6) often appear as a covariate in models presented by family studies (Bécares et al., 2015; e.g., Brody et al., 2008; Sim & Georgiades, 2022). Only two studies that met the inclusion criteria found a significant effect of family economic factors. One of these studies examines the direct effect of family financial hardship on adolescent psychological adjustment (A2) (Path P.c, Fig. 1). Another examines the moderating role of family economic factors on the association between parental discriminatory experiences and adolescent psychological adjustment (A2) (Path P.d, Fig. 1). None of the studies adopt a longitudinal study design.

Specific Findings

Hill et al. (2019) found that financial hardship and parent–child conflict increase Latino mothers' depressive symptoms (F3/F6 to F4) while parental discriminatory experiences do not have the same effect. Ford et al. (2013) found an interaction between caregiver discrimination and income on child depressive symptoms (path P.d, Fig. 1), revealing that African American adolescents from lower-income families whose caregivers reported more discrimination experiences demonstrated the least positive psychological outcomes (A2) over time.

Discussion

Discrimination experiences play an important role in the adjustment of ethnic minority individuals. To date, adolescents' discriminatory experiences on their own

developmental outcomes are widely studied, with fewer studies examining the role of parental discriminatory experiences on adolescent developmental outcomes, suggesting a need for a systematic review to get a better understanding of this association. Using a proposed framework (see Fig. 1), the current study reviewed the influence of not only parental discriminatory experiences on adolescent adjustment, but also the role of family factors in this association, by reviewing 30 empirical, quantitative studies. Going beyond prior studies' general focus on the effects of adolescents' own experiences, this study documents that parental discriminatory experiences can also broadly influence ethnic minority adolescent adjustment in multiples domains, such as their psychological well-being (Ford et al., 2013), self-pride (Berkel et al., 2009; Murry, 2019), substance use (Gibbons et al., 2004), and ethnic identity (Woo et al., 2020). The current review also highlights the important role of family factors in the association between parental discriminatory experiences and adolescent adjustment. Discussions of results for each family factor (i.e., parenting, racial socialization, family relationship, parental mental health, familism, and family economic factors) are presented below. The potential implications for future research, extensions or revisions of existing theories, and interventions to reduce the negative effects of parental discriminatory experiences on adolescent adjustment are also presented.

The first aim of the current study was to examine the direct effects of parental discriminatory experiences on adolescent adjustment. Parental experiences of discrimination were consistently found to be a negative predictor of adolescent adjustment, directly linking to different aspects of adolescent adjustment indices, which significantly affected adolescents' emotional and behavioral problems. Most of the studies explain their results by stating that witnessing discriminatory experiences of a loved one can be frustrating for adolescents, such that the external stress perceived by one family member may be shared by the whole family. This finding is consistent with the integrative model for the study of ethnic minority children proposed by García Coll et al. (1996), suggesting that researchers need to take into account the exposure to discriminatory experiences when studying the development of ethnic minority adolescents. However, the model proposed by García Coll et al. (1996) does not distinguish the unique effect of discrimination experienced by adolescents themselves from the effects of discrimination on important family members. Thus, existing theories and future research should consider the role of other family members' discriminatory experiences in addition to adolescents' own experiences to more fully understand the role of discriminatory experiences in adolescent adjustment. In assessing parental discriminatory experiences, most of the reviewed articles used questionnaires to measure retrospective experiences of discrimination. A

previous meta-analysis study has found that discrimination reported over a longer period may have a stronger impact on well-being, as the effects can be cumulative (Benner et al., 2018). It may be fruitful to compare parental retrospective discriminatory experiences to parental discriminatory experiences measured by methods such as ecological momentary assessments. By doing so, it would be possible to examine how parents' momentary experiences of discrimination can directly affect adolescents' current emotions or behaviors. As none of the studies reviewed used a momentary study design, it is an open question whether parental momentary discriminatory experiences have stronger or weaker effects than retrospective parental discriminatory experiences on adolescent adjustment.

