



OPEN ACCESS

EDITED BY

Joaquín Bahamondes,
Universidad Católica del Norte, Chile

REVIEWED BY

Nevin Solak,
TED University, Türkiye
Matthew Hibbing,
University of California, Merced, United States

*CORRESPONDENCE

Emily Balcetis
✉ emilybaltetis@nyu.edu

RECEIVED 28 May 2024

ACCEPTED 28 October 2024

PUBLISHED 21 November 2024

CITATION

Biedron HW, Reimer NK and Balcetis E (2024)
A systematic review of motivated system
justification among youth.
Front. Soc. Psychol. 2:1440094.
doi: 10.3389/frsps.2024.1440094

COPYRIGHT

© 2024 Biedron, Reimer and Balcetis. This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](#). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

A systematic review of motivated system justification among youth

Henry Winslow Biedron¹, Nils Karl Reimer¹ and Emily Balcetis^{2*}

¹Department of Psychological and Brain Sciences, University of California, Santa Barbara, Santa Barbara, CA, United States, ²Department of Psychology, New York University, New York, NY, United States

Introduction: Redressing social inequities requires people to fight for social change and upend the status quo. However, beliefs that the current state of affairs operates in a just and fair way, referred to as system justifying tendencies, stand as obstacles to social change. With this investigation, we asked if there is evidence to suggest that youth hold system justifying beliefs.

Methods: Using PRISMA guidelines for a systematic review, we identified studies that measured system justifying beliefs among children [ages 6–12] and adolescents [ages 13–18].

Results: This review synthesizes evidence that, first, both cohorts of youth hold beliefs that the status quo operates in a just and fair manner and that, second, system justification theory and its predictions extend to youth demographics. We note antecedents to system justifying tendencies in youth including demographic and situational factors. Moreover, we find evidence of the palliative consequences of system justifying tendencies in youth.

Discussion: We offer recommendations for future research into system justification among youth demographics.

KEYWORDS

system justification, children, adolescents, systematic review, motivation, PRISMA

Introduction

Here are three current facts. Though women earn about 80% of what their male counterparts make (Barroso and Brown, 2022), 1 in 4 American women oppose affirmative action programs (Brenan, 2022). In the most recent decade, about 75% of undocumented immigrants were Hispanic (Millet and Paviol, 2022); however, 1 in every 5 Hispanic people who are immigrants themselves support expanding the border wall between America and Mexico (Rosenberg, 2020). In 2021, the non-profit Mapping Police Violence reported that Black Americans were almost 3 times more likely to be killed by police than their White counterparts; despite this, 1 in 4 Black Americans do not support the Black Lives Matter movement (Civiqs, 2022).

Though these statistics are starkly different from one another in many ways, they share a common underlying element. All suggest that some members of disadvantaged groups report support for long-standing systems that have contributed to their unequal treatment and disenfranchisement. While many groups, including those who are currently advantaged, at times show support for existing social, economic, and political structures, these instances exemplify a crucial psychological construct. They are all examples of system justifying beliefs.

While researchers have asked and offered answers to the question of why people support a system of governance that has traditionally wielded and currently holds power, control, and status over them with nominal personal benefit or gain (Jost and Banaji, 1994; Jost et al., 2004, 2018), an outstanding question is whether such beliefs are weaker or present at all among younger generations. System justifying tendencies stymie advances toward equity. They promulgate discrimination. They entrench society in antiquated beliefs, even by individuals who seem best served by revamping the system and eschewing social values and beliefs that reify the status quo. However, such tendencies could, in theory, grow extinct if younger individuals distance themselves from system justifying tendencies and maintain that distance throughout the course of development into and through adulthood. Indeed, concerns for social justice and equity have grown stronger over the decades. Gen Z-ers (individuals born between 1996 and 2012), for instance, report stronger concerns about a lack of equal treatment for Black Americans than every other generation before theirs (Parker et al., 2022). In addition, the majority of Americans surveyed in 2021 said that the country has not gone far enough to address gender inequality, and identified issues like sexual harassment, women's legal rights, and representation of women in positions of leadership as obstacles to progress. Among those most likely to hold this belief were individuals who had bachelor's degrees or higher and those under 50 years old, suggesting that relatively younger individuals felt more work needed to be done compared to their older counterparts (Horowitz and Igielnik, 2021).

Though generational differences in the strength of beliefs delegitimizing the current sociopolitical systems currently exist, even youth may report system justifying beliefs given the motives people of any age demographic have to support the status quo. Evidence suggests adults engage in system justification because doing so is palliative and assists in the regulation of epistemic, existential, and relational needs. Adults are motivated to support and bolster the existing social, economic, and political institutions and arrangements and to see it as fair and legitimate as doing so offers stability, predictability, and the perception of personal control over random chance (Jost and Hunyady, 2003). Moreover, adults who support the status quo experience goal satisfaction, in that they experience stronger positive affect, feel less lonely, are more optimistic, and are more effective at coping with stress (see Dalbert, 2001, for a review). They also experience greater life satisfaction and less anxiety and depression longitudinally (Vargas-Salfate et al., 2018). Such needs and the effects of satisfying such needs are likely relevant to multiple and varied demographics including younger and older people alike.

With this review, we hold two aims. First, we aim to explore whether in fact youth—who are positioned as the next generation of future stakeholders, leaders, and decision-makers—engage in system justifying beliefs and actions. We conducted a systematic review following Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines to probe for the existence of any evidence of system justifying tendencies in youth. Youth is a period of uncertainty and transition. It is also when strong beliefs such as political beliefs begin to crystalize (Merelman, 1972). Children and adolescents strive to make sense of complex social landscapes that impact their everyday life. Unlike adults, adolescents hold relatively malleable conceptions of hierarchy (Lau,

1989; Valentino and Sears, 1998). Adolescents are highly attentive to social and class structure and people who occupy positions of status (Paluck et al., 2018). Moreover, such observations of social hierarchies in which members of higher-status groups occupy positions of leadership also serve as a foundational element in the formation of personal aspirations and goals, which holds negative implications for members of lower-status groups. For example, sociological interviews conducted with adolescents aged 12 to 16 found that all girls interviewed could remember instances when they withheld from stating an important point because they viewed themselves as being in a subordinate position (Cihonski, 2003).

It is not simply that people randomly engage in justifying, defensive responses to inequality, but they are in fact motivated to do so (Jost, 2019). As a second aim of this work, we probed for evidence among youth, modeled off the evidence present among adults, of the motives that could give rise to system justifying tendencies and consequences of system justifying tendencies if in fact they were serving active motives. Justifying the status quo can serve to meet multiple needs that advantaged and disadvantaged individuals hold. Moreover, people at times accept and even strengthen the power structure of the status quo because doing so is palliative. We probed the published literature for evidence of motivations in promoting system justifying tendencies among children and adolescents. In short, this review examines whether system justification and its predictions apply to children and adolescents.

Motivational bases for system justifying tendencies

What motives give rise to system justifying beliefs and what evidence would suggest motives guide such beliefs? First, intuition, intergroup theories of social cognition (Kteily et al., 2011), and rational choice models (Green and Shapiro, 1994) argue that advantaged groups or those that expect to join the advantaged class support the status quo because doing so is in their self-interest. Support for the societal status quo comes from those who benefit in material terms from its maintenance. Advantaged individuals are motivated to sustain, support, and perceive as legitimate the existing state of affairs that has privileged them. This self and group interest may play a role in addition to other explanations for why advantaged compared to disadvantaged groups support the status quo to a greater degree (Jost et al., 2017a).

Second, people also justify the legitimacy of existing systems because doing so can satisfy epistemic, existential, and relational concerns (Jost, 2019; Jost and Hunyady, 2005). Support for the status quo can mollify epistemic concerns regarding uncertainty, existential motives to reduce threat, and relational needs to share common reality with others in society even in countries with extreme social, economic, and political inequality (Jost et al., 2017a). System justifying beliefs and behaviors reduce feelings of uncertainty, ambiguity, and threat and increase perceptions of safety (Bonanno and Jost, 2006; Jost and Hunyady, 2005; van der Toorn et al., 2017). This is true for advantaged people. If advantaged people believe that a society is unequal, unjust, and unfair, they are faced with the possibility of accepting that their status, power,

rewards, and relative gain are illegitimate. The implication is that their position was not earned, their status not the result of their efforts or a meritocratic system. Even if rationalizing the system reflects self-interest, advantaged people who wish to maintain their place of relative privilege still want to believe their position is earned or rightfully rather than randomly awarded to them. That is, self-interest and epistemic, existential, and relational concern account both give rise to system justifying tendencies among privileged people.

Disadvantaged people also justify the system to meet epistemic, existential, and relational needs. Believing disadvantaged people have (or at least had in the past) a fair and reasonable chance to succeed can make it easier to accept inequality (Jost et al., 2004). Those individuals who hold less power to make changes to the system ameliorate the negative emotions, but perhaps not physical consequences associated with that fact, in part by way of legitimizing and rationalizing the current state of affairs. For example, Dover et al. (2020) found that for minority university students from socioeconomically disadvantaged backgrounds engaging in system justification promotes psychological health but is deleterious to physical health. Such beliefs increase confidence among the privileged and the disadvantaged that everyone has earned and deserves their position—be it good or unfortunate. Subscribing to such meritocratic ideology eases the consciences of those who are better off and fairing worse. As such, this needs-based explanation for system justification predicts support for the status quo from both advantaged and disadvantaged groups.

A third account for the motivational basis for system justification draws on dissonance theories. A dissonance-based account of system justifying tendencies predicts that disadvantaged groups support the status quo because system justifying beliefs are palliative. This strong form of the system justification hypothesis uses the logic of cognitive dissonance theory to suggest that, much like some evidence from the needs-based account, even some individuals who are disadvantaged by the system bolster and defend it under certain circumstances (Jost et al., 2003). People actively work to maintain social structures, behaviors, beliefs, and attitudes as they are and have been, and do so by favoring outcomes and holding beliefs that are more likely to occur or are already in place. Previous research (Kay et al., 2002), for example, found that adults preferred a presidential candidate that they believed was more likely to win rather than lose the election. Under certain social conditions, some people defend and justify the existing social, political, and economic conditions under which they live and upon which they depend (Jost et al., 2004).

Rationale for system justification among youth

There are a number of factors concerning stages of cognitive and personal development which would warrant studying system justification among youth of varying ages. First, children are sensitive to social hierarchies among groups and show intergroup preferences based on observed hierarchies of social dominance that they see around them (Baron and Banaji, 2006). For example, researchers asked middle and high school adolescents to indicate

who they would elect as a student council leader. White, Black, and Hispanic students indicated greater support for a White male than a Black male, a Black female, a Latino male, a Latina female, and a White female candidate (Weissbourd et al., 2015).

