Authenticity and Inauthenticity in Adolescents: A Scoping Review

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Abstract

In everyday life, adolescents' authenticity and inauthenticity (sense of, and being, the real me/true self; or false self/not the real me) are assumed to be general indicators of their psychosocial health as they navigate developmental processes of identity exploration and relational connectedness on their way to adulthood. Authenticity is important for psychological thriving in adolescents and inauthenticity is considered maladaptive, but there was no broad and systematic evidence-based resource on the topic. Therefore, this scoping review maps: (1) how authenticity and inauthenticity in adolescents (12–18 years old) have been understood, defined, and characterized; (2) what is known about authenticity and inauthenticity; (3) contexts authenticity and inauthenticity have been explored in; and (4) methodological approaches utilized. This review followed a pre-registered protocol (2852 records identified; 39 peer-reviewed primary research studies included). The review revealed authenticity and inauthenticity are typically: characterized as dispositional, involving thoughts, feelings, awareness, and a sense of being one's true self or a false self; investigated quantitatively; and contextualized in close social relationships (parents, friends, classmates). Authenticity and inauthenticity outcomes included friendship quality, wellbeing, self-esteem, depressive symptoms, internet addiction, and moral disengagement. Adolescents' authenticity generally increases over time and social support is very important for that process. Adolescents can be more authentic if parents facilitate adolescents' increasing independence and support role experimentation. Future research should target state (here-and-now) authenticity, as a critical finding was that autonomy satisfaction has an immediate and positive influence on adolescents' state authenticity, which implies people interacting with adolescents can promptly boost their capacity for positive psychological development.

Keywords Authenticity · Inauthenticity · Adolescents · Teenagers · Psychology · True self

Introduction

Authenticity—the sense of, and being, the real me—is considered important for psychological thriving; whereas inauthenticity—the sense of, and being, a false self or not the real me—is considered maladaptive (Kernis & Goldman, 2006; Ryan & Deci, 2017; Sedikides et al., 2017). In everyday life and therapeutic settings, authenticity and inauthenticity are assumed to be subjective indicators of adolescents' psychosocial health. For example, when an adolescent shares with a psychologist that they repeatedly cannot be who they really are in social situations, causing distress, it becomes a focal point for therapeutic exploration as it suggests their identity development is being compromised and is affecting their wellbeing. However, there was no broad and systematically thorough evidence-based resource people supporting adolescents could draw on which substantiated this assumption, or provided a comprehensive map of peer-reviewed primary research regarding adolescents' authenticity and inauthenticity. This scoping review fills that resource gap and outlines conceptual understandings, maps and discusses research results at general and context-specific levels, and provides material to help accelerate future research.

Adolescence is a developmental period involving vigorous cognitive, emotional, physical, and social change,

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where adolescents explore different identities (Erikson, 1968) and ways of being in social relationships (Harter et al., 1997) which might feel more authentic or inauthentic. Erikson (1968) observed that people aim for "a sense of coherent individuation and identity: of being one's self, of being all right, and of being on the way to becoming what other people, at their kindest, take one to be" (p. 35). However, philosophers (Golomb, 1995) and researchers disagree on how authenticity and inauthenticity are understood, defined, and characterized (Jongman-Sereno & Leary, 2019). Authenticity has been described as acting "in accord with one's true inner self" (Harter, 2012, p. 329) rather than being false; "consistency between the three levels of (a) a person's primary experience, (b) their symbolized awareness, and (c) their outward behavior" (Barrett-Lennard, 1988, p. 82); "unobstructed operation of one's true- or core-self" (Kernis & Goldman, 2006, p. 294); experiencing one's own behaviors as self-authored and behaving in ways that "reflect [one's] abiding values and sentiments" (Ryan & Ryan, 2019, p. 99); experiencing being "in sync with one's real or genuine self… [or perceiving] one is being the true, unvarnished 'me'" (Sedikides et al., 2019, p. 73) for authenticity, or for inauthenticity being "in alignment with an untrue or false-self" (Sedikides et al., 2017, p. 521) and "a sense… of not being the 'real me'" (Sedikides et al., 2019, p. 73). Many researchers view authenticity and inauthenticity as conceptually bipolar, existing on a shared continuum (e.g., Harter et al., 1996), while other researchers propose they may exist on separate continuums (Wood et al., 2008), as two conceptually unipolar constructs. Thus, not only are definitions of authenticity and inauthenticity debatable, but how these phenomena are understood and characterized is unclear.

The psychosocial identity exploration task commences in adolescence and is also the most developmentally salient during adolescence, as people move away from caregiver security toward adult autonomy and begin exploring new identities in relation to broader social networks (Erikson, 1968). As part of adolescents' identity exploration, Harter et al. (1997) proposed multiple role-related selves emerge, which are self-identified individualized patterns of self-aspects like being happy, outgoing, reserved, and respectful, within a specific context such as being with parents. The behavioral expression or suppression of a role-related self through true-self or false-self behavior (Harter et al., 1996) are considered forms of authenticity and inauthenticity (Harter, 2002). Many adolescents approximately 11–12 years old do not understand the idea of false-self behavior and ask what it means, "or state that it doesn't make sense because they are always their true selves" (Harter et al., 1997, p. 844). Developmentally, younger adolescents first begin to recognize other people can behave in ways inconsistent with their real self, then around 12–13 years of age realize they themselves can behave falsely (Harter et al., 1997).

The idea of role-related selves (Harter et al., 1997) is similar to the concept of identities in self-determination theory, where "an individual is negotiating at the intersection of autonomy within relatedness" (Ryan & Deci, 2017, p. 383), that is, social experiences. Self-determination theory prioritizes self-as-process within situations (Ryan & Deci, 2017), therefore, the point of realisation (coming into existence) of authenticity is in the phenomenological experience of a current situation (Ryan & Ryan, 2019). People are likely to experience authenticity in contexts where they expect their basic psychological needs will be supported and when needs are satisfied during a situation; and inauthenticity in contexts of threat, resulting in need frustration (Ryan & Deci, 2017). One of those needs is autonomy, which involves self-awareness of—and actions aligned with—an individual's "needs, processes, feelings, cognitions, and relationships that make up their true or integrated sense of who they are" (Ryan & Deci, 2017, p. 229). Identities contain (or reject) socially valued "regulations, attitudes, and values" (Ryan & Deci, 2017, p. 180) which are initially based on primary carer perspectives but alter during adolescence as adolescents' social networks expand. Having multiple identities is normal and what is important for flourishing across adolescence and into emerging adulthood is the degree to which a person's identities are becoming integrated (e.g., represent one's own values and beliefs), rather than introjected (reluctantly adopted; Ryan & Deci, 2017). Adolescents may feel reluctantly driven to behave in ways to gain social acceptance from others (Ryan & Deci, 2017) and therefore feel inauthentic (Harter et al., 1996).

In adolescents, greater authenticity predicts greater wellbeing (Sutton, 2020) and self-esteem (Peets & Hodges, 2018), while in adults authenticity experiences are associated with higher positive mood, energy, sense of flow, autonomy, and meaning (Lenton et al., 2016). In adolescents, lower authenticity is associated with internet addiction (Anli, 2018) and self-silencing (Goldner et al., 2022), greater inauthenticity with lower self-esteem (Impett et al., 2008), and inauthentic experiences with feelings of anxiety and depression (Luthar et al., 2021). While Sutton (2020) undertook a meta-analysis of the relationship between authenticity and wellbeing and reported a moderate positive relationship between them, there had been no comprehensive and systematic reviews of peer-reviewed research about adolescents' authenticity and inauthenticity and their relationship(s) with other constructs (including broader ideas of wellbeing), or mapped how they are understood, defined, and characterized, and what is known about these complex phenomena in adolescents (Alchin et al., 2022). A scoping review is the most appropriate method to provide an

overview of a topic by systematically identifying available and emerging evidence, and knowledge gaps, regarding a phenomena or concept (Munn et al., 2018) across methodologically diverse literature, to facilitate future research (Tricco et al., 2018). This includes mapping: similarities or variations in how a concept has been defined and understood, concept characteristics, related concepts (e.g., antecedents, outcomes), and methodological approaches (Munn et al., 2018). This current scoping review fills a gap, as the nomological net for authenticity and inauthenticity was widened to include any psychological constructs associated with them (antecedents/predictors, consequences/outcomes, mediators, moderators; and authenticity and inauthenticity as mediator[s]); study types were broadened to include qualitative and mixed-methods studies (not just quantitative); the emphasis was conceptual (rather than meta-analytic); and exclusively focused on adolescents. As authenticity and inauthenticity may vary depending on contexts—like social, online or in-person environments (Sherman et al., 2013), or life domains—and methodological approaches can constrain or illuminate gaps in knowledge, these aspects were mapped. As common ideas weave through different conceptualizations (Jongman-Sereno & Leary, 2019), this review takes an inclusive, rather than prescriptive approach to authenticity and inauthenticity. For clarity, when discussing authenticity and inauthenticity in this review the term *dispositional* is used to describe an individuals' reflective thoughts about how authentic and inauthentic they usually are, whether conceptualized as a personality trait, a subjective indicator across or within contexts, or a narrow indicator. The term *state* authenticity (and inauthenticity) refers to the subjective sense of, and being, the real me (or false self, not real me) right now (Sedikides et al., 2019) or "today" (Thomaes et al., 2017, p. 1049).

