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| Table S.1 | | | | |
| *Overview of Studies Included in Systematic Review of Literature: Factors Relating Critical Consciousness to Other Aspects of Development* | | | | |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
| ***Parent and Peer Socialization*** | | | | |
| Bañales, Marchand, Skinner, Anyiwo, Rowley, and Kurtz-Costes (2019) | 454 Black adolescents enrolled in 16 high schools in the Southeastern U.S.; mean age (baseline) = 16.0 | Quantitative; longitudinal structural equation modeling | Parental racial socialization; parental structural attributions for racism; adolescent individual attributions for racism; adolescent structural attributions for racism (each assessed as latent constructs, with the latter three as forms of critical reflection) | Parental racial socialization and parental structural attributions in 10th grade contributed to higher levels of structural attributions for racism in 12th grade, but were unrelated to individual attributions. |
| Diemer (2012) | 3,267 youth of color belonging to low SES, drawn from the Educational Longitudinal Study of 2002 (ELS); 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Parental political socialization, assessed via youths’ responses to the item “how often have you discussed community, national, and world events with either or both of your parents or guardians” at the 10th and 12th grade; youth sociopolitical development, assessed via 2-3 items measuring youths’ sense of importance of civic action (≈critical motivation) | Parental political socialization was associated with 10th grade sociopolitical development for all ethnic-racial groups in the study and 12th grade sociopolitical development for Latinx and African American youth |
| Diemer, Hsieh, and Pan (2009) | 2,078 low-SES adolescents of color in the U.S.; 12th grade, drawn from the National Educational Longitudinal Survey of 1988 (NELS: 88) | Quantitative; cross-sectional | Sociopolitical development via two components: (1) motivation, and (2) self-definition; parent support, assessed via a latent construct based on frequency of discussion about social or political issues; peer socialization, assessed via a latent construct representing peer racial relations | Parent support was associated with both the motivation and self-definition aspects of sociopolitical development, whereas peer socialization was not associated with either. |
| Diemer, Kauffman, Koenig, Trahan, and Hsieh (2006) | 98 high school aged youth attending two urban high schools in the Northeastern U.S; mean age = 15.44 | Mixed methods; cross-sectional | Perceived support for challenging racism, sexism, and social injustice; critical reflection, assessed by inverting scores on a scale of Social Dominance Orientation (Pratto, Sidanius, Stallworth, & Malle, 1994); critical action, assessed using the Sociopolitical Control Scale (Zimmerman & Zahniser, 1991) | Perceived support for challenging racism, sexism, and social injustice was associated with critical reflection, but not with critical action |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic | Quantitative; cross-sectional; structural equation modeling | Parent and peer sociopolitical support, measured as a single construct based on how often participants talked about current events with family and friends or about politics at home; social action; | Parent and peer sociopolitical support had a small to medium effect on social action and sociopolitical control |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  | and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 |  | sociopolitical control (≈critical motivation) |  |
| ***School Climate*** | | | | |
| Cervantes-Soon (2012) | 2 high school aged youth in Juárez, Mexico | Qualitative; ethnography | Critical education; critical examination of inequalities and social justice issues (≈critical motivation) | Educators commitment to critical education and a school climate focused on critical examination of inequalities and social justice promoted critical consciousness development |
| Clark and Seider (2017) | 60 high school aged youth attending urban charter high schools in the Northeastern U.S. | Qualitative; semi-structured interviews | Critical curiosity (defined as curiosity about power and oppression and a willingness to question dominant narratives and conceptualized as a precursor of critical consciousness); school practices thought to support the development of critical curiosity, including (1) providing new information, (2) providing relevant, real-life examples, and (3) providing new perspectives | Three identified school practices were associated with critical curiosity development, which the authors contend supports critical consciousness development |
| Diemer, Hsieh, and Pan (2009) | 2,078 low-SES adolescents of color in the U.S.; 12th grade | Quantitative; cross-sectional | Sociopolitical development via two components: (1) motivation and (2) self-definition; principal support, assessed via a latent construct based on promoting awareness about social or political issues | No associations were found between principal support and sociopolitical development: motivation or sociopolitical development: self-definition |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 | Quantitative; cross-sectional; structural equation modeling | Teacher sociopolitical support, assessed via items related to supportive discussion of social or political issues; sociopolitical control (≈critical motivation) | Teacher sociopolitical support had a small association with sociopolitical control |