Secondly, there are other causes of within-person changes in attitudes and beliefs concerning system justification over the life course. Youth differ from adults in that they have yet to experience significant life events that alter their relationship with and attitudes about the system. Children and adolescents usually have not started careers or entered parenthood, events which increase responsibility and dependency on a “network of stability” created by the existing social, economic, and political arrangements (Eibach and Libby, 2009). Indeed, research suggests that the transition into parenthood is correlated with increased perceptions of the prevalence of crime and that even experimentally manipulating individuals into a parenting mindset increases unfounded perceptions of danger in external stimuli (Eibach et al., 2003; Eibach and Mock, 2011). This suggests that transitions in life stages and experiences may influence perceptions of threat and beliefs about the system above and beyond cognitive development.

Finally, ingroup preference is a psychological default (Baron and Banaji, 2009), which would suggest a sort of universality not conditional on age. As soon as children can understand that social categories exist, they form preferences for their own group (Bigler, 1995; Bigler et al., 1997). For example, by age two, children report a stronger preference for their gender ingroup (Maccoby, 1988). By age four, children report a stronger preference for their racial ingroup (Hirschfeld, 1996). This preference for one’s ingroup gives rise to intergroup evaluations. However, as one’s knowledge about the existing social system develops and knowledge about the cultural valuation of different groups becomes reinforced, then intergroup evaluations may change in ways that legitimize that system. Indeed, this may be why Latin-identifying children ages 5–12 recruited from urban neighborhoods where they were the majority showed an implicit bias favoring their ingroup over a lower-status Black outgroup. However, they did not show a preference for their ingroup relative to a high-status White outgroup (Dunham et al., 2008). Likewise, Black children ages 5–12 years showed no ingroup biases when comparing Black people to White people (Baron et al., 2004), suggesting these relatively low status individuals have internalized societal views of their group by as early as age 5.

While this evidence suggests that young people have the capability to process the necessary social information and grapple with the complex issues required to justify systems of social, economic, and political power, a review of the empirical evidence supporting this claim among children [ages 6–12] and adolescents [ages 13–18] has not been conducted to our knowledge.

Method

Approach to literature review and PRISMA search process

To ask whether youth engage in system justifying tendencies, and if so to probe the motivations that give rise to such beliefs among this demographic, we used the PRISMA guidelines (Page

et al., 2021) to perform a systematic search within the PsycNET, SCOPUS, Web of Science, and ERIC databases to identify all manuscripts that measured system justifying beliefs among non-adults (see Supplement for full reporting on the PRISMA process we followed). The search terms included “System Justification” AND (“Child” OR “Adolescents” OR “Adolescence” OR “Young Adults” OR “Undergraduates” OR “Youth”) to ensure we captured all studies that may have included non-adult samples. These databases and search terms primarily include and identify English language journals and manuscripts. All search and review processes were managed using the Covidence program. We first searched PsycNET using these terms, then learned that the terms “Young Adults” and “Undergraduates” presented adult samples which were outside the scope of interest for this investigation; as such we excluded these two search terms in searches through SCOPUS, Web of Science, and ERIC. We searched for published articles dated January 1990 to November 2022, to envelope one of the earliest major published formulations of System Justification Theory (Jost and Banaji, 1994). We screened all records this process returned (see [Supplementary Figure S1](#) for assessment, exclusion, and inclusion details) by having two or more members of the research team read all manuscripts’ titles and abstracts for those that were empirical articles, measured system justification using the General System Justification Scale (Kay and Jost, 2003), the Gender-Specific System Justification Scale (Jost and Kay, 2005), the Economic System Justification scale (Jost and Thompson, 2000), or age-appropriate modifications of these established measures, and sampled children and adolescents younger than 18 years of age (see sample demographics for all included studies from extracted manuscripts in [Supplementary Figure S1](#)). This search yielded 315 potential publications for inclusion in the analysis. We identified 17 manuscripts that met inclusion criteria for a review of system justifying tendencies among youth. A full reference list for extracted manuscripts can be found in the [Supplementary Table S1](#).

Screening: inclusion and exclusion criteria

As inclusion criteria, we required that manuscripts in our analysis tested human participants; all 315 manuscripts met this requirement. We removed 143 duplicate manuscripts leaving 172 manuscripts for screening (see [Supplementary Figure S1](#)).

We went through three phases of article assessment during screening: initial review, retrieval, and full text review. During initial review, two or more members of the research team, including three research assistants and one supervisor (first author), assessed all 172 manuscripts’ titles and abstracts for potential relevance (see [Supplementary Figure S1](#)). Researchers identified manuscripts that were empirical articles, measured system justification, and sampled children, adolescents, or young adults. During this initial screening, we excluded 120 manuscripts that did not meet those criteria, leaving us with 52 remaining manuscripts.

Second, during retrieval, researchers attempted to and did retrieve full text versions of all 52 eligible manuscripts (see [Supplementary Figure S1](#)).

Third, during full text review, two or more research assistants and one supervisor read all 52 manuscripts. They gathered

information from the full text on the samples’ age range, measurement validity, and study design. We eliminated 35 manuscripts during full text review. Next, when reading the full text of articles obtained through PsycNET and all search terms, the researchers noted that the term “young adult” or “undergraduate” referenced participants aged 18–24. The term young adult did not include participants considered legal juveniles (under the age of 18). As such, after reading texts obtained through PsycNET but before searching all other databases, we adjusted our search terms to review research conducted on individuals younger than 18 years of age. We excluded 12 manuscripts that sampled people 18-years of age or older only (see [Supplementary Figure S1](#)).

Researchers assessed measurement validity within the sample of 52 manuscripts by evaluating the measures of system justification. We required that studies included the General System Justification Scale (Kay and Jost, 2003), the Gender-Specific System Justification Scale (Jost and Kay, 2005), the Economic System Justification scale (Jost and Thompson, 2000), or age-appropriate modifications of these established measures. We excluded 21 manuscripts that used only proxy measures (see [Supplementary Figure S1](#)) of system justification like measures of moral outrage (Wakslak et al., 2007), belief in a just world (Lerner, 1980), or hostile sexism (Hammond et al., 2018). While these measures correlate with and may partially capture some aspects of system justifying tendencies, they are indirect measures; they capture secondary components of the behavior and belief system but can be impacted by third variables. While existing theorizing has suggested that proxy measures of system justification such as conservatism do represent system justifying ideologies (Jost and Hunyady, 2005) identifying all proxy measures of system justification, including all measurements of conservatism, among adolescents would have been beyond the scope of this systematic review. As such, they were not considered direct measurements for the purposes of this systematic review of system justification among youth.

Finally, researchers assessed study design. We required that manuscripts be empirical designs and collect new data. We excluded all manuscripts that did not meet these criteria such as meta-analyses, reviews, opinion pieces, or other non-empirical manuscripts. We excluded 2 manuscripts based on these criteria which reviewed unrelated subject areas and were not relevant to the review (see [Supplementary Figure S1](#)). The remaining manuscripts that were not eliminated and were identified as eligible for quality assessment and data extraction (see [Supplementary Figure S1](#)).

Quality assessment

Before extracting data from the available manuscripts, we conducted a quality assessment ([Supplementary Table S1](#)). As required by PRISMA guidelines, researchers read the 17 manuscripts to assess potential bias, including bias from researchers’ conflicts of interest and measurement bias. To assess bias from conflicts of interest, we reviewed reported disclosures in the manuscript and attempted to identify any studies that had conflicts involving funding, biasing relationships with subjects, or ulterior interest in study outcomes. We found no manuscripts with conflicts of interest.

To assess measurement bias, we evaluated the internal validity of the scales used to measure system justification. We noted if researchers used adaptations of the primary system justification scales and if adaptations of scales still effectively measured their intended construct. Some acceptable adaptations might have been required for youth samples to comprehend the concept. Some acceptable adaptations translated the original scales from English into different languages. Some acceptable adaptations referenced systems (e.g., schools) relevant to the sample or materials used for manipulation. We probed to see if measures introduced unacceptable levels of bias if the scale departed radically from a validated measure of system justification; a priori we decided that there could be rhetorical changes that were too drastic, or the content expressed was no longer similar enough to be recognizable to a researcher familiar with the validated scales. We additionally assessed the sample sizes within manuscripts. A priori, to address potential concerns regarding the reliability of results and statistical power, we determined that studies with <35 participants would not be considered valid for inclusion, as results may not be stable with potentially a low-powered design. We excluded no studies based on these criteria (see [Supplementary Table S1](#)).

Data extraction

We identified 17 manuscripts that met inclusion criteria. We extracted the following information from included studies: age group, country of collection, participant race, participant gender, the measure of system justification, dependent variables associated with to system justification, and sample size ([Supplementary Table S2](#)). One researcher extracted data, and one supervisor confirmed the original researchers' extractions.

Study characteristics summary

We analyzed 17 manuscripts and identified 20 eligible studies (publication date range: 2006–2021). Seventeen studies, found in 15 manuscripts, measured effects among adolescents. Five studies, found in 4 manuscripts, measured effects among children (see [Supplementary Table S2](#)).

Results

In this section, we summarize findings from all studies included in this review. To that end, we group studies based on themes such as relevant population characteristics (group-based advantages predict system justification and group-based disadvantages predict system justification), relevant situational factors such system threat, and relevant outcomes of system justification such as the palliative effect of system justification. For each group of studies, we compare findings among youth to the existing literature of system justification among adults. These thematic categories of results were created after identifying all studies in the review. These sections represent either a population characteristic of interest or a psychological outcome of system justification that was well

represented within the existing literature on adults and among the accumulated findings of this review.

Group-based advantage predicts system justification

There are social conditions that serve as predictive antecedents of support for the status quo. Belonging to social groups that typically, traditionally, and historically hold resources, power, and other advantages leads to system justifying tendencies. Members of high-status, high-power social groups that control the existing social systems, have the greatest access to resources, and are insulated against the consequences of many, but not all, threatening situations are also motivated to justify current arrangements because they benefit from those arrangements. For example, survey respondents identifying as members of high socioeconomic status reported more satisfaction with American federal policies. High status individuals were also more likely to believe that America was much closer to the American ideal of meritocracy and fairness than believed their low-status counterparts ([Zimmerman and Reyna, 2013](#)). Additionally, men who are advantaged in multiple facets of personal and professional life generally score higher on measures of system justification than women ([Jost and Kay, 2005](#)).

Among youth, evidence supports that advantaged groups at times report greater system justifying beliefs. Seven studies found that boys justify the status quo more than girls ([Elenbaas and Mistry, 2021](#); [Mosso et al., 2013](#); [Sichel et al., 2022](#); [Verniers and Martinot, 2015](#); [Wiederkehr et al., 2015](#)). For example, [Sichel et al. \(2022\)](#) found that among adolescents in American detention facilities, boys were more likely than girls to report system justifying beliefs. In addition, Black adolescents who experienced less rather than more violence, including observing more frequent adult fights in their homes and victimization from physical attacks inflicted by other children, reported stronger system justifying beliefs ([Roy et al., 2019](#)). Advantaged adolescents who report safer living conditions support the existing state of affairs to a stronger degree than disadvantaged adolescents who experience more violence.