Current Study

Authenticity is important for psychological thriving, but during adolescence self-awareness of inauthenticity emerges and inauthenticity may compromise adolescents' psychosocial development and wellbeing. However, there was no resource which broadly and systematically mapped peer-reviewed primary research that people could draw on to understand adolescents' authenticity and inauthenticity, or serve as a foundation for future research, so this scoping review fills that need. To identify conceptual, definitional, and theoretical similarities across that research, the first question was, how is authenticity and inauthenticity in adolescents understood, defined, and characterized (Research Question 1)? To identify the nomological network and summarize current knowledge the second

question was, what is known about adolescent authenticity and inauthenticity from primary research literature (Research Question 2)? The next goal was to identify in what core contexts (life domains, social interpersonal, environments) adolescent authenticity and inauthenticity had been investigated or experienced (Research Question 3); and the final goal was to identify what methodological approaches had been used to investigate adolescent authenticity and inauthenticity (Research Question 4).

Methods

The scoping review protocol was pre-registered with Open Science Framework (Alchin et al., 2022; available at https://osf.io/pbm7f), and followed the JBI Manual for Evidence Synthesis: Scoping Reviews (Peters et al., 2020) and the PRISMA-ScR principles (Tricco et al., 2018). Details of the method are in the protocol and summarized below. In the protocol, the term authenticity/inauthenticity was often used to collectively refer to conceptually bipolar and unipolar forms of authenticity and inauthenticity. For increased clarity in this article, that term has been edited in the research questions above and method below to "authenticity and inauthenticity".

Eligibility Criteria

The concept of interest was individual subjective authenticity and/or inauthenticity, which included any of the following—thoughts, feelings, behaviors, and characteristics individuals identify as representative of their own authenticity and/or inauthenticity; of feeling like, sensing, or thinking they are being, have been, or tend to be their real me, true self, or false self in a situation, context, or in general (Harter, 2002, 2012; Kernis & Goldman, 2006; Ryan & Ryan, 2019; Sedikides et al., 2019; Sheldon et al., 1997; Wood et al., 2008). There were no restrictions on context. All peer-reviewed primary research (no grey literature) published in English between 1922 and 2022 was considered. Quantitative research which indicated measures assessing authenticity and/or inauthenticity; qualitative research where authenticity and/or inauthenticity was a primary focus of inquiry and key findings were reported for that concept; and mixed-methods research which met criteria for either quantitative or qualitative research were eligible for inclusion. Studies specific to adolescents aged 12–18 years old who reported on their own subjective authenticity and/or inauthenticity were reviewed.

Search Strategy

Terms were developed in consultation with a research librarian, then expanded and refined through testing in EBSCOhost Megafile Ultimate. Final key terms were: authenticity, authentic, inauthenticity, inauthentic, "real me", "real self", "true self", "false self", adolescen*, teen*, youth?, "high school", "middle school", and "secondary school". Terms were searched across title, abstract, and keywords fields. Full database-specific search strings, sequences, and limiters are in the protocol, including database-specific addition of the plural word "selves" where required. No date limit was applied. Databases searched were: EBSCOhost (Academic Search Ultimate; APA PsycArticles; APA PsycInfo; CINAHL with Full Text; Education Research Complete; E-Journals; ERIC; Psychology and Behavioral Sciences Collection; Sociology Source Ultimate); Web of Science (Core Collection); Cochrane Central (Trials); and Scopus. Searches were simultaneously conducted by two reviewers on 28 April, 2022 and records exported by one reviewer. After screening, one reviewer searched reference lists of eligible reports and identified two reports meeting search terms (unable to be retrieved).

Study Screening

EndNote X9 (Clarivate Analytics, USA) was used for screening. EBSCOhost removed auto-detected duplicate records ($n=1033$) which cannot be prevented by the user. The remaining duplicates ($n=1906$) across all databases were removed by one reviewer. Two reviewers independently screened the remaining records and assessed eligibility, with differences of opinion resolved through discussion. The process is summarized in Fig. 1 (PRISMA diagram; Page et al., 2021), with a total of 36 articles included in the review.

Data Extraction and Mapping

This is the first scoping review of authenticity and inauthenticity in adolescents, therefore, mapping methods were not proscribed a priori. Key data extraction and mapping processes are noted here, with further details in the Appendix. The extraction tool is in the protocol. For RQ1, the way researchers set the scene for understanding authenticity and inauthenticity in their studies was mapped into three categories: *theory*, where there was a clear alignment between a theory (or portion) and how the study was approached or operationalized; *framework*, which included well-developed concepts or perspectives aligned with the approach; and *stance*, where a link was present but not directly aligned. Authenticity and inauthenticity were characterized in four ways: (1) conceptual features, (2) types (state or dispositional), (3) forms (conceptually bipolar or unipolar, as operationalized), and (4) dimensionality (unidimensional or multidimensional). Definitions and operationalizations of authenticity and inauthenticity in the included studies were mapped onto pre-defined conceptual features and multiple classifications were permitted. Measures were also mapped according to the type and form of authenticity and inauthenticity. To be conceptually bipolar, authenticity and inauthenticity are viewed as two opposite ends of the same concept. To be conceptually unipolar, authenticity (or inauthenticity, but not both) is the only aspect being explored and can be thought of as being more or less authentic, or, understood as having a greater or lesser degree of authentic personality (e.g., Wood et al., 2008).
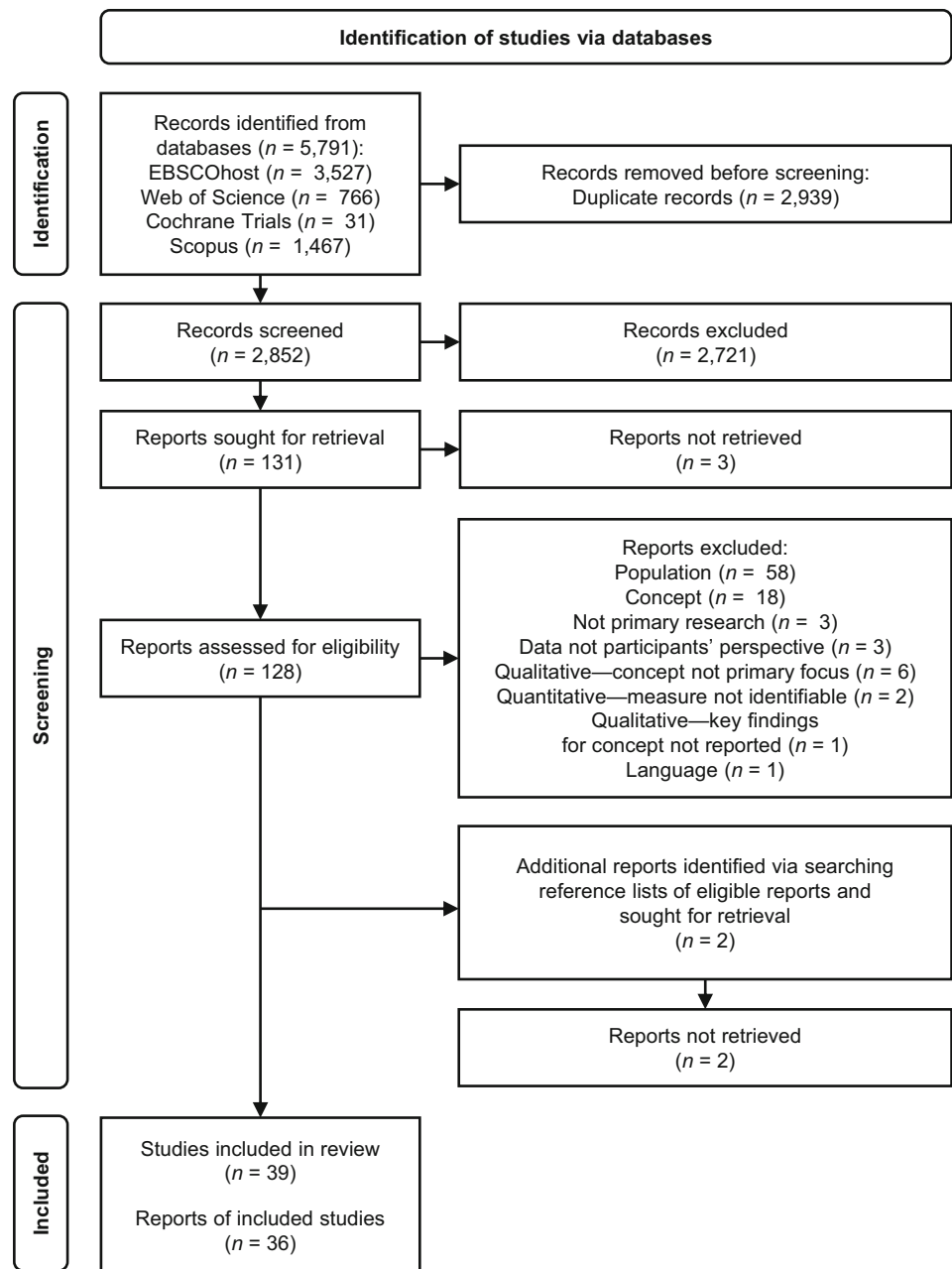
For RQ2, nomological network diagrams were used to map statistically significant antecedents/predictors and consequences/outcomes of authenticity and inauthenticity for quantitative studies. The terms antecedents/predictors and consequences/outcomes represent theoretical, conceptual, or causal directionality of processes; this facilitated consolidation of processes across diverse research designs and perspectives. Networks were mapped based on the type and form of authenticity and inauthenticity, with separate networks for most context-specific operationalizations. Findings from remaining types of analyses (e.g., analyses of variance) for the same type, form, and context were narratively summarized in the same subsections as the diagrams. Similar to Veli Korkmaz et al. (2022) this review is inclusive of all perspectives about authenticity and inauthenticity, so diagrams map networks across all constructs and do not represent networks for individual theoretical constructs. The qualitative research findings in this review were inductively emergent (rather than deductively structured), so key findings were summarized in a separate subsection.