| Fullam (2017) | 1 17-year-old high school student in Newark, New Jersey | Qualitative; case study | Critical dialogue with adult mentors; critical reflection; critical action | Critical dialogue with mentors was argued to support critical reflection and critical action |
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| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
| Godfrey and Grayman (2014) | 2,774 U.S. 9th grade students drawn from the nationally representative Civic Education Study of 1999 (CIVED); mean age = 14.00 | Quantitative; cross-sectional; multi-level regression | Open classroom climate, assessed as the degree to which discussion of controversial social and political issues was supported in class; critical school efficacy and critical political efficacy as forms of critical motivation; engagement in community service activities, assessed via a single, binary item and meant to signify critical action | Open classroom climate was associated with enhanced critical school efficacy, critical political efficacy, and greater engagement in community service activities |
| Pérez-Gualdrón, and Helms (2017) | 1,472 8th grade Latinx youth drawn from the National Education Longitudinal Study of 1988, aged 13-16; mean age (at baseline) = 14.46 | Quantitative; longitudinal; structural equation modeling | Social justice orientation, defined as a measure of awareness of and motivation to end social inequities and unfairness, along with interest in helping community members—thus combining elements of critical reflection and critical motivation; school relational climate, assessed via student perceptions and defined as the quality of relationships among teachers and students | A social justice orientation was positively associated with school relational climate |
| Seider et al. (2016) | 552 Black, Latinx, or Multiracial youth predominantly low SES in the U.S.; aged 13-16 | Mixed methods; longitudinal | Critical reflection, assessed as structural attributions for racial inequality; school practices drawing on the use of historical or literary examples to critique present-day structural racism as well as contemporary evidence of racial inequality to deepen understanding of structural racism | Students in “progressive” schools focused on the use of identified practices to use historical, literary, or contemporary evidence of racial inequality had increased critical reflection skills within the course of a single school year, compared with students attending “no-excuses” schools |
| Seider, Tamerat, Clark, and Soutter (2017) | 335 high school aged youth attending urban charter high schools in the Northeastern U.S. | Mixed methods; longitudinal | Critical consciousness, operationalized via three dimensions: (1) intellectual, defined as structural analysis of oppression, racism, and inequality; (2) performance, defined as navigating oppression through optimism, social intelligence, and perseverance; and (3) civic, defined challenging oppression through activism commitment and social responsibility; school practices and pedagogical approaches | Students attending schools using problem-posing and habits of mind pedagogical models experienced greater growth in the intellectual dimension of critical consciousness while students attending schools with “no excuses” and expeditionary learning pedagogies experienced greater growth in social intelligence and commitment to activism |
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| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
| ***Experiences of Marginalization, Oppression, and Violence*** | | | | |
| Cervantes-Soon (2012) | 2 high school aged youth in Juárez, Mexico | Qualitative; ethnography | Poverty, marginalization, oppression, and violence; critical reflective via critical awareness of oppressive systems; critical motivation via efficacy to resist oppressive systems; and critical action via engagement in action against oppressive systems | Lived experiences with poverty, marginalization, oppression, and violence translated into identities and practices reflective of critical consciousness, including greater awareness of inequities, efficacy to resist, and engagement in action against oppressive systems |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 | Quantitative; cross-sectional; structural equation modeling | Sociopolitical control (≈critical motivation) | Sociopolitical control was higher among youth of color, who experience racism and other forms of discrimination, than among White youth |
| Kelly (2018) | 7 high school aged Black girls in 12th grade, in a suburban area of a large city in the Northeastern U.S., aged 16-17 | Qualitative; case study | Critical social analysis (≈critical reflection); collective identification; political self-efficacy (≈critical motivation); sociopolitical / critical action | The development of critical consciousness came about through youths’ engagement with oppressive and marginalizing structures within their school context, including racial microaggressions, harsh disciplinary practices, and other forms of marginalization |
| Roy, Raver, Masucci, and DeJoseph (2019) | 461 urban youth predominantly from high-poverty neighborhoods in Chicago, IL aged 13-17; mean age = 15.32 | Mixed methods; cross-sectional | Neighborhood income inequality; youth exposure to violence; critical action (assessed via the Critical Consciousness Scale, Diemer et al., 2017) | Neighborhood income inequality and exposure to violence were positively associated with critical action |
| ***Beliefs, Knowledge, and Knowledge Production*** | | | | |