Group-based disadvantage predicts system justification

Disadvantaged ethnic/racial group membership

Members of racial groups who have historically experienced marginalization justify the system. Though Black Americans have experienced greater oppression and marginalization as a result of slavery, Jim Crow, and governmental enforced segregation, researchers find that Black Americans were more likely than their White counterparts to support limitations on the rights of individuals to criticize the government ([Jost et al., 2003](#)). Likewise, Black Americans who more strongly endorsed an oppressed minority ideology reported stronger trust in police as institutions, the local government, and the national government ([Shockley et al., 2016](#)). That same study also found that Black Americans who endorsed assimilation ideology—those for example who believed “Blacks should strive to integrate all institutions which

are segregated,”—reported stronger system justifying tendencies including agreement with statements like “In general I find society to be fair.”

Evidence supports that disadvantaged racial and ethnic minority children and adolescents engage in system justification. Latin-identifying adolescents reported slight to moderate levels of system-justifying beliefs; these effects were not moderated by gender or race (Godfrey et al., 2019). In addition, Henry and Saul (2006) found that even in the most extreme cases of poverty in Bolivia, low status indigenous ethnic minority adolescents were more likely than high status Hispanic ethnic majority adolescents to engage in system justification. Indigenous adolescents reported more support for the suppression of speech against the government than did Hispanic adolescents. They also reported more support for the government and less alienation from the government than Hispanic adolescents and Mestizo adolescents who are considered middle status, given their mixed indigenous and Hispanic heritage. Such race and ethnicity effects align with a dissonance-based account of system justifying tendencies.

Disadvantaged gender and sexual identity

Women, despite being disadvantaged by current systems of patriarchal social power, engage in system justification. For example, interviews with (primarily female) policymakers, university professors, post-doctoral researchers, and Ph.D. students suggested more suspicion about support given to women in primarily male-dominated fields like physics, whereas support given to men appeared more natural and legitimate (Van den Brink and Stobbe, 2014). Likewise, women reacted negatively to statements made by feminists about gender issues when the system justification motive was temporarily or chronically active (Yeung et al., 2014). Among youth, adolescent Chinese girls—those living in a country with a long history of perpetuating male advantage (Das Gupta and Shuzhuo, 1999)—were more likely to system justify than adolescent Chinese boys (Guo et al., 2021). We note, however, that Godfrey et al. (2019) did not find gender affecting the strength of system justifying beliefs among other minoritized groups, namely Latin-identifying adolescents. That aside, support for the status quo among women is palliative. Adult women who engaged in system justification felt greater control over future outcomes, which was in turn associated with higher self-esteem and physical health (McCoy et al., 2013).

Disadvantaged socioeconomic status

Adult individuals from lower socioeconomic status groups justify economic inequality. For example, low-income Americans were more likely to believe that limitations on the rights of citizens and the media to criticize the government were legitimate and necessary (Jost et al., 2003). Moreover, low socioeconomic status Latin-identifying adults were more likely to believe that the government was run for the benefit of all compared to their high-status Latin-identifying counterparts (Jost et al., 2003). In other countries, like Turkey, students from lower socioeconomic families attending both state and private universities reported stronger endorsement of beliefs that supported existing arrangements of

social economic, and political power than higher status students (Dirilen-Gumus, 2011).

The relationship between socioeconomic status and system justifying tendencies depends on the way in which socioeconomic status is measured among youth. Socioeconomic status can be operationalized as subjective self-reports of relative class, status, or societal rank. It can also be operationalized through objective markers of resources (Tan et al., 2020). Objective markers of status may relate to differences in access to information about social reality and opportunities and resources for social mobility. These differences in operationalization give rise to different conclusions regarding the impact of status-based marginalization based on system justification (Tan et al., 2020). However, some approaches to measuring socioeconomic status may be unreliable in youth demographics. Indeed, adolescents and children likely have limited information regarding their family’s household income, suggesting that their subjective estimates are likely to be unreliable (Diemer et al., 2013). Given this, researchers should be careful to use age-appropriate measures of socioeconomic status.

Supporting expressions of system justification congruent with self-interest, adolescents from advantaged high socioeconomic status groups, as indexed by subjective measures, justify the system more strongly than those from low socioeconomic status groups (Guo et al., 2021). For example, Black and Latinx youth with higher levels of subjective social status reported higher levels of system justifying tendencies than Black and Latin-identifying youth with lower status (Roy et al., 2019). In China, subjective socioeconomic status positively predicted perceived social fairness and trust in government institutions among adolescents (Li et al., 2020a,b).

However, when researchers use objective metrics of social class in analyses, data support expressions of system justification congruent with dissonance reduction. Roy et al. (2019) found that less affluent Black youth compared to more affluent Black youth, indexed by their families’ objective income-to-needs ratio, were more likely to endorse system justifying beliefs. They were also less likely to perceive inequality compared to more affluent Black youth. Similarly, Elenbaas and Mistry (2021) found among a mixed age sample of 8–14-year American youth that weaker economic security led to weaker criticisms of existing systems and stronger endorsement of system justifying beliefs. Among Chinese adolescents, objective measures of socioeconomic status including parental education and family income were negatively correlated with system justifying tendencies whereas subjective measures of socioeconomic status were positively correlated with system justification (Li et al., 2020a). In contrast, among Chinese adolescents sampled in 4 schools, system justifying tendencies were not significantly correlated with objective measures of socioeconomic status as indexed by family income and parental education levels (Guo et al., 2021).

Situational threat

Threats to the stability, legitimacy, or longevity of the larger social structures in which people are embedded and on which they depend lead people to reaffirm their commitment to and beliefs in the status quo to manage the existential danger of change. Individuals who experience challenges to the legitimacy or stability

of the status quo experience psychological threat that increase the tendency to defend the status quo among adults and youth. When economic and governmental systems are unstable, adults respond defensively, and in doing so work to restore their confidence in the system (Jost et al., 2004). Stern et al. (2016), for example, found that when the leadership in federal agencies seemed in flux and the organization of the agency seemed chaotic, Americans evinced stronger support for potential federal agency directors who appeared more prototypical of governmental leaders, namely those who had lighter rather than darker skin. Similarly, Lau et al. (2008) found that men reported stronger romantic interest in women who supported benevolent sexism when the legitimacy of their governmental and social systems was threatened. Specifically, when men learned that a foreign journalist assessed the state of their country as worsening socially, economically, and politically, men indicated greater interest in dating women who presented as more vulnerable and purer—qualities stereotypically associated with women—rather than career-oriented and athletic.

Similar effects of psychological threat emerge among youth. In comparison to control conditions, in two studies adolescents reported stronger system justifying tendencies after being exposed to a threat to American political, economic, and social systems in addition to local systems that are directly and personally relevant to teens (van der Toorn et al., 2017; Wakslak et al., 2011). These forms of threat presented the economic or social systems as unstable or under attack. van der Toorn et al. (2017) presented high school students with an epistemic threat: a short passage outlining the flaws and failings of the American political, economic, and social systems. A similar method for manipulating epistemic needs via exposing the flaws of American social and economic systems was used in Wakslak et al. (2011). By presenting these flaws, viewers experienced a threat to how they understood these systems previously, and thus their epistemic need to understand the world. Participants exposed to this system level threat reported increased levels of system justification via the General System Justification Scale.

However, in the area of situational threat some evidence emerges among adults that has yet to be replicated among children and adolescents. Objectively threatening situations represent a concrete or real danger to self. Threat emerges when researchers remind individuals of their own mortality or identify situations in which people might experience physical harm. For example, among adults researchers found that regardless of political orientation, adult survivors of the 9/11 terrorist attacks shifted beliefs to become more conservative over time (Bonanno and Jost, 2006). In Europe, as well, respondents reported stronger conservatism in response to terrorist attacks (Economou and Kollias, 2015). Indeed, meta-analyses show that mortality salience reminders bolster support for conservative ideology, but also mortality salience increases affirmation of preexisting political ideologies, regardless of whether they are liberal or conservative, suggesting defense of pre-existing worldviews (Burke et al., 2013). However, this evidence on threat and mortality salience should be considered carefully given the recent challenges to the replicability of mortality salience findings (e.g., Klein et al., 2022). Objective threats to health and safety strengthen support for the status quo which is supported by existential and relational needs explanations for system justifications. Taken together, this evidence suggests that

situational threats, including both system and personal threats, influence the degree to which individuals engage in system justification, though not all examples of this effect have yet been replicated in children and adolescents.

The palliative effect of system justification

System justification is useful in alleviating negative affect, stress, unhappiness, and dissatisfaction when societal inequality is high and opportunities to redress that inequity are low (Sengupta et al., 2017). For example, Napier et al. (2020) found that adult women who denied gender-based discrimination reported stronger beliefs that society is structured in a fair manner, and as a result, reported greater life satisfaction. Moreover, the positive association between the denial of gender discrimination and life satisfaction among women were stronger in countries where gender discrimination was higher (Napier et al., 2020). In addition, conservatives reported greater subjective happiness than did liberals because they endorsed system justifying beliefs to a greater degree (Napier and Jost, 2008). Among youth, Li et al. (2020a) found that stronger system justifying tendencies enhanced life satisfaction among Chinese adolescents. Likewise, among 6th grade adolescents in a low-income, middle school in an urban American city, system justification was associated with higher self-esteem, less delinquent behavior, and better classroom behavior (Godfrey et al., 2019). Also, in a sample of predominantly Black and Latin-identifying students, open-ended qualitative responses to how they felt about the social system included a higher frequency of words associated with positive feelings the stronger their system justifying tendencies (Arsenio and Willems, 2017). Dissonance-based motives for system justification predicts greater support for the status quo from disadvantaged than advantaged groups.

In addition, lesbian, gay, bisexual, and transgender adults who minimized rather than acknowledged the extent to which their group has been the target of discrimination reported better wellbeing, higher life satisfaction, and better physical health, including on objective indicators like body-mass-indices, because they perceived existing social arrangements as fair even if they have personally experienced discrimination (Suppes et al., 2019). Among adolescents residing in detention facilities, girls who perceived society to be fair reported lower levels of internalizing and externalizing mental health problems; however, while boys were more likely to endorse societal fairness compared to girls, those beliefs regarding fairness were unrelated to their mental health (Sichel et al., 2022).

Similarly, among youth, when understanding of past historical social contexts is weak, system justifying tendencies are stronger. Children engage more in system justifying tendencies when explanations for differences lack historical context. In these circumstances, children tend to assume that observed differences in societal functions are the result of factors internal to the members of a society. In contrast, when children are taught about the structural and historical origins of group-based hierarchies, they form a different understanding of fairness in society. In two studies, children, aged 4–8, who more strongly believed that differences in society were the result of intrinsic rather than extrinsic characteristics reported stronger support for the status

quo (Hussak and Cimpian, 2015, 2018). This change may reflect how youth engages changes in social evaluation in order to better make sense of the world around them.