The second aim of the study was to examine the different roles of family factors in the association between parental discrimination and adolescent adjustment. Findings reveal that the majority of the existing research examined whether family factors mediate the association between parental discriminatory experiences and adolescent outcomes. With the exception of family economic factors, all of the other five family factors (i.e., parenting, racial socialization, family relationship, parental mental health, and familism) showed evidence of functioning as a mediating factor. Specifically, parenting, racial socialization, and parental mental health were more likely to be directly influenced by parental discriminatory experiences (as these are parents' own individual emotions and behaviors) and mediate the association between parental discrimination and other family factors or adolescent adjustment. On the other hand, other family factors, such as family relationship and familism, may be influenced by both parents and other family members and were less likely to be directly and significantly influenced by the parents' own personal experiences of discrimination to influence the association between parental discriminatory experiences and adolescent adjustment. Additionally, studies examining the mediating effect of three of the six family factors (i.e., parenting, racial socialization, and family relationship) between parental discrimination and youth outcomes using a longitudinal study design. Thus, it appears that parental discriminatory experiences can longitudinally associate with adolescent developmental outcomes as mediated by these family factors.

The current study also finds that when parents' experiences of discrimination and certain family factors were both used as independent variables in the model to predict adolescent outcomes, some studies did not find significant effects of parental experiences of discrimination, but only significant effects of family factors (e.g., familism, Ayón et al., 2010; racial socialization, Choi et al., 2014; parental mental health, Gibbons et al., 2007; parenting, Sim & Georgiades, 2022). This result also indicates that the direct link between parental discriminatory experiences and adolescent

adjustment is weakened when the effect of family factors is taken into account, further suggesting that these family factors may mediate the association.

Few studies examine whether family factors can function as a moderator. Yet, understanding how family factors function as moderators is important as it can inform researchers about the family conditions that can buffer or exacerbate the association between parental discriminatory experiences and adolescent outcomes. For example, as shown in Ford's et al. (2013) study, adolescents from lower-income families face more risk factors than those from higher-income families, suggesting that lower family income can exacerbate the negative effect of parental discriminatory experiences on adolescents' psychological well-being. In addition, one study (Wheeler et al., 2021) found that strong levels of familism could buffer the negative impact of parental discriminatory experiences on parents' mental health. This may be because strong family-oriented values allow parents to cope with discrimination through positive sources of support and close relationships in the family environment. If so, interventions can target families at risk (e.g., lower-income) and work on improving a sense of familism in ethnic minority families to reduce the negative impact of parental discriminatory experiences on adolescent well-being. Future research may continue to explore how family factors can moderate associations of interest and which specific domain of adolescent adjustment may be affected. Researchers could also explore the moderating effects of unique family factors in specific ethnic groups—for example, most of the reviewed articles examining the role of familism are on Latino adolescents, as familism is a concept that is germane to Latino families (Ayón et al., 2010). A similar concept for Asian families may be filial piety, which requires children to respect, obey, and take good care of their parents (Yeh & Bedford, 2003). There were too few studies on filial piety to code it as a family factor in this study, but with a sufficient number of studies future reviews can summarize how filial piety functions in the association between parental discriminatory experiences and Asian adolescent adjustment, and present the potential similarities/differences in impact between familism and filial piety.

The third aim of this study was to identify the types of adjustment indices (i.e., developmental tasks, psychological adjustment, acculturative tasks) that are most influenced by parental discriminatory experiences and family processes. The results of the current study indicate that most of the existing studies examined adolescents' psychological adjustment (i.e., indicators of psychological well-being such as self-esteem, life satisfaction, anxiety, and depression) rather than the other two indices (i.e., developmental and acculturative tasks). It appears that parental experiences of discrimination can broadly influence adolescents' mental health; indeed, all family factors reviewed in this study are related