| Clark and Seider (2019) | 659 youth in the U.S. with the majority low SES and people of color; surveyed at the end of 9th, 10th, 11th, and 12th grades | Qualitative | Curiosity; sociopolitical development; social analysis; societal involvement; | In multivariate models, curiosity was positively correlated with social analysis and societal involvement at baseline and over time. |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 | Quantitative; cross-sectional; structural equation modeling | Civic and political knowledge; social action (≈critical action); sociopolitical control (≈critical motivation) | Civic and political knowledge had a small to medium association with social action and sociopolitical control |
| Diemer and Rapa (2016) | 761 poor and working class U.S. 9th grade students drawn from the nationally representative Civic Education Study of 1999 (CIVED); mean age = 14.6 | Quantitative; cross-sectional; structural equation modeling | Critical reflection via perceived inequality and egalitarian beliefs (Diemer et al., 2017); internal political efficacy (≈critical motivation); external political efficacy; critical action; civic and political knowledge | Civic and political knowledge was associated with increased critical reflection and internal political efficacy among Latinx 9th graders, while civic and political knowledge was associated with a decreased likelihood of critical action for African American 9th graders. |
| Diemer, Voight, Marchand, & Bañales (2019) | 237 urban high school aged youth from the Midwestern U.S.; mean age = 16.91 | Quantitative; cross-sectional; structural equation modeling | Political affiliation (Democrat, Republican, Conservative, Liberal), critical reflection via perceived inequality (Diemer et al., 2017) | Liberal students reported significantly higher levels of perceived inequality (a sub-dimension of critical reflection, measured using the CCS) and students who identified as Democrats reported marginally significantly higher levels of perceived inequality |
| Foster-Fishman, Law, Lichty, and Aoun (2010) | 19 middle school aged youth from the Midwestern U.S., aged 12-13 | Qualitative; youth participatory action research and photovoice | Critical reflection, assessed via observation of youth dialogue during yPAR activities and focus groups | The ReACT Method—which included problem identification and feedback, data analysis, and community dialogue—promoted critical consciousness in participants, especially via involvement in data analysis |
| ***Community Engagement*** | | | | |
| Christens and Dolan (2011) | 20 Latinx youth organizers in the U.S.; aged 16-20 | Qualitative; interview | Critical action, operationalized as engagement in organizing; critical reflection operationalized as awareness of social power and the impacts of systems of power and privilege in local communities; critical motivation operationalized as confidence to engage in civic and political action | As youth engaged in critical action, they developed an increasing capacity for building relationships across racial, ethnic, and other identity lines, increased connection to adults involved in organizing, and positive relations with other youth |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
| Fegley, Angelique, and Cunningham (2006) | 22 pre-adolescent and teenaged youth from central Pennsylvania, aged 6-13 | Mixed methods | Critical reflection | Youth participating in a community-based program had an enhanced ability to think critically about social issues, with those involved in community service having enhanced critical reflection |
| Fullam (2017) | 1 17-year-old high school student in Newark, New Jersey | Qualitative; case study | Mentorship by community activists; critical analysis; critical action | Adult mentorship by community activists at community meetings facilitated the development of critical analysis (i.e., critical reflection) and critical action |
| Oosterhoff, Ferris, Palmer, and Metzger (2017) | 299 economically diverse youth in the U.S.; 88% White; aged 14-18; mean age = 15.49 | Quantitative; longitudinal | Church involvement; volunteering; critical reflection via social dominance beliefs and authoritarianism | Greater church involvement at Time 1 was associated with lower social dominance values at Time 2, while greater social dominance values at Time 1 predicted lower involvement in volunteering at Time 2. |
| Roy, Raver, Masucci, and DeJoseph (2019) | 461 urban youth predominantly from high-poverty neighborhoods in Chicago, IL aged 13-17; mean age = 15.32 | Mixed methods; cross-sectional | Participation in after-school programming and volunteering in community organizations; critical action | Engagement in after-school programming and volunteering in community organizations were associated with critical action |
| Pérez-Gualdrón and Helms (2017) | 1,472 8th grade Latinx youth drawn from the National Education Longitudinal Study of 1988, aged 13-16; mean age (at baseline) = 14.46 | Quantitative; longitudinal; structural equation modeling | Social justice orientation, defined as awareness of and motivation to end social inequities and unfairness and interest in helping community members—thus combining elements of critical reflection and critical motivation; school relational climate, assessed via student report and defined as the quality of relationships among teachers and students | Mediated by youths’ personal agency beliefs, social justice orientation in 10th grade was associated with greater community engagement when students were in 12th grade |
| ***Career Development, Occupational Expectancies, and Occupational Attainment*** | | | | |
