Emotion regulation and coping with racial stressors among African Americans across the lifespan

Tyia K. Wilson [a],*, Amy L. Gentzler [b]

[a] University of Pittsburgh, United States
[b] West Virginia Univeristy, United States

ABSTRACT

This critical review is one of the first to take a lifespan approach to examine the emotion regulation (ER) and coping strategies used by African Americans in response to racial-related adversities (e.g., discrimination, racism, prejudice) and to discuss why African Americans may engage in these specific strategies. The current review found that African Americans continue to experience racial discrimination throughout the lifespan. The most prominent coping and ER strategies among African American in response to racial discrimination appear to be negative emotion expression suppression, avoidant coping, social support, and religion/spirituality. The review discusses various factors that may underlie these patterns (e.g., power differentials, African Americans' history and African culture) and also limitations of current ER and coping research. By examining stability and changes across the lifespan, time, and varying situations, more inferences about patterns of coping and ER and contributing factors can be made to better determine ways to help decrease or mitigate the effects of racial stress on African Americans' lives.

Past research often examined emotion regulation (ER) and coping strategies in limited samples (e.g., predominantly White) and generalized the results to other races and ethnicities (e.g., Gross, 1998a; Lazarus & Folkman, 1984). As a result, there is an immense amount of research on ER and coping strategies among European Americans (e.g., Webb, Miles, & Sheeran, 2012), but less research among African Americans. However, research is now becoming more inclusive and examining cultural, racial, and ethnic differences in coping and ER (e.g., Barbarin, 1993; Supplee, et al., 2009). Additionally, researchers are now focusing on African Americans' ER and coping strategies in response to racial stressors such as discrimination, racism, oppression, and prejudice. Although multiple minority groups can experience stress resulting from racism and discrimination, African Americans have a unique history of oppression through slavery. Thus, this review examines ER of negative and positive affect and coping patterns among African Americans in response to racial stressors.

It is critical to examine ER and coping in this population. African Americans have poorer health outcomes and life expectancies than White Americans (e.g., Bond & Herman, 2016; Goosby, Cheadle, & Mitchell, 2018). As part of Clark, Anderson, Clark, and Williams' (1999) biopsychosocial model of racism, racism is a major source of stress for African Americans, and emotion dysregulation and maladaptive coping can exacerbate the effects of racism on health. Thus, better understanding on how African Americans cope with racial stressors is critical. By identifying effective ways to cope and regulate affect can inform prevention and intervention work to help limit deleterious effects of racism on people's emotional wellbeing and health outcomes (Graham, Calloway, & Roemer, 2015).

* Corresponding author.
  E-mail address: tkw13@pitt.edu (T.K. Wilson).

Furthermore, we discuss ER and coping patterns across the lifespan, which could vary for multiple reasons (e.g., changes in development, cohort, or cultural or policy shifts). By examining stability and changes across the lifespan and across time, we can make inferences about contributing factors to African Americans' ER and coping (e.g., parental emotion socialization) and determine ways to help decrease or mitigate the effects of racial stress on African Americans' lives.

Racial stressors

Race-related stress (e.g., racial discrimination) has been found to be more detrimental to African Americans than non-race related stress (Brondolo, Rieppi, Kelly, & Gerin, 2003). Race-related stressors can account for both acute and chronic experiences with racism and discrimination (Utsey & Ponterotto, 1996). Racial stressors can be defined as "race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that tax or exceed existing individual and collective resources or threaten well-being" (Harrell, 2000). These stressors can occur during interpersonal interactions with close others, acquaintances, or strangers (and can occur directly to a target person or can be vicarious and happen to a close other), or the stress can stem from knowledge of cultural racism, institutional racism, and collective racism (e.g., Harrell, 2000; Utsey & Ponterotto, 1996). Racial discrimination is the most prominent stressor in African Americans' everyday lives (Clark, Anderson, Clark, & Williams, 1999) and leads to a host of detrimental outcomes. African Americans who report experiencing racial discrimination have reported low levels of well-being (Deitch et al., 2003), greater anger expression (Brondolo, Ver Halen, Pencille, Beatty, & Contrada, 2009; Utsey et al., 2000), and higher depressive symptoms (Hudson, Neighbors, Geronimus, & Jackson, 2016; Sellers et al., 2006; Wong et al, 2003). Perceived racial discrimination has also been linked to poorer health outcomes such as increased blood pressure (Krieger & Sidney, 1996; Lewis et al., 2009), high inflammatory markers in children (Goosby et al., 2018) and older adults (Lewis et al., 2009), and even mortality (Barnes et al., 2008; Williams, Neighbors, & Jackson, 2003).

Racial discrimination

African Americans are more likely to experience racial discrimination than other racial groups (e.g., White and Mexican Americans; Fisher, Wallace, & Fenton, 2000; Romero & Roberts, 1998). However, discrimination and racism has changed throughout the years and individuals have become less overt about their racial beliefs, which is known as "modern day racism" (McConahay, 1986). Even if at times it may be more subtle, African Americans still report experiencing discrimination every day (Essed, 1991; Sue et al., 2007). For example, African Americans reported experiencing subtle forms of racism in both predominantly White and ethnically diverse colleges and universities, including microaggressions (i.e., microinsults and microinvalidations; Mercer et al., 2011; Sue et al., 2007). Moreover, there may be a recent upswing in racial discrimination experiences the United States. Since Trump was elected as President in 2016, the Pew Research Center reports that 45% of Americans think it has become more acceptable for people to express racist views (compared to 31% who said similarly acceptable and 23% less acceptable now than in the past), and 65% think it has become more common for people to express racist views (Pew Research Center, 2019). Thus, African Americans are likely to face discrimination frequently and across their lifespan.

Discrimination across the lifespan. African Americans can experience various types of racism and discrimination throughout their lives. Sadly, at an early age, African American children experience racial discrimination and unequal punishment from their teachers (Gregory, 1995). For example, in one study, preschool teachers were more likely to watch African American boys than White boys when expecting challenging behaviors (Gilliam et al., 2016). Due to teachers preconceived negative stereotypes, African Americans, especially boys, are more likely to receive harsher punishment in school than their White peers (Shaw & Braden, 1990). African American boys face harsher discipline in school and are labeled aggressive and violent more often than White or African American girls (Eitle & Eitle, 2004; Ferguson, 2000; Morris, 2007). Additionally, African American adolescents report experiencing discrimination from their teachers and classmates (Wong et al., 2003) and more than half of the sample of African American college students reported being verbally insulted at least once or twice at their campus (D'Augelli & Hershberger, 1993).

As African Americans get older, they report experiencing discrimination and/or racism in the streets or public places, from the police or in the courts, in hospitals and especially at work (Krieger & Sidney, 1996). African Americans report experiencing discrimination in the hiring process, promotions, and report receiving unfair treatment in their current job (Hughes & Dodge, 1997; Martin, Tuch, & Roman, 2003). African American nurses reported experiencing discrimination in the workplace such that they received fewer challenging jobs, poorer supervision, and were offered fewer rewards than their White coworkers (Marshall and Barnett, 1992). Furthermore, Deitch and colleagues (2003) found that African Americans adults were more likely to experience everyday discrimination (e.g., unkind and/or unfair treatment at work) than their White colleagues (Deitch et al., 2003), and institutional discrimination and interpersonal prejudice predicts decreased job satisfaction after controlling for other job characteristics and work stress (Hughes & Dodge, 1997). Even elderly African Americans report experiencing various race related stress (e.g., cultural, institutional, individual, and collective; Utsey et al., 2002). Due to the persistence of racial stressors in African American's lives, this review examines African American's ER and coping strategies in relation to racial stressors across the lifespan.

Emotion regulation and coping

Emotion Regulation. Coping and ER are two overlapping constructs. Although used interchangeably at times due to similarities (e.g., both often involve attempts to decrease negative emotions), ER is distinct from coping in some ways (e.g., ER may involve contrahedonic attempts to increase negative emotions or decrease positive emotions). ER can be defined as a process in which an individual

manages their positive or negative emotions before, during, or after an event or situation (Gross, 1998b). Generally, people tend to use strategies that either upregulate (i.e., increase) or downregulate (i.e., decrease) their emotions. The current review examines how African Americans manage their negative emotions when dealing with racial stressors. Two common ways individuals regulate their emotions are cognitive reappraisal and expressive suppression (Gross, 2001). Cognitive reappraisal can be an antecedent-focused strategy (e.g., occurs before the emotional response) and can be defined as reinterpreting an emotional situation to alter its emotional impact (Gross, 1998a). Expressive suppression is a response-focused strategy (e.g., during the emotional response) and can be defined as inhibiting, hiding or reducing the expression of an emotion (Gross, 1998a). Experimental studies found that cognitive reappraisal effectively decreased negative emotional experiences, thus it is often considered a functional ER strategy (Gross, 1998a; Troy et al., 2018). Conversely, expressive suppression, although it may help to decrease felt emotions, it can be physiologically or cognitively taxing and it can decrease positive emotions (Gross, 1998a; Gross & John, 2003; Pennebaker & Seagal, 1999). Thus, suppression is often considered a less functional ER strategy.

However, when considering if ER (or coping) strategies are effective or ineffective at decreasing distress, or adaptive or mal-adaptive in the longer-term, there are not absolutes because situational or individual-level factors impact whether a particular strategy is effective or adaptive (Bonanno & Burton, 2013; Ford & Troy, 2019). For example, research has found that reappraisal can sometimes be maladaptive, if for example, people are less skilled at doing it (e.g., Ford, Karnilowicz, & Mauss, 2017) or that suppression of expression can be effective to decrease negative feeling, even if attempts to directly suppress the feelings or thoughts of the stressor is not as effective (Webb et al., 2012). Moreover, when considering the importance of culture and discrimination, studies suggest that reappraisal is less helpful when in the context of more oppression for Latinos (Perez & Soto, 2011; Soto et al., 2012) and suppression can be more adaptive for Chinese individuals compared to European-American individuals (Soto, Perez, Kim, Lee, & Minnick, 2011). Therefore, while generalizations are sometimes made about strategies' effectiveness or adaptiveness, it is essential to also consider how unique characteristics of individuals, stressors, or situation may moderate how effective or adaptive strategies are.