to adolescent psychological adjustment. Compared to psychological outcomes, which can be affected by all six family factors reviewed in this study, only the articles that focus on racial socialization examine adolescents' acculturative tasks (i.e., the third adaptation index in the proposed model). This may be due to racial socialization being the only family factor that focuses on ethnic minority adolescents' cultural background or experiences. Moreover, studies reviewed have found that parental discriminatory experiences are not likely to be associated with adolescents' academic outcomes (e.g., Holloway & Varner, 2021a). One possible explanation may be that the perpetrators of discriminatory experiences may determine which kinds of outcomes are most likely to be impacted by discrimination. Adolescents' academic outcomes can be strongly associated with discrimination when the perpetrators are teachers or peers encountered at school (Chavous et al., 2008). To address this issue, future research could compare the different effects of parents' and adolescents' experiences of discrimination on various kinds of adolescent outcomes, or even explore whether there is an interaction between them. For example, the negative influence of parental discriminatory experiences on adolescent academic performance may be buffered by low levels of discrimination perpetrated by peers or teachers. In general, future research could examine the three adjustment indices together to get a more comprehensive understanding.

In addition to the paths mentioned in the proposed framework (i.e., Path P.a, P.b, P.c, P.d), the current study also finds that many articles include more than one family factor. Among these studies, parental mental health and familism are the most likely to be associated with other family factors, such as parenting behavior and family relationships (Brody et al., 2008; Lorenzo-Blanco et al., 2016b; Murry, 2019; Wheeler et al., 2021). That is to say, parental psychological states (i.e., mental health) and beliefs (i.e., familism) can be influenced by parents' experiences of discrimination, and the negative impact can be transmitted to adolescents through negative parenting behaviors or worse family relationships. This result is consistent with the extension of the Family Stress Model (Conger et al., 1993), suggesting that parental discriminatory experiences can also function as an external stressor of daily life, which influences adolescent outcomes via parental mental health and parenting sequentially. Future interventions could focus on how to enhance parents' psychological strategies for coping with stressful life events (e.g., discriminatory experiences) in order to reduce the negative impact of discriminatory experiences on multiple family factors, such as parents' mental health problems and negative parenting behaviors.

It is also important to consider parents' and children's gender when examining the association between parental discriminatory experiences and family factors, as well as the association between family factors and youth outcomes.

Specifically, only fathers' preparation for bias was affected by personal racial discrimination, while there was no significant effect for mothers, as mothers are believed to engage more in caregiving than fathers, likely engaging in high preparation for bias regardless of the level of their discriminatory experiences (Holloway & Varner, 2021b). Additionally, only father's racial socialization practices mediate the association between parental discriminatory experiences and adolescents' sense of cultural misfit (Benner & Kim, 2009). It is also important to consider the gender of children. For instance, parents tend to use more racial socialization practices with same-gender children (McNeil Smith et al., 2016).

Although the results of the articles reveal the importance of considering the gender of parents and children, most of the 30 articles reviewed for this study did not consider the different role of mothers and fathers or only recognized the effect of maternal experiences. For example, none of the articles that include familism or family economic factors consider the gender of parents or children. Additionally, some of the articles that include parenting or parental mental health as family factors only examine the effect of maternal experiences, such as maternal discriminatory experiences (Bécares et al., 2015), maternal parenting behaviors (Holloway & Varner, 2021a), maternal mental health (Park et al., 2018), and mother–child relationship (Hou et al., 2017). Future research needs to pay more attention to the role of family members' gender when studying the effect of parental discriminatory experiences on ethnic minority adolescent adjustment, which will facilitate the optimization of future intervention programs based on the gender of the targeted family members. Moreover, a previous meta-analysis study has documented that, when examining the effects of adolescents' discriminatory experiences, there may exist an interaction between gender and race/ethnicity, such that discrimination is more likely to affect Latino males' academic outcomes than Latino females' and African American males' academic outcomes (Benner et al., 2018). However, the two reviewed studies that find a moderating role of parents' gender are both on African American families (Holloway & Varner, 2021b; McNeil Smith et al., 2016). Future research can explore the interaction between gender and race/ethnicity when examining the effects of parental discriminatory experiences on racial/ethnic minority adolescents and provide theoretical explanations on these interactions.