For RQ3, contexts were mapped based on quantitative operationalizations where a specific context was mentioned in a measure item or participant instructions. Contexts in qualitative study results were summarized in the same section. For RQ4, methodological approaches were listed in the study characteristics table with frequent approaches noted narratively.

Results

Results regarding authenticity and inauthenticity in adolescents are presented in the following order. Understandings (part of RQ1) which help contextualize the research aims of the included studies are presented first. They are followed by study characteristics; definitions and

Fig. 1 PRISMA flow diagram

Identification of studies via databases

Identification

Records identified from databases (*n* = 5,791):
EBSCOhost (*n* = 3,527)
Web of Science (*n* = 766)
Cochrane Trials (*n* = 31)
Scopus (*n* = 1,467)

→ Records removed before screening:
Duplicate records (*n* = 2,939)

Screening

Records screened
(*n* = 2,852)

→ Records excluded
(*n* = 2,721)

Reports sought for retrieval
(*n* = 131)

→ Reports not retrieved
(*n* = 3)

Reports assessed for eligibility
(*n* = 128)

→ Reports excluded:
Population (*n* = 58)
Concept (*n* = 18)
Not primary research (*n* = 3)
Data not participants' perspective (*n* = 3)
Qualitative—concept not primary focus (*n* = 6)
Quantitative—measure not identifiable (*n* = 2)
Qualitative—key findings
for concept not reported (*n* = 1)
Language (*n* = 1)

Additional reports identified via searching reference lists of eligible reports and sought for retrieval
(*n* = 2)

→ Reports not retrieved
(*n* = 2)

Included

Studies included in review
(*n* = 39)

Reports of included studies
(*n* = 36)

characterizations (RQ1); knowledge about authenticity and inauthenticity in adolescents (including nomological networks; RQ2); contexts it has been investigated in (RQ3); then, methodological approaches used in this field (RQ4).

Understandings of Authenticity and Inauthenticity in Adolescents (Part of RQ1)

Researchers set the scene for understanding authenticity and inauthenticity by using theories (*n*=7 studies), frameworks (*n*=10), or taking a stance (*n*=13) and were identified based on alignment with their operationalizations. Nine studies did not offer a stance, because authenticity or inauthenticity

were not primary variables of interest, or because of a ground-up exploratory approach. Table 1 lists the main theories and frameworks in order of frequency of use across studies. The most common choice was the framework of true/false-self behavior (Harter, 2002; Harter et al., 1996).

In brief, Harter (2012) held the view that an enduring, unified true self exists; and part of adolescents' developmental struggle is to decide which of their multiple role-related selves (e.g., characteristics of their self-with-parent, self-with-peers; Harter et al., 1997) represents their true self —a struggle that continues into emerging adulthood. In this framework, true-self (authentic) and false-self (inauthentic) behavior were viewed as context-specific (Harter et al.,

Table 1 Understandings: main theories and frameworks used to introduce authenticity and inauthenticity concept(s) across studies

Theory, framework, or stance	Authors	No. of studies
True/false-self behavior[abe]	Harter and colleagues (e.g., Harter, 2002; Harter et al., 1996)	$n=10$
Authentic personality[acd]	Wood et al. (2008)	$n=4$
Self-determination theory, including basic psychological needs	Ryan and Deci (2000), Deci and Ryan (2000)	$n=4$
Self-silencing[abd]	Jack (1991), Jack and Dill (1992)	$n=4$
Level of voice[abe]	Harter et al. (1998)	$n=3$
Girls' low levels of voice in relationships	Gilligan et al. (1990)	$n=3$
Feminist developmental/feminist psychodynamic developmental framework, emphasizing relational processes	(For overviews see Impett et al., 2008; Tolman et al., 2006; Tolman & Porche, 2000)	$n=2$
Multicomponent conceptualization of authenticity[ad]	Kernis and Goldman (2006)	$n=2$
Character strengths (authenticity component [ae])	Peterson and Seligman (2004)	$n=2$
Authentic leadership[acd]	Walumbwa et al. (2008) which substantially draws on Kernis'(2003) authenticity theory and Deci and Ryan (2000)	$n=1$
Need to belong	Baumeister and Leary (1995)	$n=1$
Divided self (public self and inner/true self)	Broughton (1981)	$n=1$
Identity theory (specifically, consistency across contexts)	Erikson (1970)	$n=1$

[a]Dispositional

[b]Bipolar

[c]Unipolar

[d]Multidimensional

[e]Unidimensional

1996). Wood et al. (2008) took a dispositional person-centered approach based on Barrett-Lennard's (1988) viewpoint described earlier, and conceptualized this as an authentic personality, where a person is inclined to be generally more or less authentic compared to others. They specified three dimensions: authentic living (living in line with one's own values/beliefs); absence of self-alienation (feeling "out of touch with the 'real me'", p. 388); and accepting external influence (where accepting influence is equated with reduced autonomy and authenticity). While based on Wood et al.'s concept, Abraham et al. (2018b) took a conceptually divergent approach by emphasizing a "counterfeit self", which was equated to an "inauthentic (or fake) self" (p. 519). Their discussion regarding counterfeiting placed unethical and immoral behavior firmly within the sphere of inauthenticity.

Within self-determination theory, authenticity is considered sensitive to aspects of the current social context(s) in a situation, with people likely to experience authenticity when autonomy, competence, and relatedness needs are satisfied; but if need frustration occurs, they are likely to experience inauthenticity (Deci & Ryan, 2000). Autonomy in this theory includes accepting offered support when it is welcomed (Ryan & Ryan, 2019). Authentic behaviors are volitional, self-authored, congruent with what a person experiences (such as self-regulating spontaneous emotions),

and reflect their values (Ryan & Ryan, 2019). Frameworks of self-silencing (Jack & Dill, 1992) and lower levels of voice (Gilligan et al., 1990; Harter et al., 1998) include inhibiting verbal self-expression to minimize conflict in relational interactions (self-silencing includes inhibiting actions); while feminist perspectives extend this by viewing such censorship as developmentally shaped due to gender inequalities emerging from social constructions of gender "within a power hierarchy (i.e., patriarchy)" (Impett et al., 2008, p. 723), affecting boys and girls. Kernis and Goldman's (2006) authenticity theory positioned authenticity as dispositional (individual differences perspective) and multidimensional. The first dimension involves self-awareness of "motives, feelings, desires, and self-relevant cognitions" (p. 294). The second is "unbiased processing of self-relevant information" (p. 296), so requires sufficient maturity and self-awareness to understand one's own shortcomings and an ability to critique oneself. For example, blocking out or denying something that is true about oneself is biased. The third dimension involves behavior, "acting in accord with one's values, preferences, and needs" (p. 347); and the fourth is relational orientation in close relationships, that is, being genuine, open, truthful, and showing other people who they really are. Peterson and Seligman (2004) positioned the character strength of authenticity (narrowly