Although much of the research on ER focuses on regulation during or after the emotion, ER also includes situation selection and modification, which are pre-emptive attempts to get into or out of situations or otherwise alter situations to elicit or avoid certain emotions (Gross, 1998b; see Fig. 1). Focusing on the situation can be adaptive because it is preventative to avoid the situation (Webb et al., 2018), but if used excessively it is linked to anxiety (Werner et al., 2011) and could limit people's experiences. Throughout the review, the prevalence of expressive suppression among African Americans will be highlighted due to its prominence in research with African Americans, but we also discuss other ER strategies as relevant or as future directions.
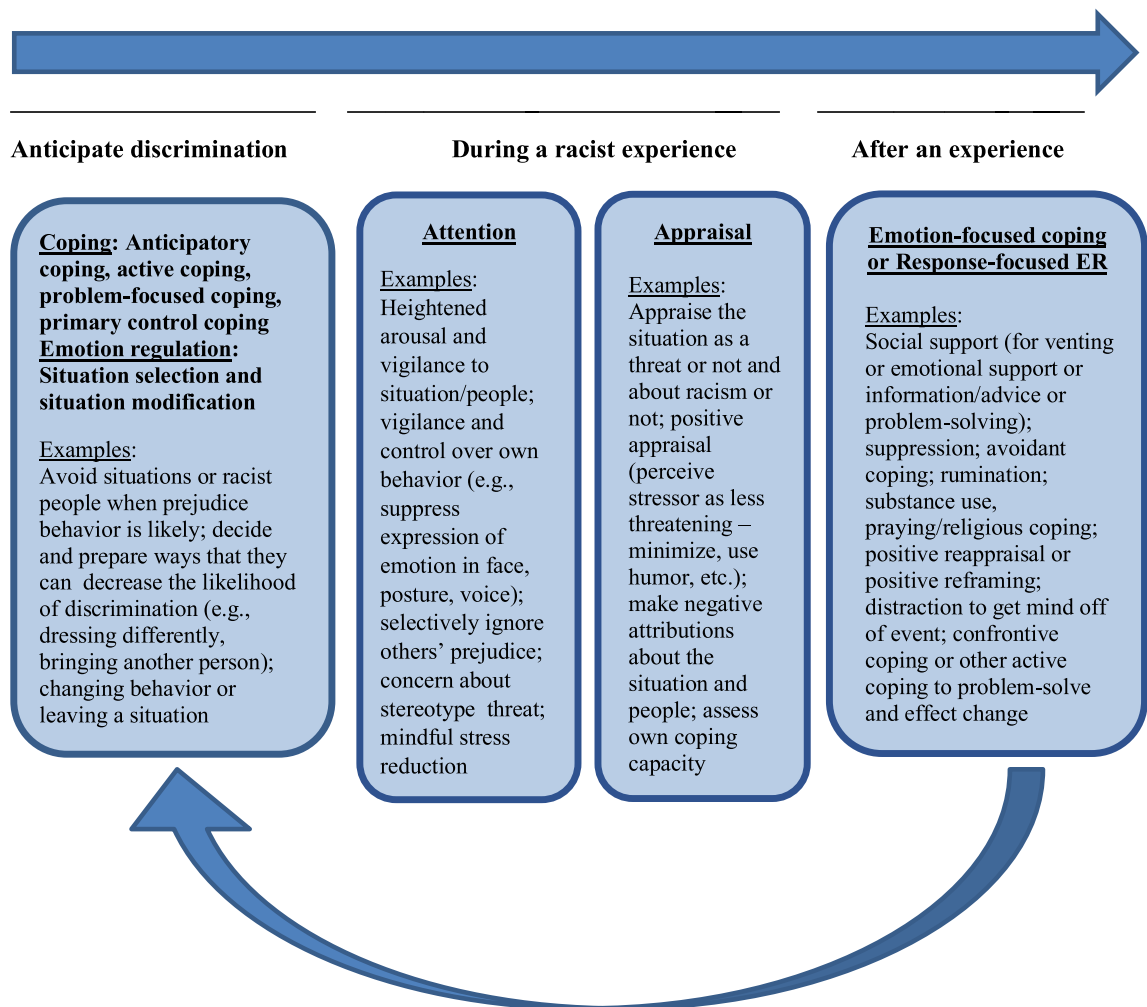
Coping. Coping differs from ER by its focus on stress and it can involve attempts to problem-solve rather than address the emotions directly. Coping can be defined as emotional, cognitive, and behavioral strategies used to adapt to or decrease stress (e.g., Compas, 1987; Lazarus & Folkman, 1984). There are various ways to conceptualize the subtypes of coping (Compas, Jaser, Dunn, & Rodriguez, 2012; Skinner, Edge, Altman, & Sherwood, 2003), but according to Lazurus and Folkman (1984), coping strategies fall into two general categories: problem-focused coping and emotion-focused coping. Problem-focused coping targets the problem and occurs when an individual actively attempts to change the situation to reduce or remove the stressor. Examples of problem-focused coping include confrontive (e.g., confront the problem in an effective or ineffective way) and planful problem solving (e.g., developing a plan to resolve the problem; Hoggard, Byrd, & Sellers, 2012).

In contrast, emotion-focused coping involves attempts to decrease negative emotions resulting from stress (Feldman & Bishop, 1997; Lazarus & Folkman, 1984). Examples of more effective coping strategies include social support (e.g., reaching out for assistance or comfort) or using prayer or religion to cope (Horton & Loukas, 2013; Neighbors, Jackson, Bowman, & Gurin, 1983). Less effective types of emotion-focused coping are avoidant coping (e.g., avoiding thoughts or emotions about the stressful event) and using alcohol or drugs to cope (Hoggard et al., 2012; Martin & Roman, 2003). Emotion-focused coping is a common way that African Americans cope with racial-related stressors. Another type of coping, called John Henryism, is characterized by high levels of active coping and working hard to succeed in work and social domains (James, Hartnett, & Kalsbeek, 1983), which has been related to negative health outcomes (e.g., high blood pressure; Clark et al., 2001; James et al., 1983, 1987; Volpe, Rahal, Holmes, & Rivera, 2020) or mental health outcomes (e.g., depressive symptoms; Hudson, Neighbors, Geronimus, & Jackson, 2016) for African Americans. However, some studies have found John Henryism coping is only related to negative outcomes for men (Subramanyam et al., 2013) or even that it relates to positive outcomes (lower likelihood of opioid problems or needing mental health services; Jones et al., 2019; greater engagement in healthy behaviors; Lehto and Stein, 2013). In general, like with ER, there are challenges to categorizing coping strategies as wholly adaptive or maladaptive, and even to categorizing coping strategies given behaviors can serve multiple purposes (e.g., social support can be problem or emotion focused; Skinner et al., 2003).

Both emotion-focused and problem-focused coping share features with the construct of ER. Emotion-focused coping overlaps with ER attempts that are carried out with the intent of decreasing negative affect (Gross, 1998b). Problem-focused coping overlaps with Gross's inclusion of situation selection and modification as ER (see Fig. 1) where in both cases, people alter situational contexts to prevent negative emotions (Gross, 1998b; Riediger & Klipker, 2014). For instance, changing one's behavior in a situation where discrimination is likely (e.g., choosing to avoid working on a project with a particular coworker) could be carried out to effectively perform one's job or for emotional reasons (e.g., to prevent feeling anger or distress). Therefore, this review highlights both ER and coping used across the lifespan.

Adaptive culture of African Americans

African Americans' coping and ER strategies can differ from other racial groups due to various environmental and historical factors. In the past, African Americans were forced to enslavement, and even though enslavement of African Americans was abolished over a

Anticipate discrimination   **During a racist experience**   **After an experience**

Coping: Anticipatory coping, active coping, problem-focused coping, primary control coping
Emotion regulation: Situation selection and situation modification

Examples:
Avoid situations or racist people when prejudice behavior is likely; decide and prepare ways that they can decrease the likelihood of discrimination (e.g., dressing differently, bringing another person); changing behavior or leaving a situation

Attention

Examples:
Heightened arousal and vigilance to situation/people; vigilance and control over own behavior (e.g., suppress expression of emotion in face, posture, voice); selectively ignore others' prejudice; concern about stereotype threat; mindful stress reduction

Appraisal

Examples:
Appraise the situation as a threat or not and about racism or not; positive appraisal (perceive stressor as less threatening – minimize, use humor, etc.); make negative attributions about the situation and people; assess own coping capacity

Emotion-focused coping or Response-focused ER

Examples:
Social support (for venting or emotional support or information/advice or problem-solving); suppression; avoidant coping; rumination; substance use, praying/religious coping; positive reappraisal or positive reframing; distraction to get mind off of event; confrontive coping or other active coping to problem-solve and effect change

Fig. 1. Examples of Coping and Emotion Regulation (ER) that African Americans may do in anticipation of, during, and in response to experiences involving racism or discrimination.

century ago, African Americans continue to face discrimination and racism in society. This prejudicial treatment not only affects African Americans' culture, but also the types of stress that African Americans are exposed to and how African Americans regulate and cope with their emotions. Due to these stressors, African Americans developed an adaptive culture to cope, which is a social system influenced by goals, values, attitudes, and behaviors that is different from the dominant culture (Garcia Coll et al., 1996). African Americans often cope by valuing emotional self-control and limiting their self-disclosure (Consedine & Magai, 2002; Plasky & Lorion, 1984). These coping strategies may help African Americans become less reactive to negativity and more reserved, which could potentially make them less vulnerable to discrimination and racism. Additionally, African Americans may promote adaptive coping strategies in their children to help them to survive in a prejudicial society.

Parenting beliefs and behaviors. It is a parent's or caregiver's responsibility to keep their child safe. Therefore, parents teach their children strategies that will encourage survival and foster their cultural competence (Keller, 2007). Due to adversities that African Americans experience (e.g., discrimination, racism, oppression), African American parents often have to socialize their children in different ways than non-African American parents. African American parents often face a triple quandary, which is when a parent must try to balance responsibilities of encouraging cultural pride, preparing children for life in mainstream society, and helping children to deal with racism and discrimination (Boykin, 1986). Analogous to any parent trying to protect their child from maltreatment, African Americans feel the need to protect their child from any negative connotations associated with their race. To successfully interact with the majority of people in society, African American parents believe it is imperative that their child have obedience and compliance (Kelley et al., 1992). African American parents want to protect their child and believe the more obedient and compliant their child is, the fewer problems their child will encounter. The values that African Americans have, such as self-control, self-disclosure, obedience, and compliance, play a significant role on their parenting styles and how they socialize their children's ER and coping.