| Diemer (2009) | 1,052 youth of color belonging to low SES; 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Sociopolitical development; occupational expectancies; post-graduate occupational outcomes | 10th grade sociopolitical development was not associated with 10th grade occupational expectancies; 12th grade sociopolitical development was positively associated with 12th grade occupational expectancies and had an indirect effect (via occupational |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  |  |  |  | expectancies) on post-graduate occupational outcomes (assessed eight years after graduation) |
| Diemer and Blustein (2006) | 220 high school aged youth attending two urban high schools in the Northeastern U.S.; mean age = 15.57 | Quantitative; cross-sectional; canonical correlation analysis | Sociopolitical analysis (inverse scores on the Social Dominance Orientation scale); Sociopolitical control (measured via the Sociopolitical Control Scale); connection to vocational futures; work role salience, or the degree to which one sees work as important; clarity of vocational identity | Sociopolitical control was strongly associated with adolescents’ sense of connection to their vocational futures and work role salience. Sociopolitical analysis was moderately associated with clarity of vocational identity including work-related goals, interests, and talents |
| Diemer and Hsieh (2008) | 1,784 12th grade students of color in the U.S. | Quantitative; cross-sectional; multiple regression analysis | Sociopolitical development; vocational expectancies; | Vocational expectancies were significantly associated with two indicators of sociopolitical development: perceived importance of helping one’s community and discussing social and political issues—specifically with one’s parents. |
| Diemer, Wang, Moore, Gregory, Hatcher, and Voight (2010) | 2,627 low-SES youth of color; 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Sociopolitical development (≈critical motivation); vocational expectancies; work salience | Sociopolitical development in 10th grade was positively associated with vocational expectations and work salience in 10th grade for all three racial groups. In 12th grade, sociopolitical development was positively associated with work salience for all three groups but was not associated with vocational expectations |
| Nicholas, Eastman-Mueller, and Barbich (2019) | 6 youth attending a community-based sex education program in Southwest Missouri | Qualitative; phenomenology | Sociopolitical development, operationalized to include critical awareness (≈critical reflection), political efficacy (≈critical motivation), and sociopolitical participation (≈critical action); career decision-making | Sociopolitical development was linked to career decision-making |
| Olle and Fouad (2015) | 137 11-12th grade students attending an urban high school from the Midwestern U.S. | Quantitative; cross-sectional | Critical consciousness, assessed via items reflecting beliefs in the importance of social action; goals/intentions for career exploration; career outcome expectations | Critical consciousness was associated with the goals/intentions of 11th and 12th grade students to participate in career exploration and moderated the relation between outcome expectations and career goals/intentions; higher outcome expectations were associated with |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  |  |  |  | stronger goals/intentions, but the association between outcome expectations and goals/intentions was weaker when critical consciousness was higher |
| Rapa, Diemer, and Bañales (2018) | 261 lower-SES African American youth, drawn from the Maryland Adolescent Development in Context Study; participants were 11th grade at baseline, or aged approximately 17 | Quantitative; longitudinal; structural equation modeling | Critical action; career expectancies; occupational attainment | Career expectancies one year after high school are predicted by career expectancies in high school and by critical action one year after high school |
| ***Expected Voting and Voting Behavior*** | | | | |
| Diemer (2012) | 3,267 youth of color belonging to low SES, drawn from the Educational Longitudinal Study of 2002 (ELS); 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Youth sociopolitical development, assessed via 2-3 items measuring youths’ sense of importance of civic action (≈critical motivation); political participation, as measured by voting and volunteering for political organization or club | Sociopolitical development in 12th grade predicted actual political participation for Asian-American and Latinx youth, but not African-American youth, two years out of high school |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 | Quantitative; cross-sectional; structural equation modeling | Social action (≈critical action); sociopolitical control (≈critical motivation); voting behavior operationalized as active voter registration, prior voting in the presidential election, and prior voting or intentions to vote in other local or national elections | Social action and sociopolitical control both had a small association with voting behavior |