Table 2 Study characteristics for included studies

Study ID, citation	Participants and country where study conducted	Aim	Methodological approaches for authenticity and inauthenticity component (study type; design; data collection; analyses)
1 Abraham et al. (2018a, St. 1)	N=994 (457 boys, 537 girls), M_{age}= 15.93, SD_{age}=1.12, *Indonesia*	Examine counterfeit self, ethical mindset, and self-theory as predictors of moral disengagement	Quantitative; NOC; Likert-type survey; SEM
2 Abraham et al. (2018b)	N=1655 (764 boys, 891 girls), M_{age}= 15.76, SD_{age}=1.08, *Indonesia*	Test a model of counterfeit self (derived from Wood et al., 2008) among Indonesian people, and theoretically review counterfeit self roles in unethical behavior	Quantitative; NOC; Likert-type survey; CFA
3 Akin et al. (2013)	N=391 (222 boys, 169 girls), high school students, *Turkey*	Translate Weir and Jose's (2010) Perception of False Self scale into Turkish and assess its validity and reliability	Quantitative; NOC; Likert-type survey; EFA, CFA, test–retest
4 Aktar et al. (2021)	N=603 (368 boys[a], 235 girls), 12–15 years old, M_{age}=13.95, SD_{age}=0.85, *Japan*	Adapt the Child Parental Acceptance-Rejection Questionnaire (short form, mother and father versions) into Japanese, evaluate its construct validity, shorten it, and assess reliability and validity of the shortened version (predictive validity assessed for positive wellbeing and authenticity)	Quantitative; NOC; Likert-type survey; SEM, mediation
5 Anli (2018)	N=420 (140 boys, 280 girls), 17–18 years old, M_{age}=17.7, SD_{age}=0.41, *Turkey*	Examine the predictive role of authenticity in internet addiction	Quantitative; NOC; Likert-type survey; regression
6 Fleishmann and Kaliski (2017)	N=38 (18 boys, 20 girls), 15–19 years old, average age 17, *Israel*	Explore effects of attention deficit hyperactivity disorder medication on adolescents' personal experience, and to understand how psychological changes adolescents experience when taking medication interrelate with their attitude toward being medicated	Qualitative; thematic analysis (grounded theory); semi-structured interviews; inductive (open, axial, and selective coding)
7 Goldner et al. (2016)	N=333 (156 boys, 177 girls), 12.5–15.5 years old, M_{age}=14.00, SD_{age}=0.69, *Israel*	Examine the contribution of parents-adolescent boundary dissolution and rejection sensitivity to true-self behavior and motives for false-self behavior	Quantitative; NOC; survey, structured alternative response format; MANCOVA
8 Goldner et al. (2017)	N=351 (164 boys, 186 girls), 12.5–15.5 years old, M_{age}=14.00, SD_{age}=0.69, *Israel*	Examine the ways in which parent–adolescent boundary dissolution, adolescent true-self behavior, and motives for false-self behavior are manifested in adolescents' self-representations (drawings)	Quantitative; NOC; survey, structured alternative response format; SEM, mediation
9 Goldner and Berenshtein-Dagan (2016)	N=302 (156 boys, 146 girls), 13–16 years old, M_{age}=14.19, SD_{age}=0.73, *Israel*	Explore associations between security within the family, satisfaction of basic psychological needs, true-self behavior, and knowledge of true self, as well as adjustment (emotional, behavioral, and social problems)	Quantitative; NOC; survey, structured alternative response format; SEM, mediation, MANOVA
10 Goldner et al. (2022)	N=208 (all girls), 12–18 years old, M_{age}=15.02, SD_{age}=1.78, *Israel*	Examine whether mother–daughter separation–individuation would mediate relationships between parentification and motives for false-self behaviors and authenticity, which in turn would mediate links between separation–individuation and self-silencing	Quantitative; NOC; Likert-type survey; SEM, regression, mediation, MANOVA, ANOVA

Table 2 (continued)

Study ID, citation	Participants and country where study conducted	Aim	Methodological approaches for authenticity and inauthenticity component (study type; design; data collection; analyses)
11 Gueta and Berkovich (2022)	N=181 (98 boys, 83 girls), 13–18 years old (11.05% aged 13–15, 88.95% aged 16–18), *Israel*	Examine relationships between autonomy-supportive climate, authenticity, and adolescents' perceived school dropout risk, including mediating role of authenticity, within the context of a second chance program to complete their school education	Quantitative; NOC; Likert-type survey; multilevel path modelling, mediation
12 Harter et al. (1996)	N=549 (262 boys, 287 girls), Grades 6–12, *Country not reported*	Examine whether perceived level, quality (unconditional or conditional), and hope about support in a relational context (parents, peers) influences false-self behavior within the same context, including mediating role of hope; examine whether motives for false-self behavior (devaluation of self, role experimentation, desire to please/impress) within a relational context (parents, peers) affects false behavior in the same context; and investigate gender differences in false-self behavior in those contexts	Quantitative; NOC; survey, structured alternative response format; SEM, MANOVA, ANOVA
13 Harter et al. (1998)	N=307 (142 boys, 165 girls), Grades 9–11 (138 in Grade 9, 85 in Grade 10, 84 in Grade 11), *Country not reported*	Examine whether adolescents' level of voice varies across relationship contexts (parents, teachers, male classmates, female classmates, and close friends); whether context-specific levels of voice are more highly related to support for voice than to gender; compare whether orientations toward femininity, masculinity, or androgyny influence level of voice; and whether level of voice within a relationship context is associated with low self-worth in the same context	Quantitative; NOC; survey with structured alternative response format; factor analysis (type not reported), MANOVA, ANOVA
14 Hernández-Serrano et al. (2022)	N=2066 (884 boys, 1182 girls), 12–18 years old (39.2% 12–14 years, 38.5% 15–16 years, 22.3% 17–18 years), *Spain*	Analyze self-presentation practices and profiles among Spanish teenagers on Instagram and TikTok	Quantitative; NOC; Likert-type survey; chi-square
15 Hill et al. (2013)	N=750 (375 boys, 375 girls[a]), M_{age}= 14.9 in first wave; N=517 (no further details) in second wave a year later, *Switzerland*	Examined how being authentic, perceiving control over and consistency in one's environment, and consistent expectations from close others change over a year, and their relationships with Big Five personality traits	Quantitative; NOC and longitudinal (1 year); Likert-type survey; univariate and bivariate latent change models (cross-lagged)
16 Impett et al. (2008)	N=183 (all girls), Grade 8 M_{age}=13.3, Grade 10 M_{age}=15.7, Grade 12 M_{age}= 17.4, *United States*	Investigate the role of relationship authenticity in promoting girls' self-esteem during adolescence (5-year, 3-wave study)	Quantitative; non-experimental, observational, longitudinal (5 year, 3 wave); Likert-type survey; univariate and multivariate latent growth curve models (constrained SEM)
17 Kurek et al. (2019)	N=709 (351 boys, 358 girls), 13–17 years old, M_{age}=15.56, *New Zealand*	Investigate whether narcissism, sadism, and psychopathy predict false self perceptions, online disinhibition, and cyber aggression	Quantitative; NOC; Likert-type survey; SEM, MANOVA, mediation

Table 2 (continued)