Parental emotion socialization. African American parents often engage in emotion socialization strategies that help prepare their

Table 1

Studies with Infants, Children, and Adolescents.

Study (Citation)	Number of participants	Age range of participants	Demographics (SES, location)	Stressor	Coping strategy/ Emotion regulation	Findings
Anderson & Stevenson, 2019	N/A review article	N/A	African American families	Racial Stressors	Coping (reappraisal, decision-making, and resolution)	• Coping with race-related stressors requires a process where events are perceived and read with respect to their appraisal as discriminatory racial encounters • The relationship between race-related stress and coping is believed to be mediated by parents' and children's confidence and expectations of the outcome of coping effectively with discriminatory racial encounters
Anderson, Mckenny, & Stevenson, 2019	N/A review	N/A	African American families	Discriminatory Racial Encounter	Coping: Stress management, resolution, self-efficacy	• Proposed the EMBRace intervention to help families deal with racial discrimination through healthy coping strategies. These strategies include having the ability to recognize racial discrimination, accurately appraise the stress of self and others, reduce one's stress, engage instead of avoid, and finally resolve toward healthy outcomes.
Griffith, Hurd & Hussain, 2019	12 Black undergraduates	N/A	Attended a large, predominantly White public university in the southeastern United States 66% African American (n = 8) 16% Nigerian (n = 2) 8% Kenyan (n = 1) 8% Biracial (n = 1).	Semi-structured interviews about discrimination experiences at school ("What types of experiences, if any, have you had with discrimination since being a student at [this school]?")	Semi-structured interviews about coping strategies (How do you deal with these experiences?)	• Black students experienced a variety of race-related stressors ranging from heightened awareness of negative stereotypes about Blacks to experiences with blatant racial discrimination. • When experiencing discrimination students described various coping responses: processing the event (n = 8), selectively seeking support (n = 11), working harder and persisting (n = 9), and educating their White peers (n = 5)
Guthrie et al., 2002	105 African American girls	11–19 years (M_{age} = 15.45)	Not pregnant 70.5% Middle Class 72.4% lived in female single-headed families 37.1% received some form of public assistance	Everyday Discrimination Scale (Williams et al., 1997) measures routine and relatively minor experiences of unfair treatment	Cigarette smoking The Monitoring the Future Survey (Johnston & O'Mal-ley, 1985)	• 52% of the sample reported that they had experienced at least one type of racial discrimination. • The most common form of discrimination reported by the sample was feeling that they received poorer service than other people at restaurants or stores (27%) and feeling that they were treated with less courtesy than other people (26%). • Discrimination was highly related to the smoking habits of African American girls. A one-point increase in the

Table 1 (*continued*)

Study (Citation)	Number of participants	Age range of participants	Demographics (SES, location)	Stressor	Coping strategy/ Emotion regulation	Findings
						discrimination variable was associated with a 37% greater likelihood of smoking. • Daily hassles mediated the relationship between discrimination and smoking in that the likelihood of smoking decreased to 31% for each onepoint increase in discrimination when daily hassles were included in the equation.
Hughes et al 2007	48 European American children (Study 1) 69 African American children (Study 2)	6–11 years ($M_{age} = 8$)	48 European American children from Midwest 69 African American children from Southwest Predominantly middle class	Racism experienced by African Americans presented in history lessons	Cognitive and affective responses (6 subscales: endorsement of countersterotypic beliefs, perception of within-group variability, perception of between-group variability, valuing of racial fairness, racial guilt, and racial defensiveness	• European American children who received experimental procedure (learned about racism toward African Americans) held more positive and less negative views toward African Americans; no significant difference in African American sample • Both lessons (control & racism) appeared to increase positivity toward both groups (White & Black) in African American children • African American children also reported increased negativity toward European Americans
Jelsma & Varner, 2020	610 African American adolescents	7th, 8th & 11th graders	Median household income: $45,000-$49,000 36% of the adolescents' primary caregivers (86% mother; 66% married) had a high school diploma or less	Perceived discrimination from teachers and peers (Wong et al., 2003)	Asked the frequency of alcohol and drug use in the past 6 months	• Peer-perpetrated and teacher-perpetrated racial discrimination experienced in eighth grade were both directly related to higher alcohol use in 11th grade • Higher school-based racial discrimination was associated with higher likelihood of marijuana use among adolescents with low peer pressure
Sales et al 2015	304 African American adolescent females	14–20 years ($M_{age} = 18.09$)	Recruited from three reproductive health clinics in Atlanta, GA 42% of participants living with their mother only	Schedule for Racist Events scale (Landrine & Klonoff, 1996)	COPE scale (Carver et al., 1989)	• Participants with high racial discrimination experiences were more likely to report high depressive symptoms compared to the those with low discrimination • Higher depressive symptoms were positively correlated with avoidance-based coping
Scott, 2003	88 African American students	14–18 years ($M_{age} = 15.6$)	Attended small, private, and religious-oriented HS in northern Alabama 53% Resided in two-parent homes 47.9% of parents were professionals and held advanced degrees	Daily Life Experiences and Racism Experiences Stress Scale (Harrell, 1997)	Self-Report Coping Scale (Causey & Dubow, 1992)	• Participants who experienced high levels of discrimination distress tended to use more internalizing and externalizing strategies to cope with perceived discriminatory experiences • African American adolescents who received more frequent messages concerning racism from their parents or guardians tended to use more self-

Table 1 (*continued*)

Study (Citation)	Number of participants	Age range of participants	Demographics (SES, location)	Stressor	Coping strategy/ Emotion regulation	Findings
Seaton, Upton, Gilbert & Volpe, 2014	314 Black adolescents	13–18 years (M_{age} = 15.6)	Attended high schools in a Southeastern city 67% Female 49% parents married/ cohabitating	Racism and Life Experiences Scale (Seaton, Yip, & Sellers, 2009)	Children's Coping Strategies Checklist (Ayerset al., 1996)	reliance/problem-solving strategies to cope with perceived discriminatory experiences • Racial discrimination was associated with avoidant coping, racial centrality, public regard, and depressive symptoms. • Avoidant coping strategies mediated the influence of experiences of racial discrimination on depressive symptoms for Black youth who had moderate to high levels of the minority/oppressive eideology.
Steele et al., 2003	107 African American children 482 White children	7–18 years (M_{age} = 12)	White: 40% had serious illness, 62% from high SES AA: 57% had serious illness, 31% high SES similar # of males and females	Race	Anger Expression Scale for Children (AESC; Phipps & Steele, 2001)	• Lower anger expression was seen in AAs and seriously ill children • AA had the greatest anger control • The healthy/African American subgroup had the highest anger control scores to the White sub-groups • AA reported higher levels of defensiveness than Whites • AA classified as more repressors compared to White • White/healthy had lowest incidence of repressors while African American/ill had the highest incidence
Terrell et al., 2006	134 Black adolescents	14–18 years (M_{age} = 16.45)	Reside in Northeast Texas 68% female	Black Anger Measure (Terrell & Miller, in press) identify the extent to which Blacks are angry at Whites as a result of being discriminated against	Cut Down, Annoyed, Guilty, Eye Opener alcoholism screening questionnaire (Ewing, 1984)	• Racial discrimination-induced anger did not significantly predict alcohol consumption among Black adolescents
Volpe et al., 2018	234 Black undergraduate students	(M_{age} = 19.33)	68.7% Female Attended large public predominantly White institution in the southeastern US Most students were in their first (41.90%) or second (29.50%) year	Racism and Life Experiences Scale (Harrell,1997),	John Henryism Active Coping Scale (James et al., 1987)	• The interaction between exposure to racial discrimination and John Henryism was associated with diastolic blood pressure • John Henryism moderated the relation between exposure to racial discrimination and diastolic blood pressure • More frequent exposure to racial discrimination was associated with higher diastolic blood pressure when participants used high levels of John Henryism, • When participants used low levels of John Henryism, there was no association between exposure to racial discrimination and diastolic blood pressure

child for the discriminatory society. Parental emotion socialization is how parents model ER, discuss emotion and react to their child's expression of emotions, which can intentionally or unintentionally influence children's emotional development (Eisenberg, Cumberland, & Spinrad, 1998). Generally, research has found that African American parents tend to respond in supportive ways when handling their child's positive emotions (e.g., Garrett-Peters et al., 2008) and are more likely to respond to their child's negative emotions in more dismissive ways (Nelson, Leerkes, O'Brien, Calkins, & Marcovitch, 2012; Parker et al., 2012). African American parents' experience with racial discrimination can even impact how they parent their children, in that they anticipate that their child will also experience it, and feel obligated to provide their children with strategies to cope (Hughes, 2003; Hughes & Chen, 1997). Given that racial discrimination is very salient and impactful in African American families, this review highlights the various ways African Americans handle this racial stressor throughout their lives.

Focus of the review

There currently is no literature that summarizes the ER and coping strategies in African Americans across the lifespan. This critical review is the first to take a lifespan approach to examine the ER and coping strategies used by African Americans in response to racial-related adversities/stressors (e.g., discrimination, racism, prejudice) across each age period and to discuss why African Americans may engage in these specific strategies. This review also highlights the limitations of current research on ER and coping to direct future studies examining this understudied population.

Emotion regulation & coping across the life span

Infancy

There is limited research on ER and coping strategies in African American during infancy and toddlerhood (birth to 4 years old) and whether their strategies differ from infants of other racial groups. Research on ER more generally suggests that an infant's environment (e.g., parenting; Cassidy, 1994) and biology (e.g., temperament, psychophysiological reactivity; Calkins, 1994) influence their emotion regulation and coping strategies. Due to the vital role that parents play in socializing their child's ER and coping, especially in infancy (Klimes-Dougan & Zeman, 2007), ER and coping in infancy is discussed in relation to parental socialization.

With parents' emotion socialization specifically, similar to all parents, African American parents socialize their children to be successful citizens of society. Research suggests that African American parents teach their children to suppress emotions and have high emotion controllability at an early age. Berlin, Brady-Smith and Brooks-Gunn (2002) examined parenting behaviors among White, African American, and Latina low-income mothers of 14-month-old infants. Parenting behaviors (e.g., supportiveness, detachment, intrusiveness, and negative regard/hostility) were measured during a 10-minute free play. The study found that African American parents typically scored lower on sensitivity and higher on control than European Americans (Berlin et al., 2002). This pattern is consistent with African Americans' views of an adaptive culture for their child and their values. Having high levels of control and less sensitivity allows children to adapt to the harsh environment of society (e.g., racism) and prepare them for racial adversities.