| Diemer and Rapa (2016) | 761 poor and working class U.S. 9th grade students drawn from the nationally representative Civic Education Study of | Quantitative; cross-sectional; structural equation modeling | Critical reflection via perceived inequality and egalitarian beliefs (Diemer et al., 2017); internal political efficacy (≈critical motivation); external political efficacy; critical action; voting behavior | Internal political efficacy predicted expected voting behavior among poor and working class Latinx and African-American 9th graders; critical action, specifically protest behaviors, was negatively associated with expected voting for poor and working class |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  | 1999 (CIVED); mean age = 14.6 |  |  | Latinx 9th graders and was not significantly associated with expected voting for African-American participants; critical reflection: egalitarianism was positively associated with expected voting and critical reflection: perceived inequality was negatively associated with expected voting for Latinx 9th graders; both critical reflection variables were uncorrelated with expected voting for African-American students |
| ***Socio-Emotional Functioning*** | | | | |
| Clonan-Roy, Jacobs, and Nakkula (2016) | 15 high school aged Black girls in grades 9-12 in the Northeastern U.S. | Qualitative; ethnography | Critical consciousness; positive youth development competencies of competence, confidence, character, connection, caring, and contribution (Lerner et al., 2005) | Critical consciousness mediated the development of positive youth development competencies in girls of color |
| Delia and Krasny (2018) | 9 high school aged youth living in Brooklyn, New York, aged 15-18 | Qualitative; narrative inquiry | Critical consciousness, including its reflection, action, and motivation components; leadership skills; sense of self; care for and contribution to community | Critical consciousness was related to enhanced leadership skills and sense of self, as well as greater care for and contribution to one’s community |
| Godfrey, Burson, Yanisch, and Way (2019) | 447 youth attending middle school in New York, NY, drawn from the longitudinal Early Adolescent Cohort study; data for study participants were collected when respondents were in 7th grade | Quantitative; cross-sectional; latent class analysis | Critical reflection; efficacy; commitment to action; depressive symptoms | Based on latent class analysis, the group lowest in the reflective elements of critical consciousness had lower levels of depressive symptoms than a group with higher levels of critical reflection; none of the four groups profiled had high critical consciousness across the domains of reflection, efficacy, and action; thus, the results of this study do not reflect the expected social-emotional outcomes for a youth who is high on all three dimensions of critical consciousness |
| Luginbuhl, McWhirter, and McWhirter (2016) | 1,196 diverse high school youth in the | Quantitative; cross-sectional | Sociopolitical development, measured via scores on the Social Dominance Orientation Scale (SDOS; Pratto et al., | Youth with higher levels of sociopolitical development had significantly higher endorsement of basic psychological |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  | U.S.; aged 13-18; mean age = 14.7 |  | 1994) and a modified version of the Measure of Adolescent Critical Consciousness (McWhirter & McWhirter, 2016); autonomy support | needs satisfaction in terms of autonomy support |
| ***Academic Functioning*** | | | | |
| Godfrey, Burson, Yanisch, and Way (2019) | 447 youth attending middle school in New York, NY, drawn from the longitudinal Early Adolescent Cohort study; data for study participants were collected when respondents were in 7th grade | Quantitative; cross-sectional; latent class analysis | Critical reflection; efficacy; commitment to action; grades; academic competence | Based on latent class analysis, youth with the lowest profile in the reflective elements of critical consciousness had better grades than youth in the other groups; they had higher academic competence than youth in one of the other groups as well |
| Diemer (2009) | 1,052 youth of color belonging to low SES; 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Sociopolitical development; academic achievement | Sociopolitical development was positively associated with academic achievement |
| Diemer, Wang, Moore, Gregory, Hatcher, and Voight (2010) | 2,627 low-SES youth of color; 10th and 12th grade students in the U.S. | Quantitative; longitudinal; structural equation modeling | Sociopolitical development (≈critical motivation); academic achievement | Sociopolitical development was negatively associated with academic achievement for Latinx and African-American youth; there was no relation between sociopolitical development and academic achievement for Asian-American youth |
| Luginbuhl, McWhirter, and McWhirter (2016) | 1,196 diverse high school youth in the U.S.; aged 13-18; mean age = 14.7 | Quantitative; cross-sectional | Sociopolitical development; autonomous academic motivation; academic achievement; educational expectancies | Sociopolitical development was positively associated with autonomous academic motivation, academic achievement, and educational expectancies; the association between sociopolitical development and academic achievement as well as the association between sociopolitical development and educational expectancies was partially mediated by autonomous motivation |
| McWhirter and McWhirter (2016) | Study 1: 476 high school aged Latinx youth, | Quantitative; cross-sectional; structural equation modeling | Critical agency (≈critical motivation); critical behavior (≈critical action); grades; school engagement | Comparing participants who were high in both critical agency and critical behavior to participants who were low |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  | aged 14-19; mean age = 16.4  Study 2: 680 high school aged Latinx youth, aged 13-20; mean age = 16.3 |  |  | in agency and behavior, self-reported grades were higher for the group that was high in both critical consciousness domains; school engagement was higher in the high critical consciousness group than in the low critical consciousness group |