Study ID, citation	Participants and country where study conducted	Aim	Methodological approaches for authenticity and inauthenticity component (study type; design; data collection; analyses)
18 Luthar et al. (2021)	N=2041 (approx. half were girls[a]), Grades 9–12, *United States*	Examine processes in psychological adjustment for Asian Americans in high-achieving schools, specifically, the influence of ethnic discrimination, parental perfectionism, internalized achievement pressure, authenticity, and closeness to adults on depressive symptoms, anxiety symptoms, and school isolation	Quantitative; NOC; Likert-type survey; regression, ANOVA
19 Morgan and Fowers (2022)	N=788 (519 boys, 192 girls, 77 chose not to report gender), 11–18 years old, M_{age}=14, *United Kingdom*	Explore moral identity, moral disengagement, and authoritative parenting as predictors of online empathy and authenticity	Quantitative; NOC; Likert-type survey and pictorial paired-choices (data treated as a range); SEM
20 Nartova-Bochaver et al. (2021)	N=167 (89 boys, 78 girls), adolescent group (12–17 years old, M_{age}=14.3), primary school group (7–11 years old, M_{age}=9.4), *Russia*	Explore everyday presentations of the true self in adolescents and primary school children	Qualitative; thematic analysis; structured interview completed in handwriting within 15–20 min; open- and close-ended questions; inductive (multiple codes could apply to each answer); chi-square
21 Ngai (2015)	N=2010 (1003 boys, 1007 girls), 11–20 years old, M_{age}=15, *China*	Investigate how parental care and control affect adolescents' character strengths (including authenticity)	Quantitative; NOC; Likert-type survey; regression, t-test
22 Özyazici and Kanak (2020)	N=514 (239 boys, 275 girls), high school students, *Turkey*	Identify relationships between secondary school students' social exclusion, friendship quality, and false identity	Quantitative; NOC; Likert-type survey; regression
23 Peets and Hodges (2018)	N=318 (155 boys[a], 163 girls), M_{age}=13.46, SD_{age}=1.51, *Finland*	Identify whether authenticity in a friendship was related to greater adjustment (self-views, loneliness, relationship satisfaction), including influence of friendship quality and conflict	Quantitative; NOC; Likert-type survey; SEM
24 Shulman et al. (2009, St. 2)	N=219 (81 boys, 138 girls), 118 in Grade 11 (M_{age}=16.21, SD_{age}=0.39), 101 in Grade 12 (M_{age}=17.49, SD_{age}=0.48). Two grades treated as one group (estimated M_{age}=16.8) at baseline; only Grade 11 group reported data at 3 month follow-up. *Israel*	Examine extent to which authenticity within a relationship is related to decreased depressive symptoms in adolescent romantic relationships, and whether lower ability to be authentic is a risk factor	Quantitative; non-experimental, observational, longitudinal (3 months); Likert-type survey; regression, ANOVA
25 Sippola et al. (2007)	N=283 (88 boys, 150 girls), 15–16 years old, *Canada*	Examine the association between interpersonal skills with peers and feelings of false self in romantic relationships, including contributions of interpersonal skills in same-sex and other-sex relationships	Quantitative; NOC; Likert-type survey; regression
26 Theran (2010)	N=108 (all girls), M_{age}=14.16, SD_{age}=0.58, *United States*	Examine impact of relationship authenticity on intimacy and quality of friendship	Quantitative; NOC; Likert-type survey; SEM, regression
27 Theran (2011)	N=435 (136 boys, 299 girls), M_{age}=14.15, SD_{age}=0.82, *United States*	Examine and compare the relation between authenticity in relationships and depressive symptoms in girls and boys	Quantitative; NOC; Likert-type survey; SEM, MANCOVA
28 Theran (2021)	N=165 (61 boys, 104 girls[a]), 14.06–16.17 years old, M_{age}=14.87, *Country not reported*	Examine parental attachment and authenticity with parents and peers as predictors of prosocial experiences	Quantitative; NOC; Likert-type survey; path analysis, MANOVA, MLR estimation

Table 2 (continued)

Study ID, citation	Participants and country where study conducted	Aim	Methodological approaches for authenticity and inauthenticity component (study type; design; data collection; analyses)
29 Theran and Dour (2022)	N=163 (75 boys, 88 girls), 12–14 years old, M_{age}=13.36, SD_{age}=0.58, *United States*	Examine relationship between internalization of the superhero ideal and depressive symptoms, including authenticity in relationships as a mediator	Quantitative; NOC; Likert-type survey; regression, mediation
30 Thomaes et al. (2017, St. 1)	N=155 (74 boys, 81 girls[a]), 12–17 years old, M_{age}=13.9, SD_{age}=1.3, *England*	Explore whether dispositional levels of psychological need satisfaction and subjective wellbeing are positively associated, and whether trait authenticity mediates this link	Quantitative; NOC; Likert-type survey and pictorial paired-choices (data treated as a range); regression, mediation
31 Thomaes et al. (2017, St. 2)	N=172 (57 boys, 115 girls[a]), 12–13 years old, M_{age}=14.8, SD_{age}=1.1, *Netherlands*	Exploring relations between need satisfaction, authenticity, and subjective wellbeing in a naturalistic setting via a daily diary, in terms of within-person psychological states; specifically, whether state authenticity mediates potential covariation of daily levels of need satisfaction and subjective wellbeing	Quantitative; NOC; Likert-type survey; two-level SEM (within-person, days nested within individuals), mediation
32 Thomaes et al. (2017, St. 3)	N=231 (76 boys, 155 girls[a]), 12–17 years old, M_{age}=15.3, SD_{age}=1.0, *Netherlands*	Experimentally manipulate psychological need satisfaction to determine causal effects on state authenticity, and examine whether state authenticity mediates the presumed link between need satisfaction and subjective wellbeing	Quantitative; experimental (between subjects), randomized (4 groups: 3 experimental, 1 control); Likert-type survey; ANOVA, mediation
33 Tolman et al. (2006)	N=148 (all girls), 12–15 years old, M_{age}=13.3, *Country not reported*	Examine whether inauthenticity in relationships and body objectification are associated with early adolescent girls' mental health	Quantitative; NOC; Likert-type survey; SEM
34 Wang et al. (2019)	N=365 (166 boys[a], 199 girls), 14–18 years old, M_{age}=15.96, SD_{age}=0.69, *China*	Examine whether authentic self-presentation predicts reduced depression in the context of online social networking, and whether rumination mediates this link	Quantitative; NOC; Likert-type survey; mediation
35 Wang et al. (2018)	N=832 (433 boys[a], 399 girls), 14–20 years old, M_{age}=16.43, SD_{age}=0.93, *China*	Examine the relationship between the need to belong and authentic self-presentation on online social networking sites, whether fear of missing out mediates this link, and whether the mediation is moderated by perceived social support	Quantitative; NOC; Likert-type survey; regression, mediation
36 Weir and Jose (2010, St. 2)	Phase 1: N=267 (79 boys, 188 girls), 11–15 years old, M_{age}=12.99, SD_{age}=1.33. Phase 2: N=195 (68 boys, 127 girls), 94<13 years+101≥13 years (estimated median>13 years), *New Zealand*	Phase 1: Development and pilot of new scale, Perception of False Self (POFS); Phase 2: 10-week follow up to explore age and gender effects for POFS, test stability of POFS scores, validity check of POFS, explore longitudinal relationships between POFS and negative affect	Quantitative; non-experimental, observational (Phase 1: cross-sectional; Phase 2: longitudinal, 10 weeks); Likert-type survey; Phase 1: EFA; Phase 2: SEM, ANOVA
37 Weir and Jose (2010, St. 3)	N=46 (20 boys, 26 girls), 12–15 years old, M_{age}=13.00, SD_{age}=1.33, *New Zealand*	Test convergent validity of POFS, criterion validity of POFS (relationship with depressive symptoms), and test–retest reliability of POFS 14 months after baseline	Quantitative; NOC; Likert-type survey; correlations only (scale validity/test–retest reliability across 14 months)

Table 2 (continued)

Study ID, citation	Participants and country where study conducted	Aim	Methodological approaches for authenticity and inauthenticity component (study type; design; data collection; analyses)
38 Xie et al. (2018)	N=1742 (781 boys, 961 girls[a]), M_{age}=14.35±1.52, *China*	Examine the relation between adolescents' online real-self presentation and depression, whether social support mediates this link, and the moderating role of dispositional optimism	Quantitative; NOC; Likert-type survey; regression, mediation
39 Yépez-Tito et al. (2021)	N=664 (376 boys, 288 girls), 12–18 years old, M_{age}=14.6, SD_{age}=1.74, *Eucador*	Examine which character strengths function as protective factors against active engagement in sexting	Quantitative; NOC; Likert-type survey; regression

[a]gender proportion within the sample was reported for this gender only, so remaining participants' gender was surmised. *ID* study identity; *NOC* non-experimental, observational, cross-sectional; *SEM* structural equation modelling; *CFA* confirmatory factor analysis; *EFA* exploratory factor analysis; *MANCOVA* multivariate analysis of covariance, *MANOVA* multivariate analysis of variance, *ANOVA* analysis of variance. M_{age} and SD_{age} are reported in years

operationalized as honesty; see Peterson & Park, 2009) as involving integrity and part of the virtue of courage.

Study Characteristics

The 39 studies included research from most world continents, with an average age of participants of 14.4 years, 53.6% were girls. Research articles spanned 27 years (1996–2022) and 80% of the studies were published between 2013 and 2022. There was no evidence of publication bias. Table 2 summarizes study characteristics for included studies, and contains study identity (ID) numbers which are used in Figures and Tables.

Definitions and Characterizations of Authenticity and Inauthenticity in Adolescents (Part of RQ1)

Table 3 lists operationalizations used in the included studies and demonstrates the varied ways authenticity and inauthenticity have been measured, including adaptations.

Authenticity was defined in 33 of 39 (85%) studies—for the rest, it was inferred as the inverse of inauthenticity. Inauthenticity was defined in 16 (41%) studies, in 16 (41%) more it was inferred as the inverse of authenticity and the rest focused on authenticity as conceptually unipolar. Definitions were mapped according to their conceptual features (one of four ways of characterizing authenticity and inauthenticity), as were operationalizations (Table 4). This revealed most studies characterized authenticity as involving congruence or self-coherence regarding the real me/true self and one's way of being, and inauthenticity as incongruence or disruption to self-coherence. Most research operationalized authenticity and inauthenticity as involving self-determination (particularly autonomy) or self-creation,

or hindrances to either, even though this feature only occurred in a third of definitions. Self-consistency/inconsistency was rarely mentioned in definitions, but operationalized in nearly half of the studies. The conceptual feature of functionality/dysfunctionality was undefined a priori but included as an optional category, as functionality is discussed in theories of authenticity (e.g., Kernis & Goldman, 2006). Only one item across all measures matched that label, suggesting authenticity and inauthenticity are usually conceptualized as precursors to, or outcomes of, functionality/dysfunctionality. The philosophical idea of discovering one's essential self (an ongoing, lifelong process; Golomb, 1995) did not feature in any operationalizations.