In summary, our systematic review identified four studies showing that stronger system justifying tendencies produced positive palliative effects among youth. Li et al. (2020b) found that stronger system justifying tendencies were associated with greater life satisfaction among Chinese adolescents even controlling for their socioeconomic status. Similarly, adolescent girls in detention facilities who perceived society to be fair reported lower levels of internalizing and externalizing mental health problems; indicating that those with higher levels of system justification struggled less with negative coping strategies with their mental health (Sichel et al., 2022). Additionally, adolescents in a low-income middle school with higher system justification experienced higher self-esteem (Godfrey et al., 2019). Finally, system justification beliefs predicted a higher frequency of words associated with positive feelings about social fairness among adolescents freely responding to a qualitative question about social systems. In this same sample, system justification also predicted stronger belief in the fairness of the US legal and social systems (Arsenio and Willems, 2017).

General discussion

We systematically reviewed the empirical literature on system justification among non-adult demographics. In total, we identified 17 manuscripts with 20 eligible studies that measured system justification among children and adolescents. However, most studies, 17 studies in 15 manuscripts, measured system justification tendencies among adolescents compared to only 5 studies in 4 manuscripts which measured these tendencies among children. In the reviewed studies, system justification was associated with varied identities and motivational antecedents. In particular, we found strong evidence that, like adults, youth with disadvantaged identities—along the lines of race, gender, sexuality, and socioeconomic status—showed directionally mixed but significant associations with system justification. Further, we found support for the palliative effect of system justifying ideologies which, among youth and adults, meet epistemic, existential, and relational needs as well as produce palliative effects for those under threat, which is in alignment with previous findings of these effects among adults. In short, there is strong evidence that the predictions System Justification Theory extend from adults to children and adolescents. Nonetheless, this systematic review showed that the literature on system justification is limited in scope and size, as discussed in the remainder of this General Discussion. This limited literature warrants continued investigation of system justification among youth demographics, particularly young children.

Suggestions for future research on motivated system justifying tendencies among youth

Conditionality of system justifying tendencies

As researchers continue to probe the motivational bases for system justifying tendencies and resolve the directionality

inconsistencies of system justifying effects among youth, they might consider probing for moderating effects of conditionality. If youth are motivated to engage in system justifying tendencies, beliefs and behaviors that support the status quo should emerge when there is congruence between an active epistemic, relational, or existential goal and opportunities to justify the system relate to that goal (Cole and Balcetis, 2021). System justifying tendencies should be specific to situations, applied to decisions, and engaged with respect to opportunities that are capable of aiding or inhibiting goal pursuit. For example, individuals might report strong system justifying beliefs when considering laws, practices, and policies that apply to their own country, city, or state and not countries in which they do not reside or hold citizenship. A racial minority American adolescent might believe that the opportunity-limiting procedures (e.g., like the process for selecting students for gifted educational tracks) that their own school district uses are fairer and more just than the same procedures when they impact adolescents in school districts in other states.

Preliminary evidence supports this conditionality hypothesis. In our systematic review, we identified that system justifying rationalizations are not unique to American youth as effects replicate in Italy, France, China, and Bolivia, and occur among Hispanic and indigenous peoples, Black and Latino participants from the United States, and Asian adolescents—racial and ethnic minority groups that are relatively more affected by system-level changes. As researchers continue this line of inquiry, they may consider explicitly modeling the degree to which youth are dependent on the institutions within which they are embedded to determine if such system dependence increases the strength of system justifying beliefs. This contextual moderator would serve as direct evidence of conditionality.

Functionality

If system justification is a motivated process, it should be functional (Cole and Balcetis, 2021). Defending the status quo should have measurable consequences that lead to progress toward achieving a goal. However, arguing that system justifying processes are motivated is not the same as suggesting they are always adaptive, serving individuals' best interests. Indeed, if a person's goals are themselves maladaptive, then the resulting biases that arise may be maladaptive. There may in fact be opportunities for system justification that do not ultimately serve goal pursuit.

Evidence suggests that system justifying tendencies do in fact serve goals, even ones that may be counterproductive. Of course, youth do engage in collective actions, including efforts to mitigate climate change (Stevenson et al., 2018) and remedy the refugee crisis in Europe (Taylor and McKeown, 2021). However, they may be less likely to do so when they hold system justifying beliefs because they have assuaged the negative affect that would otherwise push them to act. Indeed, among adults, system justifying tendencies reduce the likelihood of collective action that challenges existing systems of social, economic, and political power (Osborne et al., 2019a). Adult members of disadvantaged groups who supported system justifying beliefs held lower "will to power" (Hässler et al., 2019). Indeed, system justifying beliefs predict

reduced support for system-challenging protest activity (Jost et al., 2017b, 2012). In Germany, when young women were exposed to relatively subtle, benevolent justifications for sexism, they subsequently scored higher on gender-specific system justification, expressed more positive affect, and were less willing to participate in collective action to improve equitable conditions for women (Becker and Wright, 2011). In a nationally representative study of New Zealanders, system justification was associated with reduced distress as well as an attenuation of the relationship between relative deprivation and willingness to protest on behalf of one's group (Osborne and Sibley, 2013; Osborne et al., 2019b). The negative correlation between system justification and collective action emerges in part because system justification decreases negative affect and increase satisfaction with the status (Hässler et al., 2019; Hennes et al., 2012; Napier et al., 2020; Osborne et al., 2019b; Wiederkehr et al., 2015).

Because they dampen people's will to act, system justifying tendencies may also protect against physical harm, as individuals who seek to change the institutional structures in which they live face negative consequences for their actions. Historically, non-violent protesters, such as Martin Luther King Jr., were arrested and abused. Similarly, Black Lives Matter protesters resulted in the arrest of 14,000 individuals in 2020 (Olson, 2020). Because attempts at social change bring risks, system justifying beliefs offer some degree of safety and security.

It is also possible that age shifts the motivations that system justifying tendencies serve, as assessed by the consequences of holding such beliefs across development. Children and adolescents who engage in system justification may reap positive short-term benefits of reducing existential, epistemic, and relational anxieties by taking on long term costs that are reflected later in development. Among young children, and girls in particular, stronger system justification related to better subjective wellbeing and fewer mental health issues (Godfrey et al., 2019). However, among older children, the palliative effects of system justification disappeared. Supporting the status quo was detrimental to 7th and 8th graders self-esteem and behavior (Godfrey et al., 2019). These results may indicate a critical period in development or a possible shift in the motivations that guide decisions and actions of youth. Whether system justification is functional and what specific goals defense of the status quo may serve may depend on age.

Across stages of goal pursuit

If they are motivated, system justifying tendencies should arise during varied facets of goal pursuit common to several theoretical models of self-regulatory processes in motivation: goal planning, goal striving, and goal shielding. During goal planning, as people set goals and determine appropriate courses of action to achieve those goals (Bandura, 1991; Lewin et al., 1944; Oettingen et al., 2001), individuals must detect goal-relevant means and opportunities (Shah and Kruglanski, 2003) and gather information about whether the means to pursue goals are present in the current environment (Parks-Stamm et al., 2007). This could arise through accentuation, where opportunities to engage in system justification are more easily detected. It could also arise through sensitivity and directed attention, whereby system justifying opportunities are processed more quickly and the threshold needed for making system

justifying decisions is lower. Researchers might find that system justifying decisions are reached more quickly than decisions that fail to bolster and defend the status quo. That is, including measures of reaction time may inform on whether system justification is a motivated process.

People also engage in goal striving, when they pursue and maintain progress toward goals (Freitas et al., 2002; Lewin et al., 1944) through initiation, management, maintenance, and control of goal-directed actions (Gollwitzer, 1990; Heckhausen and Gollwitzer, 1986). In addition, they must inhibit or withhold action if it is deemed unnecessary or costly (Rueda et al., 2005). In addition, system justification may assist in *goal shielding*, as people protect their important and central motivations from competing alternatives (Fishbach and Trope, 2008; Shah et al., 2002). During this stage of goal pursuit, effective regulation requires people maintain commitment to their long-term goals even when short-term desires threaten goal progress (Ainslie, 1992; Loewenstein, 1996; Metcalfe and Mischel, 1999; Trope and Fishbach, 2000). If system justification serves goal striving and shielding, researchers might find that individuals steadfastly endorse beliefs that defend the status quo. They may do so even in the face of competing information and despite opportunities to revise decisions. They may also do so despite peer pressure to change their course of action.

Effects of system dependence among adults and youth

As dependence on existing social arrangements grows stronger, so too does the strength of system legitimizing beliefs in adults. Rather than dissenting in response to existing arrangements, individuals without the power to change the existing nature of things, generally perceive fairness and legitimacy within the status quo (Jost and van der Toorn, 2012; van der Toorn and Jost, 2014). For example, though their financial health is impacted by tuition rates, university students supported tuition increases when they thought it highly likely that the university would institute the tuition increase (Kay et al., 2002). Similarly, subordinates voluntarily deferred to and obeyed the decisions and rules made by authority figures (French and Raven, 1959; Jost and Major, 2001; Tyler, 2006). Likewise, individuals reminded of times when others had power and control over them rather than times when they had power over others reported stronger support for statements like, "society is set up so that people usually get what they deserve" (van der Toorn et al., 2015). Such beliefs offer authority and power to groups of which individuals are not a part and confer legitimacy to leaders who have historically held it even when those leaders are not serving all people well.

When social change becomes harder to enact, some people more strongly deny or rationalize injustices and other problems, even when doing so comes at the expense of their personal and group interests (Jost et al., 2004). For example, as U.S. employees became more financially dependent on holding their job, the more they believed their supervisor was a legitimate authority figure (van der Toorn et al., 2015). Likewise, Californians in the midst of a water shortage who felt a greater dependence on the government to handle their own and their household's water needs believed more strongly that a state agency should have

the authority to do whatever they think is best to conserve the water supply (van der Toorn et al., 2011). These results align with an epistemic and relational needs-based account for system justifying tendencies in youth, as system justifying tendencies in this case may reduce uncertainty and assist in establishing shared reality. We did not, however, identify any studies that examined system dependence among youth specifically. This area of the literature may represent significant gap in the literature to which new research might contribute.