Several limitations of this study need to be noted. First, all of the articles reviewed for this study were written in English. Thus, the current study is not able to capture the results of relevant studies written in other languages. Second, qualitative studies and studies that are not published in peer-reviewed journals did not meet inclusion criteria and were not included in this study. Therefore, the results found by articles included in this study may be biased towards showing significant effects. Qualitative studies and studies

that are not peer-reviewed publications such as dissertations and theses can uncover additional family factors beyond those identified in this study to provide a richer understanding of the influence of parental discriminatory experiences on adolescent adjustment. Third, as the majority of the articles reviewed targeted ethnic minority families living in the United States or other English-speaking countries, this study cannot capture the experiences of ethnic minority families living around the world. Fourth, daily discriminatory experiences may be attributed to multiple non-specific sources or reasons, such as race/ethnicity, gender, skin color, or immigrant status (Kessler et al., 1999). However, different forms of parental discriminatory experience (e.g., racial/ethnic discrimination as a specific form of discrimination versus discrimination due to skin color) were not distinguished in this study, as there were an insufficient number of studies of each type of parental discriminatory experience to merit a focused review of specific forms of discrimination. Thus, findings in this study cannot reveal or compare the effects of different types of parental discriminatory experiences, the differences between measures of parental discriminatory experiences (e.g., discrimination based on race/ethnicity, socioeconomic status, nativity, skin color), and distinct domains of specific family factors (e.g., different types of parenting, such as parental warmth versus control) were not explored. Fifth, although this study presents results for different ethnic minority groups (e.g., Latino adolescents, African American adolescents, Asian American adolescents), there were an insufficient number of studies on each group to summarize and make conclusions about the different effects of parental discriminatory experiences on adolescents from distinct ethnic minority groups. Moreover, the current review does not discuss results for specific developmental periods, such as early adolescence and middle adolescence, due to the insufficient number of studies that distinguish more specific age groups in the range from 10 to 18 years. However, it is worth noting that cognitive abilities and social skills change during adolescence, which could influence the strategies adolescents use to cope with discrimination (Benner et al., 2018). Thus, the review is not able to present conclusions about the different effects of parental discriminatory experiences on adolescents in distinct developmental periods. Finally, the proposed conceptual framework used in the study does not capture all potential associations between parental discriminatory experiences, family factors, and adolescent outcomes across the 30 reviewed studies. For example, one study (Wheeler et al., 2021) finds that strong levels of familism could weaken the association between experiences of discrimination and Mexican-origin parents' depressive symptoms. In other words, a family perspective (familism) may moderate the association between parental discrimination and another family factor, but this association was not captured by any path in the proposed conceptual

framework. Therefore, more nuanced associations than those presented in this study's conceptual framework are needed to better represent the complex associations among parental discriminatory experiences, family factors, and adolescent adjustment in future research.

Conclusion

Parental discriminatory experiences can impact adolescent adjustment, especially adolescent psychological well-being. Family factors (e.g., parenting, racial socialization, family relationships, and parental mental health) typically function as mediators in the association between parental discriminatory experiences and adolescent outcomes. Various family factors, such as parental mental health and familism, can also work together to impact ethnic minority adolescent development. Only a few studies examined how family factors buffer (e.g., high familism) or exacerbate (e.g., low family income) the effect of parental discriminatory experiences on adolescent adjustment. In terms of implications for theoretical perspectives guiding the research, it would be important to move beyond the extant literature's focus on adolescents' own experiences of discrimination to also consider the role of other family members' (especially parents') discriminatory experiences on adolescent outcomes. In terms of implications for interventions, although dismantling racism is the most important solution, it may be more immediately fruitful to focus on designing interventions where family factors are targeted to reduce the negative impact of parental discriminatory experiences on adolescent outcomes.

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Authors' Contributions JZ conceived the study, participated in the literature review, collaborated in the development of the search strategy, led the synthesis of the studies' findings, and drafted the full manuscript; WW and KC participated in the design of the literature review and helped draft the manuscript; YS collaborated in the design of the literature review, conceived part of the discussion, and helped draft the manuscript; YD and JY assisted with evaluating the studies' findings and helped draft the manuscript; MPYC participated in the title/abstract screening and full-text review and helped draft the manuscript; SYK co-conceived the study, developed the search strategy, supervised the title/abstract screening and full-text reviewing, synthesized the studies' findings, and drafted and supervised the manuscript writing. All authors have read and approved the final manuscript.

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Declarations

Conflict of interest The authors report no competing interests to declare.

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