Table 5 shows the types and forms (second and third ways of characterizing) of authenticity and inauthenticity. Most research has focused on the dispositional type. Only two studies investigated state authenticity/inauthenticity in adolescents, with the measure utilizing a duration-based referent ("today", Thomaes et al., 2017, p. 1049). State authenticity/inauthenticity was measured using three items which captured the essence of authenticity—"today I was my true self; today I acted as I really am; today I was 'real' and authentic" (Thomaes et al., 2017, p. 1049)—but this approach provided little insight regarding other conceptual features. Most researchers viewed authenticity and inauthenticity as conceptually bipolar in form. For this review, Wood et al.'s (2008) measure of authentic personality was considered conceptually unipolar based on their theoretical approach to the construct as well as their final comment: "it is not clear how authenticity is related to its nonfelicitous (sic) opposites … includ[ing] falseness … and whether these [may be] part of the same higher order factor as authenticity" (p. 397). Abraham et al. (2018b) measure of a

Table 3 Operationalizations of authenticity and inauthenticity used in the included studies

Measure name	Original measure or subscale (for conceptual purposes, original measures are listed where adaptations or translations were used in studies in this review)	Details of adaptation or translation used in included studies	Study ID where used
Authentic followership	Authenticity Inventory (Kernis & Goldman, 2006)	Leroy et al. (2015) Adaptation: named Authentic Followership, draws on four subscales from original, item wording altered, fewer items, response anchors altered to (1 =completely disagree to 6=completely agree); only two subscales of adaptation (Self-Awareness and Internalized Moral Perspective) were used for analyses as very low relationship strengths between these and remaining two scales when responded to by adolescents indicated they may be different constructs	11
Authenticity	Authenticity (Luthar & Ciciolla, 2015)	–	18
Authenticity/honesty	VIA Youth-198 (Park & Peterson, 2006), Authenticity/honesty component	Vázquez and Hervás (2007) Language: Spanish	39
Authenticity/honesty	VIA Youth-198 (Peterson & Park, 2009), Authenticity/honesty component	Duan et al. (2013) Language: Chinese	21
Authentic living (online)	Authenticity Scale (Wood et al., 2008), Authentic Living subscale only	Morgan and Fowers (2022) Adaptation: item context altered to "when online"	19
Authentic online profile	Integrated Self-Discrepancy Index (Hardin & Lakin, 2009)	Reinecke and Trepte (2014) Adaptation: named Authentic Online Profile, scale context altered to "online"	19
Authenticity scale	Authenticity Scale (Wood et al., 2008), Used as three subscales: Self-Alienation, Authentic Living, Accepting External Influence	İlhan and Özdemir (2013)[c] Adaptation: three alternative items/replaced (two of four items for Self-Alienation subscale were replaced, and one of four items for Authentic Living subscale was replaced) Language: Turkish	5
Authenticity scale (as whole scale)	Authenticity Scale (Wood et al., 2008), Used as whole scale (combining subscales together)	–	30
Authenticity scale (as whole scale)	Authenticity Scale (Wood et al., 2008), Used as whole scale (combining subscales together)	Goldner et al. (2022) Languages: Hebrew, Arabic	10
Counterfeit self	Authenticity Scale (Wood et al., 2008), Three subscales: Self-Alienation, Authentic Living, Accepting External Influence	Abraham et al. (2018b)[c] Adaptation: named Counterfeit Self (subscales named: Self-Alienation, Counterfeit/Inauthentic Living; Accepting External Influence); item wording altered, fewer items Language: Indonesian	2
Daily authenticity/State authenticity	Daily Authenticity/State Authenticity (Thomaes et al., 2017)	–	31, 32
Divided-self subscale	Silencing the Self Scale (Jack & Dill, 1992), Divided-Self Subscale only	Weir and Jose (2010, St. 3) Adaptation: item context altered to "other people"	37
False self in relationships (romantic)	Silencing the Self Scale (Jack & Dill, 1992), Divided-Self Subscale only	Sippola et al. (2007) Adaptation: named False Self in Relationships; items removed, items added	25
Honest self-presentation	Honest Self-Presentation[a] (Kim & Lee, 2011)	Niu et al. (2015b)[a]; also Niu et al. (2015a)[a] Language: Chinese	34, 35, 38
Authenticity	Identity Development (Hill et al., 2013), Authenticity subscale only	–	15
Inauthentic self in relationships	Adolescent Femininity Ideology Scale (Tolman & Porche, 2000), Inauthentic Self in Relationships subscale only	–	16, 26, 27
Inauthentic self in relationships	Adolescent Femininity Ideology Scale (Tolman & Porche, 2000), Inauthentic Self in Relationships subscale only	Tolman et al. (2006) Adaptation: item removed	33
Inauthentic self in relationships	Adolescent Femininity Ideology Scale (Tolman & Porche, 2000), Inauthentic Self in Relationships subscale only	Theran and Dour (2022)[a] Adaptation: reduced to 5 items	29

Table 3 (continued)

Measure name	Original measure or subscale (for conceptual purposes, original measures are listed where adaptations or translations were used in studies in this review)	Details of adaptation or translation used in included studies	Study ID where used
Level of voice	Level of Voice[ab] (Harter et al., 1998; has separate scales for close friends, parents, teachers in classroom, male classmates, female classmates)	–	13
Level of voice	Level of Voice (Harter et al., 1998)	Theran and Dour (2022)[b] Adaptation: separate scales for father, mother	29
Perception of false self (as whole scale)	Perception of False Self (Weir & Jose, 2010), Used as whole scale (combining subscales together)	–	17, 36, 37
Perception of false self	Perception of False Self (Weir & Jose, 2010), Used as two subscales: False Self and Social Anxiety	Akin et al. (2013)[c] Language: Turkish	3, 22
Relational authenticity	Relational Authenticity (Peets & Hodges, 2018, with some items adapted from Sippola et al., 2007)	–	23
Romantic authenticity	Romantic Authenticity (Shulman et al., 2009)	–	24
Real-self overlap scale (online self–real world/ offline self)	Real-Self Overlap Scale (Lenton et al., 2013b)	Morgan and Fowers (2022) Adaption: uses referents of "online self—real world/offline self"	19
Real-self overlap scale (real me–me generally)	Real-Self Overlap Scale (Lenton et al., 2013b)	Thomaes et al., (2017, St. 1) Adaptation: uses referents of "real me—me generally"	30
Self-alienation	Authenticity Scale (Wood et al., 2008), Self-Alienation subscale only	Abraham et al. (2018a) Adaptation: response anchors altered (1=*strongly disagree* to 6=*strongly agree*) creating a conceptually bipolar version (i.e., not personality), Language: Indonesian	1
Sense of authenticity scale	Sense of Authenticity Scale (Ito & Kodama, 2005), Language: Japanese	–	4
Authenticity (online)	Self-Presentation Practices Scale (Hernández-Serrano et al., 2022), Authenticity subscale only	–	14
Say what I think	Say What I Think[ab] (Harter & Waters, 1991 [unpublished manuscript], as cited in Weir & Jose, 2010; has separate scales for female classmates, male classmates, close friends, parents)	–	37
True/false-self questionnaire	True/False-Self Questionnaire[a] (Harter et al., 1996; has separate scales for classmates, mother, father)	–	7, 8, 9, 12
Teenage voice questionnaire	Teenage Voice Questionnaire[ab] (Harter, 1995 [unpublished manuscript], as cited in Theran, 2010, 2011; has separate scales for mother, father, teacher, classmates, best friends)	–	26, 27, 28

[a]As not all measure items are listed, not listed in full, or not publicly available using citations provided, some feature classifications in Table 4 may be unintentionally omitted

[b]These measures are likely the same as, or close variations of, scales in Harter (2000)

[c]Multidimensional measure (the rest are unidimensional or treated as unidimensional). Study ID details are in Table 2. Unless otherwise noted, all scales in Table 3 were in English language

"counterfeit self" (p. 519; based on Wood et al., 2008) was the only measure which potentially represented

conceptually unipolar inauthenticity. They stated this "behavior could be prevented by knowing the person's

Table 4 Characterizations: conceptual features across definitions and operationalizations of authenticity and inauthenticity