| Pérez-Gualdrón, and Helms (2017) | 1,472 8th grade Latinx youth drawn from the National Education Longitudinal Study of 1988, aged 13-16; mean age (at baseline) = 14.46 | Quantitative; longitudinal; structural equation modeling | Social justice orientation; personal agency beliefs; grades; behavioral disengagement; school dropout | Social justice orientation in 10th grade was associated with higher grades, lower school behavioral disengagement, and a decreased likelihood of school dropout two years later, when students were in 12th grade, via the mediated pathway through personal agency beliefs |
| ***Relations Among Critical Consciousness Sub-Domains*** | | | | |
| Bañales, Marchand, Skinner, Anyiwo, Rowley, and Kurtz-Costes (2019) | 454 Black adolescents enrolled in 16 high schools in the Southeastern U.S.; mean age (baseline) = 16.0 | Quantitative; longitudinal structural equation modeling | Adolescent individual attributions for racism; adolescent structural attributions for racism (each assessed as latent constructs, as forms of critical reflection) | Structural attributions increased from 10th to 12th grade, while individual attributions remained constant; respondents reported higher levels of structural attributions on average than individual attributions |
| Christens, Byrd, Peterson, and Lardier, (2018) | 389 high school aged youth (predominantly youth of color) in the Northeastern U.S. | Quantitative; cross-sectional; latent cluster analysis | Critical reflection, conceptualized as a cognitive component of empowerment; critical motivation, conceptualized as an emotional component of empowerment (measured by the Sociopolitical Control Scale for Youth, SPCS-Y; Petersen et al., 2011); social justice orientation; civic engagement; sense of community | Seven latent classes were identified based on youths’ cognitive empowerment and emotional empowerment. One group, The group in which both cognitive empowerment/critical reflection and emotional empowerment/critical motivation were high—had higher levels of civic engagement than the another group, the uncritical and alienated group. The latter group had lower levels of social justice orientation than all groups with the exceptions of the limited psychological empowerment group and the diminished policy control group. |
| Christens and Dolan (2011) | 20 Latinx youth organizers in the U.S.; aged 16-20 | Qualitative; interview | Critical action, operationalized as engagement in organizing; critical reflection operationalized as awareness | Engagement in organizing led to increased critical reflection; youth organizers experienced an increase in the |
| Table S.1 (continued) |  |  |  |  |
| Reference | Sampleab | Methodology | Key Associations Examined & Measurement Strategy/Instrument(s) | Key Results |
|  |  |  | of social power and the impacts of systems of power and privilege in local communities; critical motivation operationalized as confidence to engage in civic and political action | confidence they felt to engage in civic and political action; thus, engagement in critical action led to increased critical motivation or political efficacy. |
| Clark and Seider (2019) | 659 youth in the U.S. with the majority belonging to low SES and people of color; surveyed at the end of 9th, 10th, 11th, and 12th grades | Qualitative | Curiosity; sociopolitical development; social analysis; societal involvement; | Latent growth models showed that both social analysis and societal involvement generally increased during high school; for social analysis only, the rate of change was lower for youth who started high school with higher social analysis scores. In multivariate models, social analysis and societal involvement were positively correlated at baseline and over time. |
| Diemer and Rapa (2016) | 761 poor and working class U.S. 9th grade students drawn from the nationally representative Civic Education Study of 1999 (CIVED); mean age = 14.6 | Quantitative; cross-sectional; structural equation modeling | Critical reflection via perceived inequality and egalitarian beliefs (Diemer et al., 2017); internal political efficacy (≈critical motivation); external political efficacy; critical action; civic and political knowledge | Critical reflection via egalitarian beliefs was negatively associated with critical action (i.e., protest) among the Latinx youth.Perceived inequality was negatively associated with external political efficacy but positively associated with critical action for both Latinx and African American 9th graders |
| Oosterhoff, Ferris, Palmer, and Metzger (2017) | 299 economically diverse youth in the U.S.; 88% White; aged 14-18; mean age = 15.49 | Quantitative; longitudinal | Critical reflection via social dominance beliefs and authoritarianism | Endorsement of social dominance beliefs increased and endorsement of authoritarianism decreased over time; higher social dominance values at Time 1 predicted greater authoritarianism at Time 2 |

*Note.* aSome studies did not report the precise age range or mean age of participants. Thus, we provide summary information here in parallel with the specifics reported in each manuscript. bIn Table S1 and throughout this manuscript, we use the term “Latinx” to describe research participants with a Latin American ethnic identity. In some cases, the original articles that we have reviewed may have used alternative terms (e.g., “Latino/Latino”).