Expanding across domains

Motivated processes should be domain-general (Cole and Balcetis, 2021). Often new lines of research focus inquiries within a limited set of domains, like beliefs about political systems for instance. However, motivated processing should be agnostic as to the aspect of society in question. Within our systematic review, we found that the majority of studies on youth found that boys support the status quo to a stronger degree than girls, as assessed using the General System Justification scale. This is evidence for self-serving motivations among youth, as males across the world hold more advantages than do females, even within childhood and adolescence (Azcona et al., 2021; Barroso and Brown, 2022; Brennan, 2022). Despite these pronounced gender differences in lived experience, we found in our systematic review that only 2 studies probed effects of gender specific system justification (Verniers and Martinot, 2015). We encourage researchers to expand beyond this typically used general measure and expand to include measures of gender and economic justification. Children as young as age two are able to recognize gendered identities and even show preference for their gender ingroup (Maccoby, 1988). Children as young as 6 are able to discern and show preference in accordance with racial hierarchy, which may support their ability to do the same for gender at a similarly young age (Baron and Banaji, 2006). Young children and adolescents are able to identify gendered stereotypes in adults, and boys as young as those in fourth grade who believed that adults held stronger gendered stereotypes also believed their female counterparts were less capable than boys in the areas of science and mathematics (Kurtz-Costes et al., 2008). This evidence suggests that children can identify, interpret, and integrate gender hierarchies into complex cognition. It could well be that gender-differences in system justifying tendencies among children and adolescents would emerge if researchers asked about gender-based system justifying beliefs. It is likely that youth can observe gender disparities and have formed beliefs about how such disparities have emerged and whether they should exist.

No studies we identified within our systematic review tested economic system justification among youth using the established scale or age-appropriate modifications. However, children do have an understanding of economic conditions, social status, and hierarchy. Indeed, children engage in economic altruism (Guo and Feng, 2017). Children are also aware of their place in society and hold concerns about social status (Baron and Banaji, 2009). As early as 5 years old, children are able to identify and understand economic differences, as well as identify where their family stood compared to others (Mistry et al., 2015). This suggests that even young children are able to identify economic hierarchies and assess their fairness. Based on this evidence, it is likely that youth can

indeed identify and evaluate economic disparities, where they have emerged, and if they should exist (Mistry et al., 2015).

While no studies we are aware of have explicitly asked youth whether economic conditions are justified, children's economic backgrounds do predict differences in general system justifying tendencies. Youth who report lower compared to higher socioeconomic status on objective indicators engage in stronger system justifying tendencies as aligned with dissonance-based accounts of system justifying tendencies (Elenbaas and Mistry, 2021; Roy et al., 2019; Li et al., 2020a). However, in the same study, youth who report higher compared to lower socioeconomic status on subjective indicators do the same as aligned with self-interest accounts. Why would these two different forms of status give rise to opposing patterns of beliefs? Objective measures track parents' income, education, and occupation. In contrast, subjective measures reflect a child's conception of his or her position in society compared with that of others (Anderson et al., 2012; Kraus and Stephens, 2012). While it might seem that objective status serves as the basis for subjective status, the correlation between the two variables is only small to moderate in adult samples (Adler et al., 2000; Gong et al., 2012), and even unrelated to each other among some racial minority groups like Black Americans (Ostrove et al., 2000). Objective and subjective socioeconomic status might relate to actual and perceived social mobility in youth, or the actual or subjective belief that young people have a greater probability of reaching a higher social class in the future, especially in comparison to their own parents' positions (Azcona et al., 2021). While not yet tested among children and adolescents, objective and subjective status might differentially relate to actual and perceived mobility and beliefs that members of low status groups could join high status groups (McCoy et al., 2013). Given that such meritocratic ideology lies within system-justifying ideologies (Jost and Hunyady, 2005), future research should investigate the relationship among objective and subjective markers of status, mobility, and system justifying tendencies in youth.

Age-differences in motivated functions of system justification

In all, 29% of the studies included in our analysis sampled children, and 82% of studies sampled adolescents. This relative lack of studies on children is likely due to the challenges associated with conducting psychological research among very young people. But scientists must be mindful of age differences. Some evidence suggests age was negatively correlated with system justification among children, such that especially young children were more likely to system justify than older children (ranging from 8–14) (Elenbaas and Mistry, 2021). System justifying tendencies were similarly negatively correlated with age in a sample of Italian adolescents (Mosso et al., 2013). As such, it could be particularly beneficial for researchers to test predictions derived from System Justification Theory among younger children.

That said, researchers will need to consider how specifically they test young people's rationalizations. While the General System Justification Scale has been established as reliable and valid with respect to a criterion for use among adolescents, according

to a RASCH analysis conducted among Italian adolescents (Roccatò et al., 2014), no similar test has been conducted among children. Especially young children, compared to their adolescent counterparts, are less able to grasp the necessary complex social and situational information associated with assessing and making judgements concerning system-salient information. “Previous research in developmental psychology identified that cognitive complexity, perspective taking, and communication effectiveness correlated positively with age among a sample of 2nd-9th graders (Clark and Delia, 1977); these cognitive abilities may be required for developing beliefs and attitudes concerning systems, including system justifying or system challenging tendencies. Moreover, despite evidence that children are able to conceptualize and understand intergroup hierarchies (Cihonski, 2003), children’s views of social hierarchy are unstable (Lau, 1989; Valentino and Sears, 1998). Researchers have not published extensively on system justification in children, perhaps because of challenges in developing and validating scale items that are developmentally appropriate for young children.”

Intervening on the development of system justifying beliefs

System justifying beliefs may confer psychological protection even if at the expense of social change that could bring better outcomes. As such, researchers may be interested in testing what factors can intervene on the development and acceptance of system justifying beliefs. It is possible that socialization and explicit learning may stymie the development of these beliefs. Latin mothers, for example, attribute income inequality to individual responsibility (Godfrey and Wolf, 2016), and teach those perspectives to children who adopt them as well (Henry and Saul, 2006).

Practitioners may also monitor social exclusion. Social exclusion represents an unexpected threat to an individual’s epistemic sense of security about the world around them. When adults feel that they are being excluded from participating in existing power structures, they report and act in ways that legitimize the current state of affairs. Researchers found that being left out of a group game led individuals to endorse beliefs about meritocracy that align with the status quo, including the idea that hard work leads to success in society (Hess and Ledgerwood, 2014).

Finally, practitioners might appeal to youth’s strong valuation of fairness. Values-alignment interventions (Bryan et al., 2019) encourage young people to reframe associations as incompatible with important values, which motivates youth to fight for system change. In particular, adolescents who actively considered how food marketing company are manipulative and targeted saw such companies as violating social justice values and their desire for autonomy from adult control. A similar approach might reframe economic, social, and political systems of inequality as incompatible with important youth values. An intervention of this kind might be a targeted educational campaign directly presenting this reframed perspective to children and adolescents in the form of accessible games and anecdotes from real life presented in school or extracurricular context, especially targeting

systematically marginalized youth like Black, Latinx, girls, and LGBTQ+ demographics. This intervention could effectively target the underlying needs which produce system justification and reduce it among adolescents which could encourage social change. Researchers can probe how and why economic, social, and political systems that promote inequality are maintained over time, and how to sever those pathways, particularly among youth.

Moving forward using an intersectional identity approach

Because periods of cognitive development in childhood and adolescence are crucial for building the foundations of system beliefs among youth demographics (Hussak and Cimpian, 2015), we encourage researchers to take an intersectional approach to probing the demographics of youth support for the status quo. This approach would suggest that researchers recognize the interconnected nature of social categorizations such as class, race, gender, and sexuality when considering research on system justification behavior (Cole, 2009). This approach might suggest in a system justification context that those most at risk for accepting rather than seeking to change their subordination to systems of social, economic, and political power would be those with multiple, overlapping, marginalized identities. This is due to the increased epistemic, existential, and relational needs associated with marginalization, and subsequently increased system justification. These groups which paradoxically have the most to lose from accepting society as it is; they are potentially most vulnerable to accepting their insubordination due to the negative emotions, which system justification palliates, associated with confronting marginalization within systems, especially those who are helpless against. Intersectionality influences the ability to challenge the status quo among (Curtin et al., 2015). This review additionally suggests that a focus on intersectional identity as a way of structuring our understanding of demographic differences in system justifying beliefs among young people would effectively address clear examples of the influence of class, gender, and race-based effects we have reviewed.

Limitations

This review, while comprehensive in its approach, has notable limitations which future researchers might consider when expanding upon this work. Firstly, this review is limited in how we have defined measurements of system justification. We exclusively considered direct measurements of system justification which were the General System Justification Scale (Kay and Jost, 2003), the Gender-Specific System Justification Scale (Jost and Kay, 2005), the Economic System Justification scale (Jost and Thompson, 2000), or age-appropriate modifications of these measures. However, there are a number of proxy measures for system justification that have been validated in the literature such as political conservatism and religious conservatism. These indirect or proxy measures are considered a form of system justifying ideologies in System Justification Theory (Jost and Hunyady, 2005). The reasons for excluding indirect measurements from this systematic review

were due to methodological limitations of the literature search. However, a more full and thorough examination of system justifying ideologies among youth could expand to include these indirect measures, especially in contexts in which direct criticism of existing systems of economic, social, and political power are culturally repressed or directly censored (Acar et al., 2020). This may be particularly challenging in contexts such as authoritarian political regimes, where controls of academic freedom, personal expression, and political dissent are strongly controlled. Research youth perceptions of political systems may be particularly well served by these indirect measures, as approval for research on youth demographics is more closely controlled than research on adults.

Another area which limits the scope of this review is identifying which age groups are considered adolescents. We used a strict definition of youth (<18 years); however, more recent considerations have considered 18–24 as part of an adolescent group or as “emerging adults” (Sawyer et al., 2018). Existing research in psychology, including literature within system justification, has used convenience sampling of college students (typically aged 18–24) as adult samples. We did not include this group for both methodological and theoretical reasons. Firstly, we considered the impressionable years hypothesis, which suggests that attitudes begin developing in adolescence but stabilize later in life (Krosnick and Alwin, 1989). Having a clear delineation in age groups between adults and adolescents may promote more opportunities for identifying differences for this formative period. Additionally, methodological considerations such as those discussed in the Method section posed the risk of under-identifying manuscripts that sampled from this age group but did not specify the sample to identifiable search terms. Rather than knowingly excluding a majority of studies in this category, we excluded all participants who did not match the legal definition of a juvenile (<18). Future research with a greater ability to differentiate these groups would be well served in considering the emerging adult category in research on system justification and youth.

A final limitation of the generalizability of this review were in our search strategy. While no studies were excluded on the basis of language, the databases we searched primarily included English-language publications. This means that results published in non-English language journals may have been missed. While we included three studies of youth in China and one study of youth in Bolivia, this search strategy may have biased our review toward Western perspectives. Future research should take a more inclusive approach to non-English language publications to more effectively identify all studies relevant to system justification among youth.

Conclusions

The social contexts that individuals of varied demographic backgrounds and circumstances face serve to shape system justifying tendencies during formative years of cognitive development among youth. Identifying, addressing, and ultimately redressing social inequities requires people to challenge the status quo. However, these systems persist in part due to the palliative effect that legitimizing systems has for individuals’ existential, epistemic, and social needs. Adolescence and childhood are crucial times for the development, internalization, and solidification of

beliefs concerning the legitimacy of such hierarchies. We believe that further initiatives addressing system justification among youth demographics who sit as the next generation of society’s leaders, are not only urgent, but necessary for those who seek to create a more equitable world, and especially so for those who justify the one we already have.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

HB: Conceptualization, Data curation, Investigation, Methodology, Project administration, Writing – original draft, Writing – review & editing. NR: Supervision, Writing – review & editing. EB: Conceptualization, Resources, Supervision, Writing – original draft, Writing – review & editing.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

Acknowledgments

We thank John Jost for his comments on an earlier version of this manuscript. We thank research team members Abi Rivera, Michelle Stern, and Ashley Winegarden for their assistance.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The reviewer MH declared a shared affiliation with the authors HB and NR to the handling editor at the time of review.