Conceptual features	Conceptual feature definitions	No. of studies with definitions aligning with elements of conceptual features	Operationalizations	
			No. of different measures	Study ID/No. of studies
Congruence/incongruence, self-coherence/disruption to self-coherence	Thoughts, feelings, awareness, or sense of being true self/aligned with true self; versus false self or disruptions/incongruence between thoughts, feelings, awareness, or sense of being true self. (Citations used for collective definition: Kernis & Goldman, 2006; Sedikides et al., 2019; Wood et al., 2008.)	Authenticity, $n=29$; Inauthenticity, $n=16$	$n=28$	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 22, 23, 24, 25, 29, 30, 33, 37, 26, 27, 31, 32, 34, 35, 36, 37, 38; $n=34$
Self-determination or self-creation/hindrance	Active, intentional, autonomy, relatedness, competence, intrinsic motivation, supported/supporting. (Citations discussing partial aspects of this feature: Golomb, 1995; Kernis & Goldman, 2006; Ryan & Deci, 2017; Ryan & Ryan, 2019.)	Authenticity, $n=10$; Inauthenticity, $n=3$	$n=22$	2, 3, 4, 5, 10, 11, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39; $n=29$
Self-consistency/inconsistency	The self remaining relatively consistent across, or within, contexts, situations, or roles. (Citations discussing partial aspects of this feature: Harter et al., 1997, 1998; Sheldon et al., 1997.)	Authenticity, $n=4$; Inauthenticity, none	$n=18$	2, 4, 5, 10, 11, 14, 15, 19, 21, 23, 24, 25, 29, 30, 33, 37, 39; $n=17$
Functionality/dysfunctionality	No definition set. Single item in measure fitting this label mentioned devaluing one's own feelings (i.e., Tolman et al., 2006, item 9).	Authenticity, none Inauthenticity, none	$n=1$	16, 26, 27, 33; $n=4$
Self-discovery/stalling	Discovering one's essential self. (See Golomb, 1995, for philosophical discussion.)	Authenticity, $n=3$ Inauthenticity, none	–	–

Study ID details are in Table 2. For classification purposes, non-English language scales were translated into English using Google translate, then classified. An expanded table identifying which measures mapped on to specific conceptual features is available at https://doi.org/10.17605/OSF.IO/F3958

Table 5 Characterizations: types and forms of operationalized authenticity and inauthenticity

Type and form	Aspect	Number of different measures	Study ID and number of studies
State			
Bipolar	Authenticity/inauthenticity	$n=1$	31, 32 $n=2$
Dispositional			
Bipolar	Authenticity/inauthenticity	$n=20$	1, 3, 4, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36, 37, 38 $n=27$
Unipolar	Authentic personality	$n=7$	5, 10, 19, 21, 30, 39 $n=6$
Unipolar	Inauthentic personality	$n=1$	2 $n=1$
Unipolar	Authenticity	$n=3$	14, 19, 30 $n=3$

Study ID details are in Table 2. An expanded table identifying which measures represented a specific type and form is available at https://doi.org/10.17605/OSF.IO/F3958
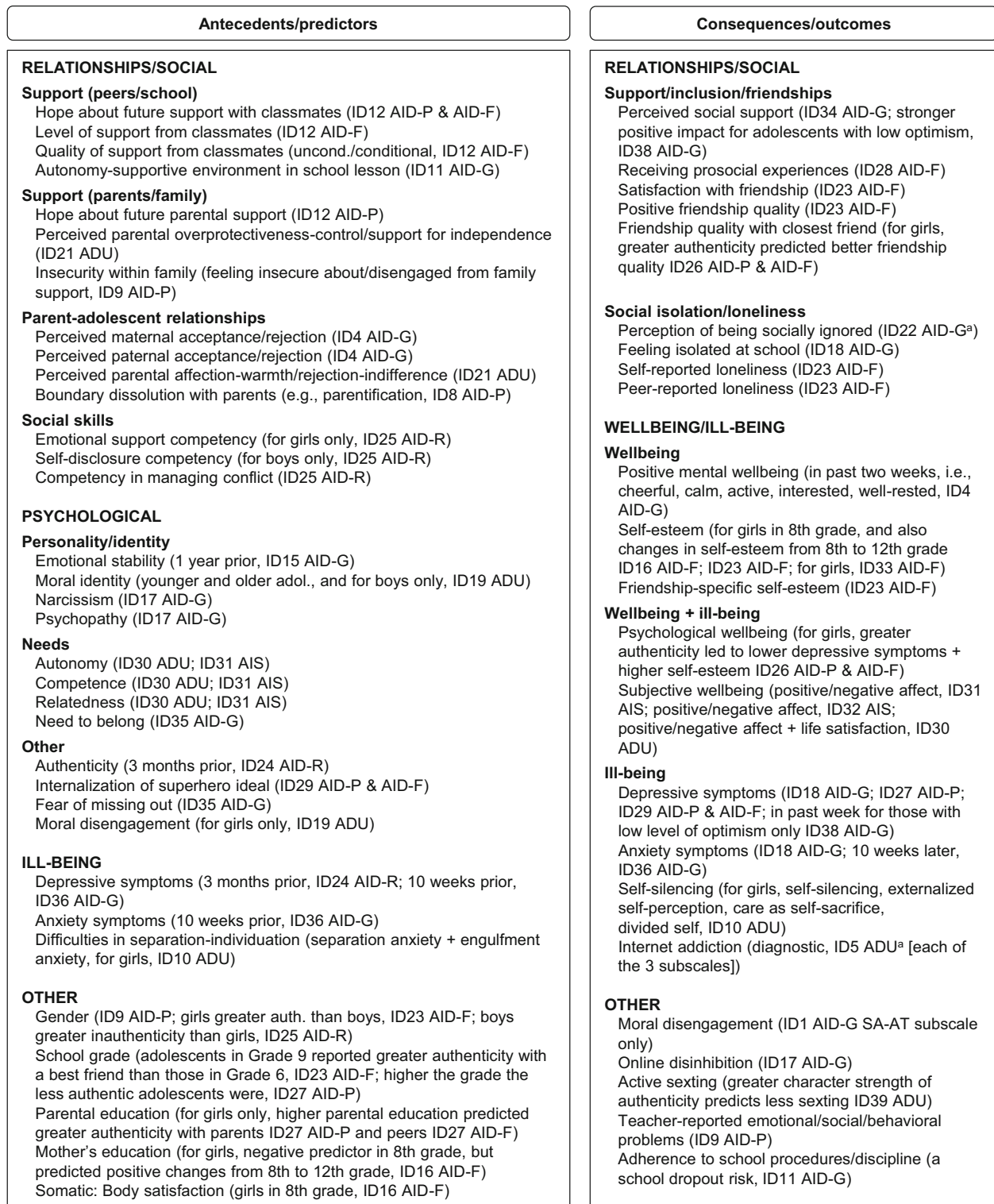
counterfeit self, and intervention could be done accordingly" (p. 519). Their goal was to identify "the psychological structure of counterfeit self" (p. 519) and confirmatory factor analysis of their adaptation with adolescent participants resulted in two confirmed factors. One factor—Self-Alienation—contained three unaltered (translated) items from Wood et al. (which had four items, all oriented toward self-alienation). In contrast to Wood et al. who positioned self-alienation as partially indicative of a less authentic personality (i.e., not an inauthentic personality), Abraham et al. (2018b) positioned it as belonging to an inauthentic personality (counterfeit self) by stating, "the higher the self-alienation dimension, theoretically, the higher the counterfeit self" (p. 520). The second factor was called "counterfeit/inauthentic living" (p. 520), and two of its three items were altered from Wood et al.'s version (which had four items) to be oriented toward inauthenticity, rather than authenticity. This example demonstrates how conceptual understandings and forms of authenticity and inauthenticity diverge. There were only three multidimensional measures in this review (see Table 3 footnote), the rest were unidimensional or treated as such.

Knowledge About Authenticity and Inauthenticity in Adolescents (RQ2)

This subsection summarizes longitudinal results, and presents an overall nomological network for all forms of authenticity and inauthenticity (Figs. 2, 3, 4, 5), followed by general findings for state authenticity/inauthenticity, four varieties of dispositional authenticity/inauthenticity (general, with parents/authority figures, with peers/friends, in romantic relationships), and conceptually unipolar dispositional authenticity. The subsection finishes by summarizing qualitative research findings. Bolded headings in the nomological network diagrams represent gist-based themes (not analytically derived, prescriptively defined, or theoretically specific) and were included to facilitate general understanding across multiple diagrams.

Longitudinal Results

Three longitudinal studies revealed dispositional authenticity (bipolar) increased across time (3 months, Shulman et al., 2009; 1 year, Hill et al., 2013; girls' authenticity with best friends increased each year from 8th to 12th grades, Impett et al., 2008), while a fourth indicated it remained stable across 10 weeks irrespective of gender or age (Weir & Jose, 2010).