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| Table S.2 | | | |
| *Overview of Studies Included in Systematic Review of Literature: Interventions* | | | |
| Reference | Sampleab | Methodology | Intervention / Program Focus | |
| ***Literature and the Arts*** |  |  |  | |
| Hawkins (2014) | 38 preschool aged children in Australia, aged 3-5 | Qualitative; youth participatory action research | Children’s books | |
| Osorio (2018) | 20 2nd grade second generation (U.S.-born) emergent bilingual children | Qualitative; youth participatory action research | Latinx children’s literature | |
| Silva (2012) | 20 1st grader students attending a K-8 public charter school in the central coast of California, aged 6-7 | Qualitative; ethnography | Arts | |
| Tyson (2002) | 6th grade students from a single class, attending an urban school | Qualitative | Children’s and young adult literature | |
| ***Science*** |  |  |  | |
| Dimick (2016) | 20 high school aged youth attending an urban high school in the U.S. | Qualitative; case study | Environmental sciences | |
| Hoeg, Lemelin, and Bencze (2015) | 12 6th grade students in the U.S. | Qualitative; interviews | Social sciences | |
| Kozan, Blustein, Barnett, Wong, Connors-Kellgren, Haley, … Wan (2017) | 9 urban high school aged youth from the Northeastern U.S., aged 15-18 | Qualitative; content analysis | STEM | |
| Tsurusaki, Barton, Tan, Koch, and Contento (2013) | 6th grade students from a single class, attending a school in an economically depressed Midwestern state | Qualitative; participant observation | Food and nutrition sciences | |
| ***Cross-Curricular*** |  |  |  | |
| Bajaj, Argenal, and Canlas (2017) | Immigrant and refugee youth attending an urban public high school in Oakland, California in grades 9-12; aged 14-21 | Qualitative; ethnographic case study | Socio-politically relevant pedagogy woven throughout curriculum | |
| Ngai and Koehn (2011) | Approx. 300 1st-5th grade students attending a public K-5 school in western Montana | Mixed methods; longitudinal | Indigenous education and critical democracy | |
| ***Other Instructional Areas*** |  |  |  | |
| Cammarota (2016) | High school aged youth in Tucson, Arizona | Qualitative; youth participatory action research | Ethnic studies | |
| Jearey-Graham and Macleod (2017) | 11 10th grade students in South Africa, aged 15-17 | Qualitative | Sex education | |
| Moya (2017) | 24 high school aged Latinx youth from Southern California, aged 14-18 | Qualitative; case study | Civic education | |
| Table S.2 (continued) | | | |
| Reference | Sampleab | Methodology | Intervention / Program Focus | |
| Nicholas, Eastman-Mueller, and Barbich (2019) | 6 youth attending a community-based sex education program in Southwest Missouri | Qualitative; phenomenology | Sexual health education | |
| Tintiangco-Cubales, Daus-Magbual, Desai, Sabac, and Torres (2016) | 25 students participating in an ethnic studies educational program in San Francisco, California, aged 7-21 | Qualitative; case study and youth participatory action research | Ethnic studies | |
| ***In-School Extra-Curricular Programs*** | | | | |
| Jacobs (2016) | Approx. 25 Black girls in grades 9-12 in the Northeastern U.S. | Qualitative | In school supplemental program | |
| Slaten, Rivera, Shemwell, and Elison (2016) | 9 African American youth attending an urban alternative school in the Midwestern U.S., aged 17-19 | Qualitative; phenomenology | In school supplemental program | |
| Watts & Abdul-Adil (1998) | 32 African American 9-10th grade high school students attending an urban school in the Midwestern U.S.; mean age = 15.5 | Qualitative; content analysis | In school supplemental program | |
| ***Out of School Time Extra-Curricular Programs*** | | | | |
| Brown, Outley, and Pinckney (2018) | Black youths ranging from 5 to 18 in the U.S. | Qualitative; multi-case methodology | Programs focused on Afrocentrism / Pan-Africanism | |
| Foster-Fishman, Law, Lichty, and Aoun (2010) | 19 middle school aged youth from the Midwestern U.S., aged 12-13 | Qualitative; youth participatory action research and photovoice | Local knowledge production | |
| Groves Price and Mencke (2013) | Native American youth participating in a residential summer camp in the Northwestern U.S., aged 13-17 | Qualitative; youth participatory action research | Digital storytelling | |
| Harper, Sands, Horowitz, Totman, Maitín, Rosado, Colon, and Alger (2017) | 8 middle, high school, and college aged youth from Holyoke, Massachusetts, aged 13-20 | Qualitative; youth participatory action research | Food justice | |
| Ngo (2017) | 9 low-income, second-generation immigrant Hmong youth from the Midwestern U.S., aged 16-19 | Qualitative; ethnography | Theater | |
| Nguyen and Quinn (2018) | Approx. 16 Vietnamese immigrant and U.S.-born youth from Philadelphia, Pennsylvania, aged 14-21 | Qualitative; content analysis | Summer political education program | |
| Table S.2 (continued) | | | |
| Reference | Sampleab | Methodology | Intervention / Program Focus | |
| Rodríguez (2008) | 50 high school aged youth and 45 undergraduate pre-service teachers from the Southeastern U.S. | Qualitative; youth participatory action research | Liberatory practice | |
| Sánchez Carmen, Domínguez, Greene, Mendoza, Fine, Neville, and Gutiérrez (2015) | 30 high school aged youth from across a mountain-region state | Qualitative; ethnographic case study and photovoice | Ethnic studies | |
| Wernick, Kulick, and Woodford (2014) | 13 youth who were participants of a LGBTQQ youth organization in Ann Arbor, Michigan, aged 14-22 | Qualitative | Theater | |
| Winans-Solis (2014) | 3 12th grade students attending a public charter high school in New York, New York | Qualitative; case study | Service learning | |
| ***Other*** |  |  |  | |
| Houser and Overton (2001) | 2 focal students drawn from a larger sample of 27 first grade students from the Middle Atlantic region of the U.S., aged 5-7 | Qualitative; ethnographic case study | Student personal choice and freedom in classroom | |

*Note.* aSome studies did not report the precise age range or mean age of participants. Thus, we provide summary information here in parallel with the specifics reported in each manuscript. bIn Table S2 and throughout this manuscript, we use the term “Latinx” to describe research participants with a Latin American ethnic identity. Please note that, in some cases, the original articles that we have reviewed may have used alternative terms (e.g., “Latino/Latina”).