Additionally, African American parents are more likely to up-regulate their child's positive emotions than their White counterparts. Garret-Peters and her colleagues (2008) examined whether there were cultural differences in the mothers' early emotion talk. This short longitudinal study included both White and Black mothers of 6–8-month-old babies from high poverty rural area. The study observed mother–child interactions when the mother described a picture book with their infant and during a free-play period. African American mothers were more likely to engage in positive emotion talk with their children than White mothers after controlling for maternal education, maternal age, child age, and location of residence (Garrett-Peters et al., 2008). Because African American parents may be aware of the racial stressors that their children will face throughout their life, parents may want to teach their children to savor (e.g., up-regulate or maintain positive affect) the positive moments in hopes of buffering the negative effects of racial stressors. These studies suggest that African American parents' controlling behavior of their child's negative emotions is detectable even at this young age. Because research indicates that parents' socialization of children's coping and ER strategies influence their children's use of these strategies (Abaied & Rudolph, 2010), parents who engage in unsupportive emotion socialization strategies may be teaching their child that these emotions are inappropriate and to suppress their emotions.

Childhood

In childhood (ages 4–10 years), children develop a better understanding of racism (Branch & Newcombe, 1986). For example, young African American children (6–7-year-olds) understand that their racial group has a lower status than Whites (Bigler, Averhart, & Liben, 2003). Only a few studies have examined ER in low-income children, where the sample is predominantly African American. For example, Garner and Spears (2000) conducted a study examining the ER among low-income children (3–6 years old; 91% African American). After observing the children's emotional behavior in their naturalistic preschool setting, the most common coping strategy when angry was venting (e.g., expressing the emotion without any action toward resolving the situation) or seeking support from an adult. Additionally, observers suggested that the children expressed more anger than sadness and showed avoiding behaviors to their own sadness response (e.g., avoiding sad situations). Although some African American children may engage in dysfunctional ER and a significant amount of their African American parents are rejecting of their negative affect, the majority of African American children are well adjusted (Achenbach, Howell, Quay, & Conners, 1991) and have low rates of serious emotional disturbances (Barbarin, 1993). These inconsistent findings may be explained by age and emotional abilities. While it is natural for children to engage in some

ineffective ER and coping, with age, children can develop more advanced regulatory skills (e.g., use of cognitive distraction) due to cognitive advances (e.g., Altshuler & Ruble, 1989; Campos, Frankel, & Camras, 2004).

Adolescence

Adolescence (age 11–18 years) is a crucial period of development when adolescents not only explore and establish their self-identity, but also their racial identity (Cross & Fhagen-Smith, 2001). For African Americans, this also is a time where adolescents are more susceptible to negative stereotypes regarding African Americans and may internalize these negative views (Cross & Fhagen-Smith, 2001). Additionally, peers start to be more salient during adolescence, such that adolescents turn to friends for emotional support more than to their parents (Helsen, Vollebergh, & Meeus, 2000). Peers play an important role in African Americans' ethnic identity. For example, African American adolescents who reported having close friendships and more contact with other African Americans experienced a positive change in their ethnic identity status (e.g., greater exploration and commitment; Yip, Seaton, & Sellers, 2006). Furthermore, African American adolescents who reported greater percentage of African American friends reported positive feelings about their ethnic-racial group (Derlan & Umaña-Taylor, 2015). However, peers can have a negative effect on adolescent outcomes such that racial discrimination from peers were related to lower levels of socioemotional and psychological well-being (Benner & Graham, 2013). Additionally, peer-perpetrated racial discrimination experienced in 8th grade were related to higher alcohol and marijuana use in African Americans in 11th grade. Peer pressure is one of the strongest predictors of adolescent substance use (Chassin et al., 2002), which may be especially salient to minority youth such as African Americans if they anticipate further social exclusion if they do not give in to peer pressure (Petraitis, Flay, & Miller, 1995).

Experiences with racial discrimination can have detrimental effects on the adolescent, such as internalizing and externalizing behaviors (Clark, Coleman, & Novak, 2004), depressive symptoms (Sellers et al., 2006; Wong et al, 2003), and perceived stress (Sellers et al., 2006). To combat these negative outcomes, African American adolescents can engage in various coping behaviors. Some ways that African American adolescents cope are ineffective, such as cursing out loud to the perpetrator or engaging in emotion-focused coping such as drug use to cope with discrimination (Scott, 2003). Substance use is a common coping strategy for adolescents who report experiencing racial discrimination (e.g., Gerrard et al., 2012; Gibson et al., 2010; Jelsma & Varner, 2020). Additionally, Guthrie et al. (2002) found that African American female adolescents who reported experiencing racial discrimination were more likely to cope with these stressors by smoking cigarettes than African American males.

African American adolescents also engage in various ER strategies when dealing with racial stressors. One study conducted by Steele, Elliot and Phipps (2003) sampled African American and White children between the ages of 7–18 years old ($M_{age} = 12$) with mixed levels of socioeconomic statuses (e.g., high, medium, and low). After controlling for age, sex and SES, African American youth were more likely to report suppressing their anger than White youth, whereas White youth were more likely to report expressing their anger more than African American youth (Steele et al., 2003). Additionally, Johnson and Greene (1991) conducted a study with African American male adolescents to examine the relationship between suppressed anger and psychological distress. The majority of the adolescents fell into the moderate- to high-suppression group. Further, adolescents with high levels of suppression had higher cardiovascular arousal, sleep disturbances, and stressful life events, highlighting the detrimental effects of emotional suppression (Johnson & Greene, 1991).

Emerging adulthood

Emerging adulthood (18 to 25 years) is a phase in life where an individual is no longer a teenager but not quite an adult (Arnett, 2000). Emerging adults are working on better understanding themselves and developing their self-identity, sometimes going to college to further their education (Jensen & Arnett, 2012). Although college is a time of self-exploration and growth, African Americans continue to face racism, discrimination, and oppression.

Consistent with earlier period of their lives, African American emerging adults are more likely to suppress their emotions than White individuals (Gross & John, 2003) and are more likely to believe that the expression of negative emotions is less acceptable than White adults (Matsumoto, 1993). African Americans also suppress their emotions when experiencing discrimination. For example, during discriminatory treatment by Whites, African Americans reported that they felt obligated to suppress their anger (Feagin & Sikes, 1994; McKinney & Feagin, 2003).

Although there are various ways African American emerging adults cope with discrimination, emotion-focused coping (e.g., avoidance, social support seeking) is common (e.g., Ingram & Wallace, 2019). Research has shown that individuals may utilize different coping strategies based on the type of stressor (e.g., racial vs. nonracial). For example, Hoggard, Byrd and Sellers (2012) sampled African American college students to examine their coping strategies to racial and nonracial stressful events. They found that avoidant coping was used more often with racially stressful events than nonracially stressful events (Hoggard et al., 2012). Also, after controlling for their appraisals (e.g., rating how taxing each stressor is), African American college students were more likely to use confrontive coping strategies (e.g., get into an angry verbal conflict with the people involved) when dealing with racially stressful events compared to nonracially stressful events (Hoggard et al., 2012).

Similarly, Utsey et al. (2000) examined racial discrimination and coping among African American college students. Results indicated that African American college students were more likely to seek social support (e.g., telling others about an event) than engage in problem-solving strategies (e.g., "brainstormed all possible solutions before deciding what to do") to cope with discrimination (Utsey et al., 2000). Moreover, African American women in the study were more likely to engage in avoidant coping (e.g., avoiding thoughts or actions about the stressful event) than African American males (Utsey et al., 2000). These results are consistent with Krieger and

Table 2
Studies with Adults (18 and older).

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
Bierman, 2006	2,581 European Americans; 201 African Americans	25–74 years (M_{age} = 45.56)	English-speaking adults from the National Survey of Midlife Development in the United States (MIDUS)	Frequency of discrimination	Religious Involvement (single item)	• Religious attendance buffered the association between discrimination and negative affect (e.g., psychological distress) in African Americans
Brantley, O'Hea, Jones, & Mehan, 2002	480 African American and European American adults	Middle aged (M_{age} = 45.52)	Patients at a primary care clinic Primarily low-income (M = $6,281) 80% female 75% African American	Everyday stressful situations	Emotion-focused: distancing, self-controlling, accepting responsibility, escape-avoidance, confrontive coping, positive reappraisal Problem-focused: planful problem solving Seeking social support	• AA reported the use of emotion focused coping such as distancing and positive reappraisal) more than European Americans.
Bogart et al., 2018	64 Black, sexual minority men who are HIV positive	Intervention n = 38 M_{age} = 46.2 Control group n = 26 M_{age} = 46.3	89% completed high school 72% Unemployed 58% Annual income less than $10,000	Participants tracked discrimination events that they experienced for 7 weeks of the intervention	Brief COPE (Carver, 1997) – denial, functional coping, humor, religion, self-blame, social support or venting, substance use Africultural Coping Inventory (Utsey et al., 2000) – cognitive/ emotional debriefing; spiritual coping; collective coping; ritual-centered coping	• The intervention led to higher levels of functional coping, humor, cognitive/emotional debriefing (positive reframing, social support, physical and psychological strategic avoidance)
Consedine, Magai, Cohen, & Gillespie, 2002	1,118 community dwelling older adults in large urban city	65–86 years (M_{age} = 73.8)	62% female; US-born African Americans, African Caribbean, US-born European Americans, Eastern European immigrants	Everyday stress (National Survey of Black Americans) in 10 target areas: health, money, job, problems with family or marriage, problems with people outside of family, children, crime, police, love life, racial conflict	Social support, emotion inhibition	• AA and African Caribbean reported least stress, Eastern European highest • AA and African Caribbean lowest in social networks, Eastern European highest • Eastern European highest in negative emotion, AA and African Caribbean lower (AA lowest) • AA and European Americans highest in emotional inhibition • Negative emotion in African descent predicted sleep symptoms and respiratory disorder • Greater inhibition of emotion in African descent associated with increased hypertension and sleep disturbance
Cooper et al., 2020	438 African American Men	M_{age} = 38.39	Fathers with 8–17-year-old sons	Daily Life Experience Subscale from Racism and Life Experience scales (Harrell, 1994); measures racial microaggressions in the past year	Coping using the BRIEF-COPE Inventory (Carver, 1997)	• Used Latent Profile Analysis to identify 8 profiles of fathers' coping • The most common profile (33% of the sample) included higher levels of