Publisher’s note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/frsps.2024.1440094/full#supplementary-material>

References

- Acar, Y. G., Moss, S. M., and Ulug Ö. M. (2020). *Researching Peace, Conflict, and Power in the Field: Methodological Challenges and Opportunities*. Cham: Springer. doi: 10.1007/978-3-030-44113-5
- Adler, N. E., Epel, E. S., Castellazzo, G., and Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: preliminary data in healthy white women. *Health Psychol.* 19, 586–592. doi: 10.1037/0278-6133.19.6.586
- Ainslie, G. (1992). *Picoeconomics: The Strategic Interaction of Successive Motivational States Within the Person*. Cambridge University Press.
- Anderson, C., Kraus, M. W., Galinsky, A. D., and Keltner, D. (2012). The local-ladder effect: social status and subjective well-being. *Psychol. Sci.* 23, 764–771. doi: 10.1177/0956797611434537
- Arsenio, W. F., and Willems, C. (2017). Adolescents' conceptions of national wealth distribution: connections with perceived societal fairness and academic plans. *Dev. Psychol.* 53, 463. doi: 10.1037/dev0000263
- Azcona, G., Beegle, K., Bhatt, A., Boudet, A. M. M., and Newhouse, D. (2021). *Four facts you need to know about gender and poverty Today*. UN Women Data Hub. Available at: <https://data.unwomen.org/features/four-facts-you-need-know-about-gender-and-poverty-today> (accessed December 24, 2022).
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Org. Behav. Hum. Decis. Process.* 50, 248–287. doi: 10.1016/0749-5978(91)90022-L
- Baron, A., and Banaji, M. (2009). Evidence of system justification in young children. *Soc. Personal. Psychol. Compass* 3, 918–926. doi: 10.1111/j.1751-9004.2009.00214.x
- Baron, A. S., and Banaji, M. R. (2006). The development of implicit attitudes: evidence of race evaluations from ages 6 and 10 and adulthood. *Psychol. Sci.* 17, 53–58. doi: 10.1111/j.1467-9280.2005.01664.x
- Baron, A. S., Shusterman, A., Bordeaux, A., and Banaji, M. R. (2004). "Implicit race attitudes in African-American and hispanic children," in *5th Annual Meeting of the Society for Personality and Social Psychology* (Austin, TX). doi: 10.1037/e633912013-901
- Barroso, A., and Brown, A. (2022). *Gender pay gap in U.S. held steady in 2020*. Pew Research Center. Available at: <https://www.pewresearch.org/fact-tank/2021/05/25/gender-pay-gap-facts/> (accessed November 21, 2022).
- Becker, J. C., and Wright, S. C. (2011). Yet another dark side of chivalry: Benevolent sexism undermines and hostile sexism motivates collective action for social change. *J. Pers. Soc. Psychol.* 101:62. doi: 10.1037/a0022615
- Bigler, R. S. (1995). The role of classification skill in moderating environmental influences on children's gender stereotyping: a study of the functional use of gender in the classroom. *Child Dev.* 66, 1072–1087. doi: 10.2307/1131799
- Bigler, R. S., Jones, L. C., and Lobliner, D. B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Dev.* 68, 530–543. doi: 10.2307/1131676
- Bonanno, G. A., and Jost, J. T. (2006). Conservative shift among high-exposure survivors of the September 11th terrorist attacks. *Basic Appl. Soc. Psych.* 28, 311–323. doi: 10.1207/s15324834basp2804_4
- Brenan, M. (2022). *Gender disparities in views of women's equality persist*. Gallup.com. Available at: <https://news.gallup.com/poll/355958/gender-disparities-women-equality-persist.aspx> (accessed December 13, 2022).
- Bryan, C. J., Yeager, D. S., and Hinojosa, C. P. (2019). A values-alignment intervention protects adolescents from the effects of food marketing. *Nat. Hum. Behav.* 3, 596–603. doi: 10.1038/s41562-019-0586-6
- Burke, B. L., Kosloff, S., and Landau, M. J. (2013). Death goes to the polls: a meta-analysis of mortality salience effects on political attitudes. *Polit. Psychol.* 34, 183–200. doi: 10.1111/pops.12005
- Cihonski, D. A. (2003). *The experience of loss of voice in adolescent girls: An existential-phenomenological study*. USF Tampa Graduate Theses and Dissertations. Available at: <https://digitalcommons.usf.edu/etd/1342> (accessed November 15, 2022).
- Civiqs (2022). *Black Lives Matter*. Civiqs. Available at: [https://civiqs.com/results/black_lives_matter?annotations=trueanduncertainty=trueandzoomIn=trueandrace=Black\\$+Sor\\$+African-Americanandchoice=Support](https://civiqs.com/results/black_lives_matter?annotations=trueanduncertainty=trueandzoomIn=trueandrace=Black$+Sor$+African-Americanandchoice=Support) (accessed December 13, 2022).
- Clark, R. A., and Delia, J. G. (1977). Cognitive complexity, social perspective-taking, and functional persuasive skills in second- to ninth-grade children. *Hum. Commun. Res.* 3, 128–134. doi: 10.1111/j.1468-2958.1977.tb00511.x
- Cole, E. R. (2009). Intersectionality and research in psychology. *Am. Psychol.* 64:170. doi: 10.1037/a0014564
- Cole, S., and Balci, E. (2021). "Motivated perception for self-regulation: How visual experience serves and is served by goals" in *Advances in Experimental Social Psychology* (Academic Press), 129–186. doi: 10.1016/bs.aesp.2021.04.003
- Curtin, N., Stewart, A. J., and Cole, E. R. (2015). Challenging the status quo: The role of intersectional awareness in activism for social change and pro-social intergroup attitudes. *Psychol. Women Q.* 39, 512–529. doi: 10.1177/0361684315580439
- Dalbert, C. (2001). *Critical Issues in Social Justice. The Justice Motive as a Personal Resource: Dealing with Challenges and Critical Life Events*. New York, NY: Springer. doi: 10.1007/978-1-4757-3383-9
- Das Gupta, M., and Shuzhuo, L. (1999). Gender bias in China, South Korea and India 1920–1990: effects of war, famine and fertility decline. *Dev. Change* 30, 619–652. doi: 10.1111/1467-7660.00131
- Diemer, M. A., Mistry, R. S., Wadsworth, M. E., López, I., and Reimers, F. (2013). Best practices in conceptualizing and measuring social class in psychological research. *Anal. Soc. Issues Public Policy* 13, 77–113. doi: 10.1111/asap.12001
- Dirilen-Gumus, O. (2011). Differences in system justification with respect to gender, political conservatism, socio-economic status and religious fundamentalism. *Procedia-Soc. Behav. Sci.* 30, 2607–2611. doi: 10.1016/j.sbspro.2011.10.510
- Dover, T. L., Major, B., and Glace, A. M. (2020). Discrimination, health, and the costs and benefits of believing in system fairness. *Health Psychol.* 39, 230–239. doi: 10.1037/hea0000841
- Dunham, Y., Baron, A. S., and Banaji, M. R. (2008). The development of implicit intergroup cognition. *Trends Cogn. Sci.* 12, 248–253. doi: 10.1016/j.tics.2008.04.006
- Economou, A., and Kollias, C. (2015). Terrorism and political self-placement in European Union countries. *Peace Econ. Peace Sci. Public Policy* 21, 217–238. doi: 10.1515/peps-2014-0036
- Eibach, R. P., and Libby, L. K. (2009). "Ideology of the good old days: exaggerated perceptions of moral decline and conservative politics," in *Social and Psychological Bases of Ideology and System Justification*, 402–423. doi: 10.1093/acprof:oso/9780195320916.003.016
- Eibach, R. P., Libby, L. K., and Gilovich, T. D. (2003). When change in the self is mistaken for change in the world. *J. Pers. Soc. Psychol.* 84, 917–931. doi: 10.1037/0022-3514.84.5.917
- Eibach, R. P., and Mock, S. E. (2011). The vigilant parent: parental role salience affects parents' risk perceptions, risk-aversion, and trust in strangers. *J. Exp. Soc. Psychol.* 47, 694–697. doi: 10.1016/j.jesp.2010.12.009
- Elenbaas, L., and Mistry, R. S. (2021). Distributive justice in society and among peers: 8- to 14-year-olds' views on economic stratification inform their decisions about access to opportunities. *Dev. Psychol.* 57, 951–961. doi: 10.1037/dev0001188
- Fishbach, A., and Trope, Y. (2008). "Implicit and explicit counteractive self-control," in *Handbook of Motivation Science*, eds J. Y. Shah and W. L. Gardner (The Guilford Press), 281–294.
- Freitas, A. L., Liberman, N., Salovey, P., and Higgins, E. T. (2002). When to begin? Regulatory focus and initiating goal pursuit. *Pers. Soc. Psychol. Bull.* 28, 121–130. doi: 10.1177/0146167202281011
- French, J. R. P., and Raven, B. (1959). "The bases of social power," in *Studies in social power*, ed. D. Cartwright (Ann Arbor: University of Michigan Press), 150–167.
- Godfrey, E. B., Santos, C. E., and Burson, E. (2019). For better or worse? System-justifying beliefs in sixth-grade predict trajectories of self-esteem and behavior across early adolescence. *Child Dev.* 90, 180–195. doi: 10.1111/cdev.12854
- Godfrey, E. B., and Wolf, S. (2016). Developing critical consciousness or justifying the system? A qualitative analysis of attributions for poverty and wealth among low-income racial/ethnic minority and immigrant women. *Cult. Divers. Ethnic Minor. Psychol.* 22:93. doi: 10.1037/cdp0000048
- Gollwitzer, P. M. (1990). "Action phases and mind-sets," in *Handbook of Motivation and Cognition: Foundations of Social Behavior, Vol. 2*, eds E. T. Higgins and R. M. Sorrentino (The Guilford Press), 53–92.
- Gong, F., Xu, J., and Takeuchi, D. T. (2012). Beyond conventional socioeconomic status: examining subjective and objective social status with self-reported health among Asian immigrants. *J. Behav. Med.* 35, 407–419. doi: 10.1007/s10865-011-9367-z
- Green, D. P., and Shapiro, I. (1994). *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*. New Haven, CT: Yale University Press.
- Guo, Q., and Feng, L. (2017). The associations between perceived parenting styles, empathy, and altruistic choices in economic games: a study of Chinese children. *Front. Psychol.* 8:1843. doi: 10.3389/fpsyg.2017.01843
- Guo, Z., Li, W., Yang, Y., and Kou, Y. (2021). Honesty-humility and unethical behavior in adolescents: the mediating role of moral disengagement and the moderating role of system justification. *J. Adolesc.* 90, 11–22. doi: 10.1016/j.adolescence.2021.05.009
- Hammond, M. D., Milojevic, P., Huang, Y., and Sibley, C. G. (2018). Benevolent sexism and hostile sexism across the ages. *Soc. Psychol. Personal. Sci.* 9, 863–874. doi: 10.1177/1948550617727588