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| Table S.3 | | | |
| *Overview of Studies Included in Systematic Review of Literature: Measurement* | | | |
| Reference | Sampleab | Methodology | Resulting Measure |
| ***Scales Designed to Measure Critical Consciousness*** | | | |
| Diemer, Rapa, Park, and Perry (2017) | 326 youth from the Midwestern U.S., aged 13-19; mean age = 15.47 | Quantitative; cross-sectional; structural equation modeling | Critical Consciousness Scale |
| McWhirter and McWhirter (2016) | Study 1: 476 high school aged Latinx youth, aged 14-19; mean age = 16.4  Study 2: 680 high school aged Latinx youth, aged 13-20; mean age = 16.3 | Quantitative; cross-sectional; structural equation modeling | Measure of Adolescent Critical Consciousness |
| ***Scales Designed to Measure Constructs Related to Critical Consciousness*** | | | |
| Aldana, Bañales, and Richards-Schuster (2019) | 249 racially and socioeconomically diverse adolescents; aged 13-19 in the U.S.; mean age = 16.0 | Quantitative; cross-sectional; confirmatory factor analysis | Anti-Racism Action Scale |
| Baker and Brookins (2014) | Study 1: Salvadoran adolescents from rural communities and belonging to low SES; One group of five 11 to 14 year-olds and another group of 6 17-19 year-olds  Study 2: 681 Salvadoran high school students, aged 14-22 years, mean age = 16.9 | Quantitative; cross-sectional; exploratory factor analysis | Measure of Sociopolitical Consciousness |
| Byrd (2017) | Study 1: 315 6-12th grade students in the U.S. recruited through nationwide panels by Qualtrics; mean age = 15.34  Study 2: 504 6-12th grade students recruited by Qualtrics; mean age = 15.23 | Quantitative; cross-sectional; structural equation modeling | Critical Consciousness Socialization (sub-scale) |
| ***Proxy Measures of Critical Consciousness*** | | | |
| Bañales, Marchand, Skinner, Anyiwo, Rowley, and Kurtz-Costes (2019) | 454 Black adolescents enrolled in 16 high schools in the Southeastern U.S.; mean age (baseline) = 16.0 | Quantitative; longitudinal structural equation modeling | Proxy measure of critical reflection |
| Diemer and Li (2011) | 665 U.S. poor and working class youth drawn from the nationally representative Civic and Political Health Survey of 2006 (CPHS), aged 15-25; mean age = 20.6 | Quantitative; cross-sectional; structural equation modeling | Proxy measures of critical motivation action |
| Diemer and Rapa (2016) | 761 poor and working class U.S. 9th grade students drawn from the nationally representative Civic Education Study of 1999 (CIVED); mean age = 14.6 | Quantitative; cross-sectional; structural equation modeling | Proxy measures of critical reflection, motivation, and action |
| Table S.3 (continued) | | | |
| Reference | Sampleab | Methodology | Resulting Measure |
| Hope & Bañales (2018) | 36 Black students in the United States, aged 10-14 | Qualitative; focus groups | N/A |
| McWhirter, Gomez, and Rau (2018) | 686 Latinx youth attending 71 schools in the U.S. Pacific Northwest, aged 13-20; mean age = 16.3 | Qualitative; thematic content analysis | N/A |

*Note.* aSome studies did not report the precise age range or mean age of participants. Thus, we provide summary information here in parallel with the specifics reported in each manuscript. bIn Table S3 and throughout this manuscript, we use the term “Latinx” to describe research participants with a Latin American ethnic identity. In some cases, the original articles that we have reviewed may have used alternative terms (e.g., “Latino/Latina”). Note that Table S3 includes only the studies described in detail in text.