(continued on next page)

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
						support-seeking and problem-focused coping • Other coping profiles included: emotion-focused coping (more support-seeking, venting, avoidance, and distraction); low coping (less of all); active coping (more in support-seeking, problem-focused, venting, distraction, cognitive restructuring); problem-focused/low support-seeking; high-coping (reporting more of all); problem-focused coping; moderate avoidant/low active coping • Fathers reporting more discrimination experiences were more likely in the high coping or emotion-focused coping profiles
Crockett, Grier, & Williams, 2003	10 African-American men	20–37 years ($M_{age} = 33$)	All had some college experience 80% with bachelors's degree	In-depth interviews about marketplace discrimination (i.e., being treated more negatively due to group membership)	In-depth interviews about problem-focused and emotion-focused coping	• Problem-focused behaviors include dressing in a differently (i.e., professional instead of casual clothes) when shopping to decrease likelihood of differential treatment due to race, confronting the person who is discriminating or alerting the company or others about the discrimination • Emotion focused coping included distancing, self-protective appraisals, minimizing impact, humor, internalization (i.e., preparing themselves for expected discrimination)
Doyle & Molix, 2014	592 African American adults	34–85 years ($M_{age} = 51.64$)	MIDUS II sample recruited from Milwaukee, WI	Perceived discrimination in daily life	Perceived stress (Cohen et al., 1983), venting and denial from the COPE Inventory (Carver et al., 1989)	• Greater perceived discrimination was related to more perceived stress, which related to more emotion dysregulation (venting and denial) • Greater perceived discrimination also related to more inflammation, which was related to greater relationship strain (spouse, family, and friends)
Deitch, et al. 2003	Study 1: 314 first-line workers at an American corporation in mid-Atlantic states; Study 2: 5483	Study 1: 20–64 years; $M_{age} = 37$; Study 2: 20–50 years; $M_{age} = 31.6$;	Study 1: 79.6% white; 21.4% Black; 58% male; over 40% completed college degree or greater; average tenure on job 11.92 years	Everyday discrimination in job	N/A	• Black participants perceived more mistreatment than White participants in the workplace • Everyday discrimination partially accounted for lower job satisfaction

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
	individuals in US Navy; <u>Study 3</u>: 8311 US Army personnel	<u>Study 3</u>: 20–50 years; $M_{age} = 32.7$	<u>Study 2</u>: 23% Black; 80% Female <u>Study 3</u>: 40% Black;82% female			• Stress from everyday discrimination in workplace may be a factor for lower health • Black participants reported lower physical well-being than White participants • Emotional well-being was higher in Black than White participants; authors inferred this may be due to coping mechanisms and other factors that influence their wellbeing (e.g., religion, family)
English, Rendina, & Parsons, 2018	376 Bay and bisexual men of Black, Latino, or multiracial	18 to 63 years ($M_{age} = 35$)	Part of a larger study on Gay and Bisexual men from NYC 44.7% Black; 30% Latino; 25.3% multiracial	Everyday Discrimination Scale (Williams et al., 1997)	ER Difficulties Scale (DERS; Gratz & Roemer, 2004)	• Men reporting more racial discrimination reported more ER difficulties • Racial discrimination and an interaction with gay rejection sensitivity also predicted ER difficulty, which then predicted more internalizing symptoms 6 months later and more heavy drinking 6 months after that
Eschmann, 2019	27 undergraduate students of color	Undergraduate students	Midwestern University students of color	Sexist, racist, homophobic content posted on an anonymous Facebook page entitled "Politically Incorrect Mid-U Confessions"	N/A	• Some participants were surprised at the racist things being posted, challenging their originally positive view of their environment • Coping was challenging because anonymity made participants unaware of who was racist, homophobic, etc. so they weren't sure of how to deal with it • Making friends was challenging because of anonymity: hard to trust people of different races • Modified behavior to try not to fit stereotypes • Some turned to school for help but was unsuccessful because it was on Facebook • Some were glad everyone could see that racism still exists
Graham, Calloway, &	140 Black adults	18 to 70 years ($M_{age} = 25.98$)	Recruited in the community; 38.7% were full-time students	Schedule of Racist Events (SRE; Landrine & Klonoff, 1996)	ER Difficulties Scale (DERS; Gratz & Roemer, 2004)	• Both racist experiences and difficulties with ER were associated with more stress and anxiety

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
Roemer, 2015						• Higher levels of racist experiences predicted more anxiety symptoms for people with more ER difficulties but not for those with average or lower levels of ER difficulties; thus, effective ER was protective against racist experiences
Hall, Everett, & Hamilton-Mason; 2012	41 African American Women	18–55 years; 62.8% over 40	Fewer than $1/3$ married; 88.3% had bachelor's or higher; income range 5,000–50,000; 88.3% had jobs with clearly defined career paths	Racism/stereotypes and sexism; work stress; establishing relationships with coworkers; isolation in predominantly white work environments	Emotion-focused coping, problem-focused coping; shifting; caring for self and relying on other black females for support	• Felt subjected to unnecessary scrutiny (e.g., constantly monitored for behaviors associated with stereotypes) • Shift speech patterns and behaviors to ensure they didn't conform to stereotypical beliefs held by supervisors and colleagues • Common coping strategies: caring for themselves, relying on other Black females for support and using spirituality as a major support
Himmelstein, Young, Sanchez, & Jackson, 2015	221 Black adults	$M_{age} = 40.3$	66.1% female	Daily discrimination	Vigilance to discrimination	• Discrimination was related to higher levels of vigilance • Vigilance mediated the relationship between experiences of discrimination and stress
Hoggard, Byrd, and Sellers (2012)	225 African American college students	18–21 years; $M_{age} = 19.08$	74% female; had to have experienced one racially/nonracially stressful event in the 20-day study	racial hassles, perceived stress, situational characteristics	Appraisal, rumination, confrontation, and avoidance	• No difference in appraisals of racially stressful vs nonracially stressful events • Racially stressful events: less planful problem solving and more confrontative, ruminative, and avoidance coping mechanisms compared to nonracially stressful events
Horton & Loukas, 2013	984 technical/ vocational students	18 and older	41% white; 27.8% African American; 30.4% Mexican American adults recruited at two-year colleges in Texas	General Ethnic Discrimination Scale (GEDS; Landrine et al., 2006); discriminatory events at work, in public, health care settings	Brief RCOPE (Pargament, 1999) to assess positive and negative religious coping	• African Americans reported more discrimination more positive and negative religious coping than Mexican American and White participants • Contrary to hypotheses, African Americans' reports of more racial discrimination was related to more cigarette use when they also reported higher levels of positive religious coping

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
Hudson, Neighbors, Geronimus, & Jackson, 2016	2137 African American adults	18 to 90 years ($M_{age} = 42.5$)	From the National Survey of American Life Reinterview; 56.1% female; $M_{income} = 35,638$ ($se = 1676$) range $= 0$–520,000	Everyday Discrimination Scale (Essed, 1991; Williams et al., 1997)	John Henryism Scale for Active Coping (James et al., 1983) assessing high-effort active coping	• Higher levels of racial discrimination was related to higher John Henryism coping • Both discrimination and John Henryism coping were related to more depressive symptoms • No interaction was found between discrimination and John Henryism coping to predict depressive symptoms
Hughes & Dodge, 1997	157 African Americans	21–53 years ($M_{age} = 37$)	79 women AA in married-couple families with at least one child between age 4 and 14; 30 different community areas; Median family incomes rage $5,909 to $62,715	Racial bias in workplace	N/A	• Substantial number reported organizational sources of racial bias: salaries, benefits, job assignments, opportunities for advancement • Subtle biases reported: interpersonal interactions, stereotyping, feelings of discomfort in White coworkers and supervisors • Institutional discrimination and interpersonal prejudice predicted decreased job satisfaction more than structural features of work or other psychosocial job stressors
Ingram & Wallace, 2019	228 college students	18–60 years ($M_{age} = 25.6$)	66.2% Black/African American; 21.9% Latino/Hispanic; 14.5% Asian; 8.3% White/Caucasain	Authors created measures of Minority Student College Stress Survey and Mixed Methods Responses on Stress and Coping; they asked questions about racism and oppression and how stressful and traumatic it was	Asked about how they coped, bounced back, or healed from racism, oppression, or discrimination	• The most common form of coping (30.6%) reported was cognitive coping – reframing or distraction • Other responses included social support (19%), talking about the experience (17.4%), religion or spirituality (11.6%), advocacy/education/activism (7.4%), reading and writing to cope (5%), avoidance (5%), other stress reduction and self-care (4.1%)
Jackson & Wingfield 2013	Black male students at a predominantly White university	Undergraduates	Students from a campus organization (Uplift and Progress) for black men dedicated to eliminating stereotypes and encouraging positive ones regarding AA men	anger expression related to "angry black man" stereotype	Unity and brotherhood	• Anger was displayed by enforcing their ideals of brotherhood and policing acts of unprofessionalism • Only in certain contexts (e.g., all Black setting away from non-African Americans) were Black males comfortable expressing their feelings of anger, frustration, annoyance, and irritation
Jones et al., 2019	319 Black adults	$M_{age} = 44.6$				