- Hässler, T., Shnabel, N., Ullrich, J., Arditto-Vogel, A., and SimanTov-Nachlieli, I. (2019). Individual differences in system justification predict power and morality-related needs in advantaged and disadvantaged groups in response to group disparity. *Group Process. Integr. Relat.* 22, 746–766. doi: 10.1177/1368430218773403
- Heckhausen, H., and Gollwitzer, P. (1986). “Information processing before and after the formation of an intent,” in *In Memoriam Hermann Ebbinghaus: Symposium on the Structure and Function of Human Memory* (Elsevier; North-Holland Biomedical Press), 1071–1082.
- Hennes, E. P., Nam, H. H., Stern, C., and Jost, J. T. (2012). Not all ideologies are created equal: epistemic, existential, and relational needs predict system-justifying attitudes. *Soc. Cogn.* 30:669. doi: 10.1521/soco.2012.30.6.669
- Henry, P. J., and Saul, A. (2006). The development of system justification in the developing world. *Soc. Justice Res.* 19, 365–378. doi: 10.1007/s11211-006-0012-x
- Hess, Y. D., and Ledgerwood, A. (2014). Bolstering system-justifying beliefs in response to social exclusion. *Group Process. Integr. Relat.* 17, 494–508. doi: 10.1177/1368430213510572
- Hirschfeld, L. A. (1996). *Race in the Making*. Cambridge, MA: MIT Press. doi: 10.7551/mitpress/5734.001.0001
- Horowitz, J. M., and Igielnik, R. (2021). *A century after women gained the right to vote, majority of Americans see work to do on gender equality*. Pew Research Center’s Social and Demographic Trends Project. Available at: <https://www.pewresearch.org/social-trends/2020/07/07/a-century-after-women-gained-the-right-to-vote-majority-of-americans-see-work-to-do-on-gender-equality/> (accessed December 15, 2022).
- Hussak, L. J., and Cimpian, A. (2015). An early-emerging explanatory heuristic promotes support for the status quo. *J. Pers. Soc. Psychol.* 109, 739–752. doi: 10.1037/pspa0000033
- Hussak, L. J., and Cimpian, A. (2018). Investigating the origins of political views: biases in explanation predict conservative attitudes in children and adults. *Dev. Sci.* 21, 1–17. doi: 10.1111/desc.12567
- Jost, J., and Hunyady, O. (2003). The psychology of system justification and the palliative function of ideology. *Eur. Rev. Soc. Psychol.* 13, 111–153. doi: 10.1080/10463280240000046
- Jost, J. T. (2019). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *Br. J. Soc. Psychol.* 58, 263–314. doi: 10.1111/bjso.12297
- Jost, J. T., and Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *Br. J. Soc. Psychol.* 33, 1–27. doi: 10.1111/j.2044-8309.1994.tb01008.x
- Jost, J. T., Banaji, M. R., and Nosek, B. A. (2004). A decade of system justification theory: accumulated evidence of conscious and unconscious bolstering of the status quo. *Polit. Psychol.* 25, 881–919. doi: 10.1111/j.1467-9221.2004.00402.x
- Jost, J. T., Becker, J., Osborne, D., and Badaan, V. (2017a). Missing in (collective) action: ideology, system justification, and the motivational antecedents of two types of protest behavior. *Curr. Dir. Psychol. Sci.* 26, 99–108. doi: 10.1177/0963721417690633
- Jost, J. T., Chaikalis-Petritsis, V., Abrams, D., Sidanius, J., Van Der Toorn, J., and Bratt, C. (2012). Why men (and women) do and don’t rebel: effects of system justification on willingness to protest. *Pers. Soc. Psychol. Bull.* 38, 197–208. doi: 10.1177/0146167211422544
- Jost, J. T., Glaser, J., Sulloway, F. J., and Kruglanski, A. W. (2018). *Political Conservatism as Motivated Social Cognition*. London: Routledge, 129–204. doi: 10.4324/9781315175867-5
- Jost, J. T., and Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Curr. Dir. Psychol. Sci.* 14, 260–265. doi: 10.1111/j.0963-7214.2005.00377.x
- Jost, J. T., and Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: consequences for specific and diffuse forms of system justification. *J. Pers. Soc. Psychol.* 88, 498–509. doi: 10.1037/0022-3514.88.3.498
- Jost, J. T., Langer, M., Badaan, V., Azevedo, F., Etchezahar, E., Ungaretti, J., et al. (2017b). Ideology and the limits of self-interest: system justification motivation and conservative advantages in mass politics. *Transl. Issues Psychol. Sci.* 3:e1. doi: 10.1037/tps0000127
- Jost, J. T., and Major, B. (2001). “Emerging perspectives on the psychology of legitimacy,” in *The Psychology of Legitimacy: Emerging Perspectives on Ideology, Justice, and Intergroup Relations*, 3–30.
- Jost, J. T., Pelham, B. W., Sheldon, O., and Ni Sullivan, B. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: evidence of enhanced system justification among the disadvantaged. *Eur. J. Soc. Psychol.* 33, 13–36. doi: 10.1002/ejsp.127
- Jost, J. T., and Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *J. Exp. Soc. Psychol.* 36, 209–232. doi: 10.1006/jesp.1999.1403
- Jost, J. T., and van der Toorn, J. (2012). “System justification theory,” in *Handbook of theories of social psychology*. eds. P. A. M. Van Lange, A. W. Kruglanski, and E. T. Higgins (London, United Kingdom: Sage), 313–343. doi: 10.4135/9781446249222.n42
- Kay, A. C., Jimenez, M. C., and Jost, J. T. (2002). Sour grapes, sweet lemons, and the anticipatory rationalization of the status quo. *Pers. Soc. Psychol. Bull.* 28, 1300–1312. doi: 10.1177/01461672022812014
- Kay, A. C., and Jost, J. T. (2003). Complementary justice: effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *J. Pers. Soc. Psychol.* 85, 823–837. doi: 10.1037/0022-3514.85.5.823
- Klein, R. A., Cook, C. L., Ebersole, C. R., Vitiello, C., Nosek, B. A., Hilgard, J., et al. (2022). Many Labs 4: failure to replicate mortality salience effect with and without original author involvement. *Collabra: Psychol.* 8:35271. doi: 10.1525/collabra.35271
- Kraus, M. W., and Stephens, N. M. (2012). A road map for an emerging psychology of social class. *Soc. Personal. Psychol. Compass* 6, 642–656. doi: 10.1111/j.1751-9004.2012.00453.x
- Krosnick, J. A., and Alwin, D. F. (1989). Aging and susceptibility to attitude change. *J. Pers. Soc. Psychol.* 57:416. doi: 10.1037//0022-3514.57.3.416
- Kteily, N. S., Sidanius, J., and Levin, S. (2011). Social dominance orientation: cause or ‘mere effect’?: Evidence for SDO as a causal predictor of prejudice and discrimination against ethnic and racial outgroups. *J. Exp. Soc. Psychol.* 47, 208–214. doi: 10.1016/j.jesp.2010.09.009
- Kurtz-Costes, B., Rowley, S. J., Harris-Britt, A., and Woods, T. A. (2008). Gender stereotypes about mathematics and science and self-perceptions of ability in late childhood and early adolescence. *Merrill-Palmer Quart.* 54, 386–409. doi: 10.1353/mpq.0.0001
- Lau, G. P., Kay, A. C., and Spencer, S. J. (2008). Loving those who justify inequality: the effects of system threat on attraction to women who embody benevolent sexist ideals. *Psychol. Sci.* 8:2040. doi: 10.1111/j.1467-9280.2008.02040.x
- Lau, S. (1989). Sex role orientation and domains of self-esteem. *Sex Roles* 21, 415–422. doi: 10.1007/BF00289600
- Lerner, M. J. (1980). “The belief in a just world,” in *The Belief in a just World* (Boston, MA: Springer), 9–30. doi: 10.1007/978-1-4899-0448-5_2
- Lewin, K., Dembo, T., Festinger, L., and Sears, P. S. (1944). “Level of aspiration,” in *Personality and the Behavior Disorders*, ed. J. M. Hunt (Ronald Press), 333–378.
- Li, W., Wu, J., and Kou, Y. (2020a). System justification enhances life satisfaction of high- and low-status people in China. *Soc. Psychol. Personal. Sci.* 11, 588–596. doi: 10.1177/1948550619866182
- Li, W., Yang, Y., Wu, J., and Kou, Y. (2020b). Testing the status-legitimacy hypothesis in China: objective and subjective socioeconomic status divergently predict system justification. *Pers. Soc. Psychol. Bull.* 46, 1044–1058. doi: 10.1177/0146167219893997
- Loewenstein, G. (1996). Out of control: visceral influences on behavior. *Org. Behav. Hum. Decis. Process.* 65, 272–292.
- Maccoby, E. E. (1988). Gender as a social category. *Dev. Psychol.* 24, 755–765. doi: 10.1037/0012-1649.24.6.755
- McCoy, S. K., Wellman, J. D., Cosley, B., Saslow, L., and Epel, E. (2013). Is the belief in meritocracy palliative for members of low status groups? Evidence for a benefit for self-esteem and physical health via perceived control. *Eur. J. Soc. Psychol.* 43, 307–318. doi: 10.1002/ejsp.1959
- Merelman, R. M. (1972). The adolescence of political socialization. *Sociol. Educ.* 14, 134–166. doi: 10.2307/2112005
- Metcalf, J., and Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: dynamics of willpower. *Psychol. Rev.* 106, 3–19. doi: 10.1037/0033-295X.106.1.3
- Millet, E., and Paviol, J. (2022). *Undocumented Hispanic immigrants in the United States*. The Center for Migration Studies of New York (CMS). Available at: <https://cmsny.org/publications/hispanic-undocumented-immigrants-millet-paviol-101722/> (accessed December 13, 2022).
- Mistry, R. S., Brown, C. S., White, E. S., Chow, K. A., and Gillen-O’Neel, C. (2015). Elementary school children’s reasoning about social class: a mixed-methods study. *Child Dev.* 86, 1653–1671. doi: 10.1111/cdev.12407
- Mosso, C., Briante, G., Aiello, A., and Russo, S. (2013). The role of legitimizing ideologies as predictors of ambivalent sexism in young people: Evidence from Italy and the USA. *Soc. Justice Res.* 26, 1–17. doi: 10.1007/s11211-012-0172-9
- Napier, J. L., and Jost, J. T. (2008). The “antidemocratic personality” revisited: a cross-national investigation of working-class authoritarianism. *J. Soc. Issues* 64, 595–617. doi: 10.1111/j.1540-4560.2008.00579.x
- Napier, J. L., Suppes, A., and Bettinsoli, M. L. (2020). Denial of gender discrimination is associated with better subjective well-being among women: a system justification account. *Eur. J. Soc. Psychol.* 50, 1191–1209. doi: 10.1002/ejsp.2702