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
			67.4% female; range from less than high school to college graduate, median = high school/GED (49.6%)	Experience of Discrimination Scale (Krieger, 1990; Krieger & Sidney, 1996) asked about discrimination in 8 domains	John Henryism Scale for Active Coping (James et al., 1983; 1994) assessing high-effort active coping	• Higher levels of John Henryism active coping were related to lower likelihood of opioid problem and being in need of mental health services • Racial discrimination predicted greater likelihood of opioid problem and being in need of mental health services, even with John henryism coping in the model
Joseph, Peterson, Gordon, & Kamarck, 2020	54 African American emerging adults	18–30 years (M_{age} = 23)	74% female; 53% in college; education range from high school or less to some graduate school	Detroit Area Study Everyday Unfair Treatment Scale (Williams et al., 1997) was used to assess past racial discrimination and momentary (hourly) daily discrimination for two days	N/A; examined trait (past week) and momentary (hourly for two days) negative and positive emotions, but not ER or coping	• Exposure to more momentary racial discrimination was related to more momentary negative emotions, particularly for participants who had the mean or lower percentage of African-Americans in their neighborhoods; thus, higher percentage of African American neighbors was protective • Exposure to more momentary racial discrimination was related to fewer psychosocial resources (e.g., self-esteem, connectedness, racial identity) when past racial discrimination was average or higher, but not when lower on past racial discrimination
Krieger & Sidney, 1996	831 AA men 1143 AA women 1006 White men 1106 White women	25–37 years	Resided in Alabama, Illinois, Minnesota, or California; Completed at least 12 years of education; broad SES	racial discrimination effects on health	Acceptance (e.g., keeping it to self) Action (e.g., talking about the issue)	• African Americans who typically accept unfair treatment had higher blood pressure than those who challenged unfair treatment or who had not experienced racial discrimination
Lykes, 1983	52 African American women	61 to 93 years (M_{age} = 76)	Participants were from the Black Women Oral History Project who were describing events in mid-1900 s; 60% were from the south; 22% less than 4-year college; 24% college; 29% Masters, 25% doctorate	Participants completed comprehensive interviews (about 5 h long) about a range of life topics (options, choices, experiences) by Black interviewers; later coded for incidents, attribution as prejudice or societal, and levels of perceived control	Asked about coping strategies in interview; coded for direct instrumentality, indirect instrumental coping, purposeful indirect coping, and flexibility of coping	• 33% did not describe racism; 37% described racism; and 31% described racism and sexism • Comparing the 67% with racism with the 33% not discussing it, those with racist discrimination used more direct instrumental coping and multiple strategies compared to those without • When people viewed situation as more within their control, they used more instrumental coping and had more flexibility

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
						• An interaction between situational and individual factors indicated that women who worked in a mostly black organization and attributed problem to prejudice and those working at mostly white organizations and attributed problem to society or institutional factors were both more likely to use instrumental coping
Martin & Roman, 2003	2,638 African Americans	18–96 years; ($M_{age} = 36.56$)	African American from National Survey of Black Workers w/ phone access;Mean income $37, 898	Perceived discrimination & prejudice	Escape drinking and problematic drinking	• Reports of discrimination doubled the odds of being classified as problem drinker • Reports of unfair treatment related to higher reports that drinking helps cope with job stressors • Discrimination experiences related to escapist drinking motives (e.g., to cheer up, to relax after work, to unwind on the weekend)
Mercer et al., 2011	385 African American or Black undergraduates from two universities	$M_{age} = 21.37$ years	21% from large university in southwestern region of US (63% White) 79% from midsize university in southern region of US (66% White) 83% women 47% reported family income below $25,000 per year 28% income between $25,000 and $50,000	Microinsults, microinvalidations	N/A	• Developed a new measure: the Inventory of Microaggressions against Black Individuals (IMABI) • The measure was related to emotional distress and life stress, even when accounting for global racism stress • Microinvalidations that deny "racial and experiential reality of people and color" may be even more harmful than microinsults, though microinvalidation may be less common than microinsults • Individuals who endorsed microinvalidation tend to endorse microinsults more as well
Neighbors, Jackson, Bowman, & Gurin,	1249 Black or African American adults	566 participants: 18–34 years 414 participants: 35–54 years 269 participants: 55 and above	Sample obtained from the National Survey of Black Americans, a national probability sample 67% female	Interviewed about stressful episodes; stressful events did not have to be related to race	Interviewed about coping responses	• Prayer was common and some people reported it was most helpful response; women reported it was the most helpful response more than men; prayer was also more common for very stressful events • Lower income and women more often reported using prayer

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
Ortiz, 2019	12 men of color	18–41 years	Recruitment from ads on Facebook and Tumblr, United States residents, Xbox Live gamers, heterosexual	Trash talking on Xbox Live	Desensitization	• Social support, especially informal (not professional) support, was common • Women were more likely to report using professional help than men • Participants believe avatar, voice, gamertag gives rise to racist hate speech • Anonymity is believed to provide trash talkers with courage and resources necessary to insult others without fear of confrontation or retaliation • Respondents initially sought support but were told "it's just a game" • Experience it so much they have become desensitized and conserve emotional energy
Pitcan, Park-Taylor, & Hayslett, 2018	12 Black men who work at mostly White organizations	24–33 years ($M_{age} = 28.16$)	All had less than 10 years of work experience, income ranged from $30,000 to over $100,000 with 75% between $60 and $100,000	Researchers interviewed participants about work experiences	Researchers interviewed participants about their reactions and coping	• Participants reported several types of coping, including: • Assimilation into dominant workplace culture and needing to restrict self-expression • Needing to work harder than others, John Henryism • Using humor and minimization • Compartmentalization • Avoiding certain topics • Support seeking • Reactions included cognitive concerns (questioning their perceptions, worrying about how to react, and fear of repercussions) and negative feelings (e.g., angry, frustrated, resignation and hopeless)
Plummer & Slane, 1996	532 volunteers recruited from college and universities, church and employment settings	18–25: 407 26–39: 58 40–56: 64 56+: 8	376 White 156 Black 34% male 64% female 81% resided in suburban and urban Midwest cities 84% middle class income	Recalling racially stressful event	Problem-focused coping: accepting responsibility, confrontive coping, planful problem solving, seeking social support Emotion-focused coping: distancing, escape avoidance, positive reappraisal, self-control	• Blacks engaged in more problem-focused coping than Whites • Blacks also engaged in more emotion-focused coping than Whites • In general, Blacks endorsed more coping strategies in face of racial stress • Blacks reported more incidents of racial stress

Table 2 (*continued*)

Study (Citation)	Number of participants	Age of Participants	Demographics (e.g. SES, location)	Stressor	Coping/ Emotion regulation (ER)	Findings
Riley et al., 2020	419 African American college students	$M_{age} = 18.42$	76% female;	The Schedule of Racist Events (SRE; Landrine & Klonoff, 1996) to assess perceived racial discrimination in the past year	Emotion Regulation Questionnaire assessing reappraisal and suppression	• Racial discrimination was related to less reappraisal and unrelated to suppression • Reappraisal was related to more civic engagement attitudes and behaviors • Suppression was related to less positive attitudes toward civic engagement
Shellman, 2004	7 African American elders	70+	US born and grew up in the South 4 women Lived in urban city in the northeast Retired	N/A	N/A	• Theme 1: "Nobody ever asked me before" – first time they talked about their life experiences, no one asked them about their past, they felt like people didn't care enough to ask, asking is caring • Theme 2: Stories of discrimination, "that's the way it was" – described discrimination in school, work, army, health care, in a way that they couldn't do anything about it • Theme 3: coping with discrimination – four main ways (caring and love provided by family, making home remedies for medical care, strength of faith, moving to the north) • Theme 4: The hurt of discrimination – life regrets because they missed out on these due to segregation, being abused by husband due to stress on the family, feeling different than others • Theme 5: self-discoveries – becoming better people due to the hardships in their lives

Sidney's study (1996) where young African American adults reported a greater likelihood of engaging in avoidance coping (e.g., "accept as fact of life and keep to self") than White adults to deal with unfair treatment and racial discrimination. Furthermore, African American women were more likely than White women to respond to discrimination by keeping to themselves (Krieger & Sidney, 1996). However, another study noted that African American men were selective on their support-seeking, and chose to discuss their negative feelings when around only African Americans (Jackson & Wingfield, 2013). Additionally, another study found that African American college students' reports of more racial discrimination was unrelated to suppression, but it did relate to less use of reappraisal (Riley et al., 2020). African American young adults also engage in drug use (e.g., tobacco and alcohol) to cope with high levels of racial discrimination (Horton, & Loukas, 2013; Kwate, Valdimarsdottir, Guevarra & Bovbjerg, 2003; Martin, Tuch, & Roman, 2003). Overall, while several types of coping are evident, avoidance and suppression tend to be a common response for African Americans emerging adults dealing with racial discrimination.

Early and middle adulthood

During middle adulthood (25–64 years old), adults often have more stability, such as a stable job, partner (i.e., committed relationship), and secure identity. Unfortunately, during this period, adults continue to experience discrimination throughout their everyday life (Essed, 1991). To cope with these stressors, African Americans continue to suppress their negative emotions throughout adulthood, particularly in certain contexts. Woods-Giscombé (2010) conducted a focus group with low-income African American women (M_{age} = 34 years old) to discuss their Superwoman role (i.e., role living as an African American). The women agreed on common characteristics of the Superwoman role, with one characteristic being the obligation to suppress emotions. The women discussed how they held a lot of their emotions inside and wish they could release them. However, they feared that expressing their negative emotions would be a sign of weakness or feared that they would be a burden to others (Woods-Giscombé, 2010).

African American women also limit their emotional expression in the workplace. African Americans believe that they should limit their range of emotional displays to combat negative stereotypes, and thus they feel less entitled to express negative emotions (Jackson & Wingfield, 2013; Wingfield, 2007). Similarly, African American males avoided expressing anger to avoid negative reactions from their White coworkers (Wingfield, 2007). Because African Americans believe they should not be expressing negative emotions, they also are more likely to distance themselves from situations that they know are emotionally inducing. For example, in a sample of middle age adults (M_{age} = 45.52), when controlling for income, results suggested that African Americans were more likely to report utilizing emotion-focused coping strategies such as distancing (e.g., detaching self from stressor) and positive reappraisal (e.g., focus on personal growth or religious meaning) than their White counterparts (Brantley, O'Hea, Jones, & Mehan, 2002). Overall, instead of expressing their negative emotions, African Americans tend to suppress them and distance themselves from stressors.

Research also suggests that African Americans adults may engage in drug or alcohol use to cope with discrimination. For example, Kwate et al. (2003) found that the more racial and discrimination experiences reported, the greater number of cigarettes and alcohol consumed. Additionally, reports of racism were associated with more illicit drug use (e.g., crack, heroin, amphetamines, etc.) in African American women (M_{age} = 36 years old). Furthermore, Martin, Tuch and Roman (2003) examined problem drinking behaviors among African Americans (18 years of age or older) from the National Survey of Black Workers. African Americans who reported experiencing discrimination were more likely to be classified as problematic drinkers (Martin, Tuch, & Roman, 2003). These individuals endorsed drinking as a way to relieve stress and cope with problems in their lives. Moreover, those who reported unfair treatment at work were more likely to report that they drink to help reduce job pressures, forget about work problems, and help relieve job tension (Martin et al., 2003).

African Americans also engage in more adaptive coping strategies such as religious coping. African Americans report more use of religious coping than Whites (Chatters et al., 2008). For example, Hall, Everett, and Hamilton-Mason (2012) examined how African American women coped with workplace stress. The women reported using various coping strategies including avoidance (i.e., walking away), religious coping (i.e., strong spiritual beliefs and praying) and social support (i.e., relying on friends; Hall, Everett, & Hamilton-Mason; 2012). These results for religious coping parallel other studies that examine stress more generally. For example, African Americans were more likely than White adults to endorse religious coping, such that prayer was an important aspect of coping with stress (Chatters, Taylor, Jackson, & Lincoln, 2008). Similarly, Neighbors, Jackson, Bowman, and Gurin, (1983) examined religious coping in African American adults and found that African Americans were more likely to report coping with stressors by praying instead of other coping strategies (e.g., facing or solving the problem, keeping busy, staying relaxed).

Other coping strategies include more direct encounters with the perpetrator or the source of stress. For instance, Plummer and Slane (1996) examined African American and White adults' patterns of coping in racially stressful situations. Reports of racially stressful situations were related to more confrontive coping (e.g., aggressive, hostile attitudes to change situation) and less emotion-focused coping (e.g., positive reappraisal, self-controlling) in African Americans (Plummer & Slane, 1996). Overall, depending on the individual and type of stressors, African Americans may rely on a variety of coping strategies, which may either exacerbate the problem (e. g., use drugs) or help to relieve the problem or distress (e.g., seek social support) in middle adulthood.

Older adulthood

During late adulthood (ages 65 and older), older adults are going into retirement, becoming grandparents, dealing with the death of close others and adjusting to the effects of aging. Unfortunately, older adulthood brings further adversities for African Americans. Elderly African Americans are now members of another devalued social group (i.e., both old and Black), which is known as double jeopardy (i.e., being old and Black; Dowd & Bengtson, 1978). Due to the discrimination and racism faced throughout their life, elderly

African Americans remain worse off than Whites, such that African Americans tend to have lower income, education, and occupational status (Taylor & Chatters, 1986). Due to the financial hardships and institutional racism, elderly African Americans lack proper health services contributing to psychological distress and lower life satisfaction (Broman, 1997).

In the general ER literature, there are mixed findings on the relationship between suppression and age (e.g., Masumoto et al., 2016). However, in studies that examine race and cultural ER differences, African Americans tend to continue to suppress their negative emotions. For example, Consedine and Magai (2002) examined the racial differences in emotional expression in community-dwelling older adults (M_{age} = 74). Though not studying ER or coping in relation to discrimination, after controlling for income, age, sex, education, and marital status, African Americans expressed significantly less emotion during conflict than the White and Russian/Ukrainian groups. Additionally, African Americans were less likely to use emotional tactics (e.g., "insulted or swore at the other", "stomped out of the room") when coping with conflict compared to Whites (Consedine & Magai, 2002). Similarly, Consedine and colleagues (2002) sampled lower income older adults aged 65 to 86 (M_{age} = 73) from four different ethnic groups utilizing stratified cluster sampling. African Americans reported higher emotional inhibition than African Caribbean and Eastern European adults after controlling for age, income, gender, marital status, and education level (Consedine et al., 2002). Again, Consedine, Magai, and Hortonand (2005) examined the relationship between ethnic variation and ER in older women, age ranging from 50 to 70 years old. Self-reported anger was lower among African American women than European American women, however there was no main effect for the relationship between ethnicity and emotion inhibition (Consedine et al., 2005). Although these studies do not examine racial stressors specifically, the results highlight the variation of ER strategies of different racial groups.

One of the most prominent forms of coping with discrimination in elderly African Americans is through religion. For example, older African American adults (i.e., 55 years of age and older) were more likely to report that prayer was an extremely important coping response compared to younger adults (i.e., less than 55 years old; Neighbors, Jackson, Bowman, & Gurin, 1983). Furthermore, African Americans reported that God was their primary source of social support over their own friends and family (Lee & Sharpe, 2007). Additionally, Shellman (2004) examined elderly African Americans coping strategies when dealing with discrimination. Again, religion was a reoccurring coping strategy along with social support (e.g., support from family). The tendency to rely on religious coping with race-related stress mirrors the high prevalence of religious coping with everyday stressors (Dunn & Horgas, 2000; Levin & Taylor, 1997). Religiosity is considered an effective coping strategy due to its buffering effects. For example, having high religious involvement buffered the negative effect discrimination had on African Americans' negative emotions, such that discrimination was related to lower levels of negative emotions for African Americans with high religious involvement (Bierman, 2006). Thus, a recurring theme in the coping literature in late adulthood includes religious coping.

Summary

Throughout the lifespan, African Americans experience and cope with racial stressors in a variety of ways. As early as preschool, African American children are discriminated against by their teachers (e.g., Gilliam et al., 2016; Gregory, 1995; Shaw & Braden, 1990) and continue to experience racism, discrimination, oppression, and prejudice until old age. These negative racial experiences can have detrimental effects on an individual throughout the lifespan such as depressive symptoms (Sellers et al., 2006; Wong et al, 2003), anxiety (Graham et al., 2015), perceived stress (Sellers et al., 2006), and health outcomes (Krieger and Sidney, 1996). To counteract these negative effects, developing effective coping is critical and can help to offset effects of these frequent and deleterious stressors (Graham et al., 2015).

The most prominent coping and ER appear to be negative emotion expression suppression, avoidant coping, social support, and religion/spirituality. Due to African American parents' efforts to protect their child from racial stressors (Nelson et al., 2012), African Americans are socialized to limit their negative emotional expression in infancy (Berlin et al., 2002), childhood (Nelson, Leerkes, O'Brien, Calkins, & Marcovitch, 2012), and adolescence (Dow, 2016). Thus, it is not surprising that suppression of negative emotions is prominent coping response across the lifespan. Another common way African Americans cope with racial stressors is through avoidant coping, which was especially true for women (Utsey et al., 2000). Sue et al. (2007) have speculated that this form of coping may be prevalent due to modern day racism and its subtlety, where it may be harder to confront more subtle types of racism when the perpetrator may not even know that they are being discriminatory. This review also suggested that social support was also one of the most prevalent coping strategies used throughout the lifespan (e.g., 2012;; Utsey et al., 2000), thus stressing the importance of social interaction in African American's lives. Lastly, because religion plays a large role in some African American's lives, religious coping is very common, especially among older adults (Shellman, 2004). Overall, coping strategies of African Americans appear similar across different age periods, and the most prominent strategies noted as emotion-focused responses.

Potential influences on emotion regulation and coping

Age. As children become older, they start to develop more coping strategies and engage in better ER skills (Campos, Frankel, & Camras, 2004). Thus, one would suspect that as African American ages, the less they would engage in ineffective ER strategies, such as suppression. However, research suggested that African Americans continued to suppress their negative emotions throughout their lives, highlighting how pervasively discrimination and racism can harm African Americans' lives. Additionally, according to the Socioemotional Selectivity Theory, older adults tend to have a limited time perspective, and they try to avoid and minimize negative emotional experiences while optimizing and maximizing positive emotional experiences (Carstensen et al., 1999). Findings with older African American adults tend to support this theory such that older African Americans may maximize their positive emotional experiences by engaging in more positive religious coping. Overall, these age effects, found across publications decades apart, suggests

that there is some stability with certain regulatory responses, such as suppression, but others may change in developmentally normative ways (i.e., prioritizing positive emotions, increased religious coping) that mimic trends with people of other racial or ethnic groups.

Cohort effects. The influence of racism and discrimination on ER and coping strategies may change over time. For example, individuals may react to racial events differently if they were born during the 1960′s civil rights movement vs. 2013′s Black Lives Matter movement. Racism and discrimination have changed throughout the years, and as previously stated, is less overt in the present society. However, there are also recent concerns that since the election of Trump 2016, racism may have worsened, including racial discrimination exhibited by police (McManus, Cullen, Jonson, Burton, & Burton, 2019). The various changes in racial climate may have an effect on an individual's ER and coping behaviors related to racial stressors (e.g., less likely to confront the perpetrator, more likely to suppress negative emotions). Thus, it is important for future studies to consider cohort effects. Additionally, it is important to note that various measures of coping and ER have been utilized across studies throughout the years. Although these measures overlap to some degree, they may be capturing different aspects of the construct. Thus, the generalization of means of ER across the different studies should be interpreted with caution.

Perceived control. In the general coping literature, problem-focused coping is more adaptive for controllable situations, whereas emotion-focused coping is more fitting when the situation is less controllable (Lazarus & Folkman, 1984). Because discrimination, racism, and oppression may be impossible to resolve (e.g., often cannot actively change an individual's racist views) or would ideally be addressed at a systemic level (e.g., policies or cultures), it may be difficult for African Americans to engage in problem-focused coping. Engaging in high effort and persistent active coping (called John Henryism) sometimes predicts poorer physical and mental health outcomes (Clark et al., 2001; Hudson et al., 2016; Volpe et al., 2020), potentially due to these active attempts to combat uncontrollable racial stress. Although emotion-focused coping does not fix the problem, various emotion-focused coping strategies may temporarily help African Americans mitigate the negative effect of racial stressors.