- Oettingen, G., Pak, H. J., and Schnetter, K. (2001). Self-regulation of goal-setting: turning free fantasies about the future into binding goals. *J. Pers. Soc. Psychol.* 80, 736–753.
- Olson, E. (2020). *Hawaiian shirts, guns and anticipation of war: Who are the 'Boogaloo boys'?* ABC News. Available at: <https://www.abc.net.au/news/2020-06-28/antifa-boogaloo-extremists-at-us-floyd-protests/12388260> (accessed November 30, 2022).
- Osborne, D., Jost, J. T., Becker, J. C., Badaan, V., and Sibley, C. G. (2019a). Protesting to challenge or defend the system? A system justification perspective on collective action. *Eur. J. Soc. Psychol.* 49, 244–269. doi: 10.1002/ejsp.2522
- Osborne, D., Sengupta, N. K., and Sibley, C. G. (2019b). System justification theory at 25: evaluating a paradigm shift in psychology and looking towards the future. *Br. J. Soc. Psychol.* 58, 340–361. doi: 10.1111/bjso.12302
- Osborne, D., and Sibley, C. G. (2013). Through rose-colored glasses: system-justifying beliefs dampen the effects of relative deprivation on well-being and political mobilization. *Pers. Soc. Psychol. Bull.* 39, 991–1004. doi: 10.1177/0146167213487997
- Ostrove, J. M., Adler, N. E., Kuppermann, M., and Washington, A. E. (2000). Objective and subjective assessments of socioeconomic status and their relationship to self-rated health in an ethnically diverse sample of pregnant women. *Health Psychol.* 19:613. doi: 10.1037//0278-6133.19.6.613
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Syst. Rev.* 10, 1–11. doi: 10.1186/s13643-021-01626-4
- Paluck, E. L., Shepherd, H., and Aronow, P. M. (2018). “Changing climates of conflict: A social network experiment in 56 schools”: Correction. *PNAS Proc. Natl. Acad. Sci. USA* 115:E3598. doi: 10.1073/pnas.1804429115
- Parker, K., Igielnik, R., and Graf, N. (2022). *Generation Z looks a lot like millennials on key social and political issues*. Pew Research Center's Social and Demographic Trends Project. Available at: <https://www.pewresearch.org/social-trends/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/> (accessed December 15, 2022).
- Parks-Stamm, E. J., Gollwitzer, P. M., and Oettingen, G. (2007). Action control by implementation intentions: effective cue detection and efficient response initiation. *Soc. Cogn.* 25, 248–266. doi: 10.1521/soco.2007.25.2.248
- Roccatto, M., Rosato, R., Mosso, C., and Russo, S. (2014). Measurement properties of the system justification scale: a rasch analysis. *TPM-Testing, Psychom. Methodol. Appl. Psychol.* 21, 467–478. doi: 10.4473/TPM21.4.7
- Rosenberg, S. (2020). *4. Views of Immigration Policy*. Pew Research Center's Hispanic Trends Project. Available at: <https://www.pewresearch.org/hispanic/2018/10/25/views-of-immigration-policy/#:sim:text=About%20eight%Din%2Dten%20,the%20U.S.%20Among%20the%20U.S.> (accessed December 13, 2022).
- Roy, A. L., Uriostegui, M., and Uribe, M. (2019). “Intersecting experiences, motivating beliefs: the joint roles of class and race/ethnicity in the development of youths' sociopolitical perceptions and participation,” in *Advances in child development and behavior: Child development at the intersection of race and SES, Vol. 57* (Elsevier Academic Press), 169–194. doi: 10.1016/bs.acdb.2019.04.003
- Rueda, M. R., Rothbart, M. K., McCandliss, B. D., Saccomanno, L., and Posner, M. I. (2005). Training, maturation, and genetic influences on the development of executive attention. *Proc. Natl. Acad. Sci. U.S.A.* 102, 14931–14936. doi: 10.1073/pnas.0506897102
- Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., and Patton, G. C. (2018). The age of adolescence. *Lancet Child Adol. Health* 2, 223–228. doi: 10.1016/S2352-4642(18)30022-1
- Sengupta, N. K., Greaves, L. M., Osborne, D., and Sibley, C. G. (2017). The sigh of the oppressed: the palliative effects of ideology are stronger for people living in highly unequal neighbourhoods. *Br. J. Soc. Psychol.* 56, 437–454. doi: 10.1111/bjso.12192
- Shah, J. Y., Friedman, R., and Kruglanski, A. W. (2002). Forgetting all else: on the antecedents and consequences of goal shielding. *J. Pers. Soc. Psychol.* 83, 1261–1280.
- Shah, J. Y., and Kruglanski, A. W. (2003). When opportunity knocks: bottom-up priming of goals by means and its effects on self-regulation. *J. Pers. Soc. Psychol.* 84, 1109–1122. doi: 10.1037/0022-3514.84.6.1109
- Shockey, E., Wynn, A., and Ashburn-Nardo, L. (2016). Dimensions of Black identity predict system justification. *J. Black Psychol.* 42, 103–113. doi: 10.1177/0095798414557276
- Sichel, C. E., Javdani, S., and Yi, J. (2022). Perceiving fairness in an unfair world: System justification and the mental health of girls in detention facilities. *Am. J. Community Psychol.* 69, 451–462. doi: 10.1002/ajcp.12558
- Stern, C., Balcells, E., Cole, S., West, T. V., and Caruso, E. M. (2016). Government instability shifts skin tone representations of and intentions to vote for political candidates. *J. Pers. Soc. Psychol.* 110:76. doi: 10.1037/pspi0000040
- Stevenson, K. T., King, T. L., Selm, K. R., Peterson, M. N., and Monroe, M. C. (2018). Framing climate change communication to prompt individual and collective action among adolescents from agricultural communities. *Environ. Educ. Res.* 24, 365–377. doi: 10.1080/13504622.2017.1318114
- Suppes, A., Napier, J. L., and van der Toorn, J. (2019). The palliative effects of system justification on the health and happiness of lesbian, gay, bisexual, and transgender individuals. *Pers. Soc. Psychol. Bull.* 45, 372–388. doi: 10.1177/0146167218785156
- Tan, J. J., Kraus, M. W., Carpenter, N. C., and Adler, N. E. (2020). The association between objective and subjective socioeconomic status and subjective well-being: a meta-analytic review. *Psychol. Bull.* 146:970. doi: 10.1037/bul0000258
- Taylor, L. K., and McKeown, S. (2021). Adolescent outgroup helping, collective action, and political activism in a setting of protracted conflict. *Int. J. Interc. Relat.* 85, 37–46. doi: 10.1016/j.ijintrel.2021.09.001
- Trope, Y., and Fishbach, A. (2000). Counteractive self-control in overcoming temptation. *J. Pers. Soc. Psychol.* 79, 493–506.
- Tyler, T. R. (2006). Legitimacy and legitimation. *Annu. Rev. Psychol.* 57, 375–400. doi: 10.1146/annurev.psych.57.102904.190038
- Valentino, N. A., and Sears, D. O. (1998). Event-driven political communication and the preadult socialization of partisanship. *Polit. Behav.* 20, 127–154. doi: 10.1023/A:1024880713245
- Van den Brink, M., and Stobbe, L. (2014). The support paradox: overcoming dilemmas in gender equality programs. *Scand. J. Manag.* 30, 163–174. doi: 10.1016/j.scaman.2013.07.001
- van der Toorn, J., Feinberg, M., Jost, J. T., Kay, A. C., Tyler, T. R., Willer, R., et al. (2015). A sense of powerlessness fosters system justification: Implications for the legitimation of authority, hierarchy, and government. *Polit. Psychol.* 36, 93–110. doi: 10.1111/pops.12183
- van der Toorn, J., and Jost, J. T. (2014). Twenty years of system justification theory: Introduction to the special issue on “Ideology and system justification processes”. *Group Process. Interg. Relat.* 17, 413–419. doi: 10.1177/1368430214531509
- van der Toorn, J., Jost, J. T., and Loffredo, B. (2017). Conservative ideological shift among adolescents in response to system threat. *Zeitschrift Für Psychol.* 225, 357–362. doi: 10.1027/2151-2604/a000299
- van der Toorn, J., Tyler, T. R., and Jost, J. T. (2011). More than fair: outcome dependence, system justification, and the perceived legitimacy of authority figures. *J. Exp. Soc. Psychol.* 47, 127–138. doi: 10.1016/j.jesp.2010.09.003
- Vargas-Salfate, S., Paez, D., Khan, S. S., Liu, J. H., and Gil de Zúñiga, H. (2018). System justification enhances well-being: A longitudinal analysis of the palliative function of system justification in 18 countries. *Br. J. Soc. Psychol.* 57, 567–590. doi: 10.1111/bjso.12254
- Verniers, C., and Martinot, D. (2015). L'EJSAG, une Échelle de Justification du système Spécifique Au Genre: Validation auprès d'une population d'adolescents et d'adultes. [The EJSAG, a gender—Specific system justification scale: Validation among adolescents and adults.]. *L'Année Psychol.* 115, 107–140. doi: 10.4074/S0003503315001050
- Wakslak, C. J., Jost, J. T., and Bauer, P. (2011). Spreading rationalization: Increased support for large-scale and small-scale social systems following system threat. *Soc. Cogn.* 29, 288–302. doi: 10.1521/soco.2011.29.3.288
- Wakslak, C. J., Jost, J. T., Tyler, T. R., and Chen, E. S. (2007). Moral outrage mediates the dampening effect of system justification on support for redistributive social policies. *Psychol. Sci.* 18, 267–274. doi: 10.1111/j.1467-9280.2007.01887.x
- Weissbourd, R., Ross Anderson, T., Cashin, A., and McIntyre, J. (2015). *Leaning out: Teen girls and leadership biases*. Available at: <https://mcc.gse.harvard.edu/reports/leaning-out> (accessed November 15, 2022).
- Wiederkehr, V., Bonnot, V., Krauth-Gruber, S., and Darnon, C. (2015). Belief in school meritocracy as a system-justifying tool for low status students. *Front. Psychol.* 6:1053. doi: 10.3389/fpsyg.2015.01053
- Yeung, A. W., Kay, A. C., and Peach, J. M. (2014). Anti-feminist backlash: The role of system justification in the rejection of feminism. *Group Process. Interg. Relat.* 17, 474–484. doi: 10.1177/1368430213514121
- Zimmerman, J. L., and Reyna, C. (2013). The meaning and role of ideology in system justification and resistance for high- and low-status people. *J. Pers. Soc. Psychol.* 105:1. doi: 10.1037/a0032967