Context. African Americans' context can affect their discrimination experiences and emotion expression/suppression. For example, Hunt et al. (2007) found that self-reported racial discrimination experiences decreased as the percentage of African American neighborhood residents increased. Similarly, African American women living in neighborhoods with the lowest percentages of African Americans reported more experiences with racial discrimination (Dailey et al., 2010). African Americans are more open to express negative emotions privately around their black peers and family (Jackson & Wingfield 2013). Because it may be dangerous for African Americans to express negative emotions in a discriminatory society, they may suppress emotions in some contexts (e.g., public settings, work) but be more willing to express negative emotions within a family context due to feeling more accepted and less threatened

Perceived power differential. In addition to concern about potential discrimination and safety fears, the high prevalence of suppression among African Americans may also be due perceived differences in power social status of White individuals (Jackson & Wingfield 2013; Keltner, Gruenfeld, & Anderson, 2003). Research has found a relationship between social power and ER such that people high in social hierarchy (e.g., self-measured or manipulated) are more likely to express their emotions than people low in social power (Anderson & Galinsky, 2006). For example, Catterson et al. (2017) found that when participants reported having higher social power, they reported using less suppression than they used on average. Similarly, people that reported higher levels of suppression also reported lower social status than those who suppressed less often (English et al., 2012). Therefore, research could assess perceived social power to better understand its role in African Americans' tendency to suppress emotions. Additionally, a power differential may preclude a confrontive or active coping type of response (e.g., if it is a supervisor at work who is racist). Furthermore, it may seem more appropriate in a social setting to remain silent in hopes not to be stereotyped as the "angry black woman" or the "aggressive black male" (e.g., Hall, Everett, & Hamilton-Mason, 2012). In line with stereotype threat research (Steele and Aronson, 1995), concern about confirming a stereotype is additional stress that undermines people's concentration and physical health (Spencer et al., 2016). In general, African Americans' value of emotional self-control and limited self-disclosure (Consedine & Magai, 2002; Plasky & Lorion, 1984) helps to protect them by being less reactive and more reserved, thus, making them less vulnerable to negative encounters and interactions.

African culture. Although African Americans reside in the United States, which is classified as individualistic culture (e.g., values independence), African Americans' values originated from the African culture which is more collectivistic (Belgrave & Allison, 2018). Collectivist cultures reinforces interdependence and values interpersonal relationships. Additionally, collectivistic cultures endorse emotional expression that supports social networks, such as sympathy, love, and shame (Durik et al., 2006) and discourages emotional suppression (Samter, Whaley, Mortenson, & Burleson, 1997). However, African American families have been influenced by a history of oppression that has led African Americans to value emotional self-control and limited self-disclosure to avoid censure by the dominant culture (Consedine & Magai, 2002). Lastly, spirituality is a fundamental dimension in African culture and is incorporated in all aspects of life (Belgrave & Allison, 2018). Other researchers speculated that religion is so prominent in African Americans due to the fact that churches were the only way for African Americans to express their views. Black churches are considered the central institution in the civic and spiritual life of African Americans (Taylor, Chatters, & Brown, 2014). These culture values seem to influence African Americans' emotion regulation (e.g., suppression) and coping behaviors (e.g., social support, religious coping).

Limitations and future directions

There are some limitations of the focus of this review itself. One limitation is that this review occasionally focused on between-group differences. When studying different races, ethnicities, and cultures, it is important to examine within group differences to better understand the variability among that group. Focusing solely on between group differences could perpetuate emphases on group generalizations (Helms, Jernigan & Maschler, 2005). Some African Americans may also be faced with additional discrimination, so

investigating individuals with intersecting characteristics, and potential exacerbated discrimination is important, as some research has done (e.g., with African American women; Lykes, 1983; Woods-Giscombé, 2010; sexual minority Black men; Bogart et al., 2018; English et al., 2018). Another limitation is that the current review only examined ER and coping strategies in relation to racial stressors. Future studies should research ER and coping among African Americans in response to varying types of stressors to examine whether the results remain consistent. Lastly, because this review only focused on research with African Americans, future research should examine other racial and ethnic groups across the lifespan to assess any similarities, differences, change or stability across time.

In terms of limitations of the literature, the research on African Americans' ER and coping strategies to racial stressors has several methodological limitations. For example, a few of the research studies failed to control for important covariates or examine moderated effects (e.g., by income, age, etc.). Additionally, because the majority of the studies utilized self-reported surveys or interviews which are subjective, this work would benefit from more objective measures (e.g., observational studies of ER, physiological assessments of stress reactivity). Obtaining data on immediate effects of discrimination and resulting coping/ER is also important because the initial effects of coping could be very distinct from longer term effects (e.g., suppression may be necessary and adaptive in the short-term but may have maladaptive health or interpersonal outcomes in the long term; Brondolo, Ver Halen, Pencille, Beatty, & Contrada, 2009). Thus, using ecological momentary assessments in the field or exposing participants to a mild racial stressor in the lab (with debriefing after) would important. It also would be useful to examine additional contextual factors, such as racial composition of people's situation or neighborhood (as Dailey et al., 2010), if people's coping and ER changes when they are with African Americans compared to White people. In addition, similar to Hoggard et al. (2012), more research could examine coping in response to multiple types of stressors, to better delineate how the context of racial stress may be particularly unique in eliciting particular emotion or coping reactions. Because so few conducted longitudinal studies, it is impossible to infer true stability or change within African Americans across the lifespan. Future studies should use research designs (e.g., cross-sequential) that allow researchers to study multiple sources of influence simultaneously, such as cohort and time of assessment (Baltes, Reese, & Nesselroade, 1977). Lastly, there are developmental periods with limited amounts of research with African American samples (e.g., infancy), so future studies should expand their research to these populations.

In addition to methodological limitations, researchers could expand their conceptualization of discrimination and ER or coping. Given the increased reliance on technology for communication, work, and entertainment, and that racism has been detected online among high school students (Tynes, Umana-Tylor, Rose, Lin, & Anderson, 2012), college students (Eschmann, 2019), and in male adults using online video games (Ortiz, 2019), researchers should investigate discrimination and coping in these important contexts. Another understudied area of ER and coping is focusing on situation selection (putting yourself in or avoiding situations) or other ways of situation modification or anticipatory coping, where people change their behavior in anticipation of discrimination. For example, one study on marketplace discrimination reported that African Americans may dress more professionally when shopping to decrease the likelihood of being treated negatively (Crockett, Grier, & Williams, 2003). Although there are likely many other ways that African Americans preemptively avoid or leave situations, systematic reviews of these behaviors are lacking. Considering anticipated racism in-the-moment, Hicken, Lee, Ailshire, Burgard, and Williams (2013) studied discrimination-related vigilance, where people are constantly monitoring their surroundings and their behavior as a way to cope with potential expected discrimination. This increased vigilance has been related to negative health outcomes and more stress (Hicken et al., 2013; Himmelstein, Young, Sanchez, & Jackson, 2015). Thus, more work should be done to investigate the myriad of ER and coping strategies in advance (behavioral strategies that African Americans do in preparation for discrimination) or during situations (attentional strategies) when expecting racist behavior from others (see Fig. 1).

More research could also be done to better understand reappraisal. It does not usually appear as one of the most common ways to react to racial stress. However, because, religiosity is strongly associated with more frequent use of cognitive reappraisal (Vishkin et al., 2016), it may be the case that reappraisal is more frequent than realized if it often is part of religious coping. Another consideration is that although reappraisal is often effective method of decreasing negative affect (Webb et al., 2012), studies have shown that it is less helpful in dealing with oppression among Latinos (Perez & Soto, 2011; Soto et al., 2012) and may inhibit people's tendency to act collectively for societal change (Ford and Troy, 2019). Therefore, it would be helpful for research to further investigate African Americans' use of reappraisal to better understanding when it is useful (e.g., in the moment to downregulate threat appraisal and arousal vs. after to feel less strongly about the experience), what specific reappraisals or reframing are useful and for what purposes (e.g., decreasing upset feelings vs. motivating action to change the situation), and what types of reappraisals are made when praying and turning to religion.

ER and coping strategies are contextual and are influenced by individual-level factors which makes it difficult to conclude its effectiveness. Although there are some research studies that suggest negative effects inhibiting and suppressing negative emotions (e. g., Gross & Levenson, 1997). This type of inhibitory regulation may be beneficial for African Americans in short term because it can potentially ensure survival. As previously stated, African Americans adaptive culture is valuing emotional self-control and limiting their self-disclosure (Consedine & Magai, 2002; Plasky & Lorion, 1984). These coping strategies could potentially make them less vulnerable to discrimination and racism. Therefore, when discussing African Americans' ER and coping strategies, readers should yield caution in interpreting these strategies as ineffective or maladaptive because it may foster a more adaptable life in African Americans.

Understanding these patterns are useful to also inform intervention work. Although there are limited examples, there are a few interventions designed to help African Americans cope with racial stress. First, in one support group of African American men, Elligan and Utsey (1999) applied principles of Ntu African therapy (e.g., harmony, balance, interconnectedness, culturally aware, and authentic) proposed by Phillips (1990). Men reported less conflict in their lives and more renewed spirituality and tools to cope with a racist society (Elligan & Utsey, 1999). A second intervention called Still Climbin' was designed to help sexual minority, HIV-positive, Black men cope with discrimination (Bogart et al., 2018). This 8-week intervention involved having men track discrimination

experiences and coping, and applied cognitive behavior therapy to teach coping skills (e.g., social support, positive reframing) and promote resiliency. It showed promising results with increased rates of functional coping, humor, and cognitive/emotional debriefing (positive reframing, social support, physical and psychological strategic avoidance; Bogart et al., 2018). Third, the Racial Encounter Coping Appraisal and Socialization Theory (RECAST; Anderson & Stevenson, 2019) encourages the use of racial socialization (i.e., teaching children about race) and improved coping skills (e.g., accurate appraisals of the stressor, stress reduction techniques, and mindfulness) to help African Americans cope with racial discrimination. Based on the RECAST theory, the Engaging, Managing, and Bonding through Race (EMBRace) 7-week intervention program was created (Anderson, McKenny, & Stevenson, 2019). This intervention targets African American 10–14-year-olds and their parent/caregiver. The intervention teaches parents racial socialization strategies, encourages parents and their child to open up about their racial discrimination experiences, and a clinician is there to facilitate activities to teach and coach the families about effective racial socialization methods. These parent-child interactions could increase relationship satisfaction and perception of social support, which could possibly reduce the burden of race related stressors. Overall, these interventions are promising ways to not only teach more effective appraisal and coping skills, but to build positive racial identity in youth and social support to help indirectly reduce race-related stress.

Conclusions

The goals of this review were to highlight racial discrimination experiences in African Americans throughout their lifespan and patterns in their regulatory and coping strategies (see Tables 1 and 2). The review showed various coping strategies are used by African American across the lifespan, some that are more effective (e.g., social support) and others that are less effective (e.g., drug/alcohol use). Helping African Americans more effectively cope with racial discrimination and resulting negative emotions is a critical goal given it is one route to potentially lessen the harmful impact of the stress on their health (Clark et al., 1999). Thus, this review information hopefully can advance our understanding of the complexities of ER and coping (e.g., how these constructs are highly individualistic and contextual) and can facilitate preventions and interventions for healthy ER and coping strategies for African Americans across the lifespan.

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