Antecedents/predictors	Consequences/outcomes

RELATIONSHIPS/SOCIAL

Support (peers/school)
Hope about future support with classmates (ID12 AID-P & AID-F)
Level of support from classmates (ID12 AID-F)
Quality of support from classmates (uncond./conditional, ID12 AID-F)
Autonomy-supportive environment in school lesson (ID11 AID-G)

Support (parents/family)
Hope about future parental support (ID12 AID-P)
Perceived parental overprotectiveness-control/support for independence (ID21 ADU)
Insecurity within family (feeling insecure about/disengaged from family support, ID9 AID-P)

Parent-adolescent relationships
Perceived maternal acceptance/rejection (ID4 AID-G)
Perceived paternal acceptance/rejection (ID4 AID-G)
Perceived parental affection-warmth/rejection-indifference (ID21 ADU)
Boundary dissolution with parents (e.g., parentification, ID8 AID-P)

Social skills
Emotional support competency (for girls only, ID25 AID-R)
Self-disclosure competency (for boys only, ID25 AID-R)
Competency in managing conflict (ID25 AID-R)

PSYCHOLOGICAL

Personality/identity
Emotional stability (1 year prior, ID15 AID-G)
Moral identity (younger and older adol., and for boys only, ID19 ADU)
Narcissism (ID17 AID-G)
Psychopathy (ID17 AID-G)

Needs
Autonomy (ID30 ADU; ID31 AIS)
Competence (ID30 ADU; ID31 AIS)
Relatedness (ID30 ADU; ID31 AIS)
Need to belong (ID35 AID-G)

Other
Authenticity (3 months prior, ID24 AID-R)
Internalization of superhero ideal (ID29 AID-P & AID-F)
Fear of missing out (ID35 AID-G)
Moral disengagement (for girls only, ID19 ADU)

ILL-BEING
Depressive symptoms (3 months prior, ID24 AID-R; 10 weeks prior, ID36 AID-G)
Anxiety symptoms (10 weeks prior, ID36 AID-G)
Difficulties in separation-individuation (separation anxiety + engulfment anxiety, for girls, ID10 ADU)

OTHER
Gender (ID9 AID-P; girls greater auth. than boys, ID23 AID-F; boys greater inauthenticity than girls, ID25 AID-R)
School grade (adolescents in Grade 9 reported greater authenticity with a best friend than those in Grade 6, ID23 AID-F; higher the grade the less authentic adolescents were, ID27 AID-P)
Parental education (for girls only, higher parental education predicted greater authenticity with parents ID27 AID-P and peers ID27 AID-F)
Mother's education (for girls, negative predictor in 8th grade, but predicted positive changes from 8th to 12th grade, ID16 AID-F)
Somatic: Body satisfaction (girls in 8th grade, ID16 AID-F)

RELATIONSHIPS/SOCIAL

Support/inclusion/friendships
Perceived social support (ID34 AID-G; stronger positive impact for adolescents with low optimism, ID38 AID-G)
Receiving prosocial experiences (ID28 AID-F)
Satisfaction with friendship (ID23 AID-F)
Positive friendship quality (ID23 AID-F)
Friendship quality with closest friend (for girls, greater authenticity predicted better friendship quality ID26 AID-P & AID-F)

Social isolation/loneliness
Perception of being socially ignored (ID22 AID-G[a])
Feeling isolated at school (ID18 AID-G)
Self-reported loneliness (ID23 AID-F)
Peer-reported loneliness (ID23 AID-F)

WELLBEING/ILL-BEING

Wellbeing
Positive mental wellbeing (in past two weeks, i.e., cheerful, calm, active, interested, well-rested, ID4 AID-G)
Self-esteem (for girls in 8th grade, and also changes in self-esteem from 8th to 12th grade ID16 AID-F; ID23 AID-F; for girls, ID33 AID-F)
Friendship-specific self-esteem (ID23 AID-F)

Wellbeing + ill-being
Psychological wellbeing (for girls, greater authenticity led to lower depressive symptoms + higher self-esteem ID26 AID-P & AID-F)
Subjective wellbeing (positive/negative affect, ID31 AIS; positive/negative affect, ID32 AIS; positive/negative affect + life satisfaction, ID30 ADU)

Ill-being
Depressive symptoms (ID18 AID-G; ID27 AID-P; ID29 AID-P & AID-F; in past week for those with low level of optimism only ID38 AID-G)
Anxiety symptoms (ID18 AID-G; 10 weeks later, ID36 AID-G)
Self-silencing (for girls, self-silencing, externalized self-perception, care as self-sacrifice, divided self, ID10 ADU)
Internet addiction (diagnostic, ID5 ADU[a] [each of the 3 subscales])

OTHER
Moral disengagement (ID1 AID-G SA-AT subscale only)
Online disinhibition (ID17 AID-G)
Active sexting (greater character strength of authenticity predicts less sexting ID39 ADU)
Teacher-reported emotional/social/behavioral problems (ID9 AID-P)
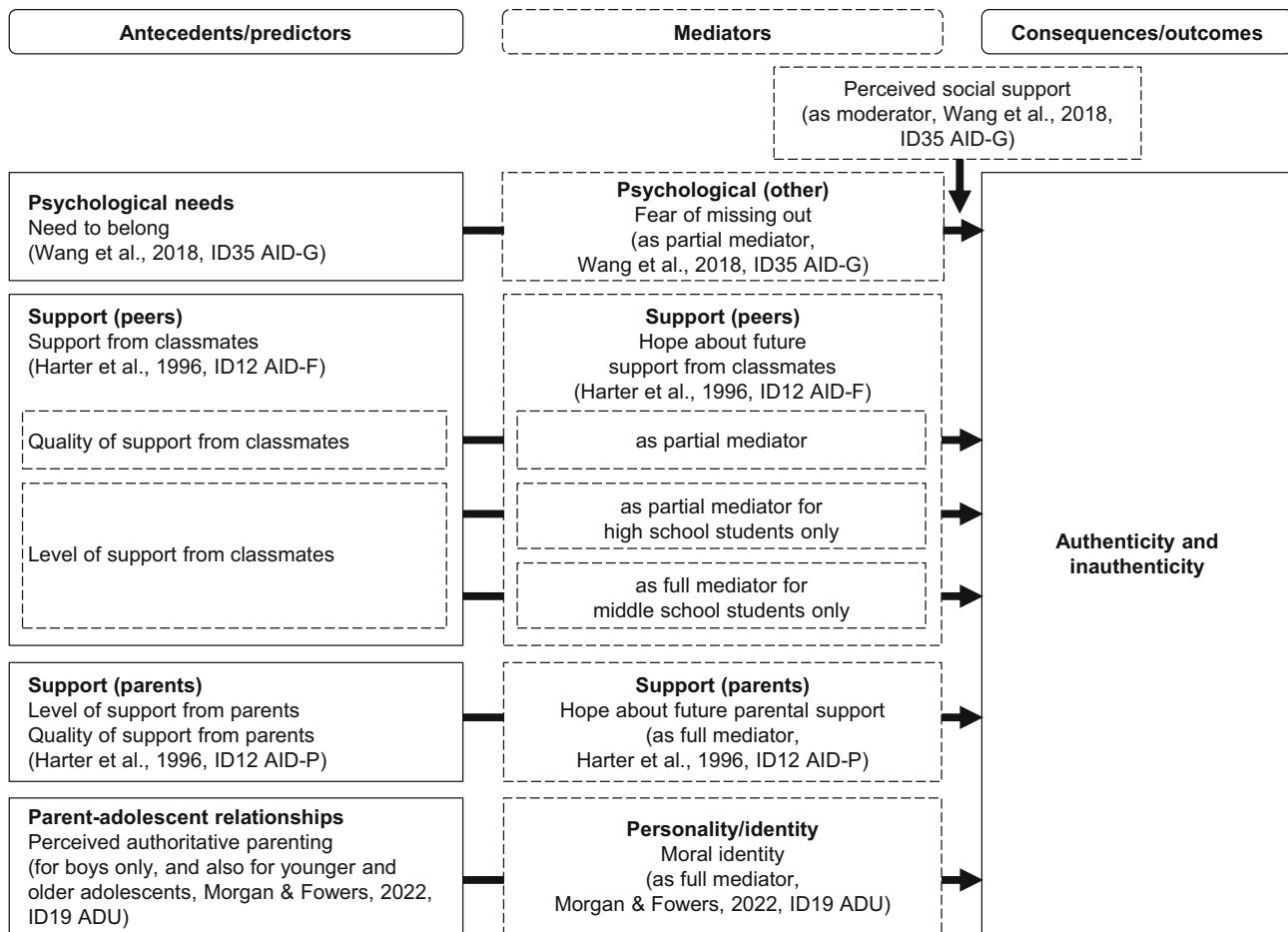Adherence to school procedures/discipline (a school dropout risk, ID11 AID-G)

Note. ID = study identity (see Table 2 for details). ADU = authenticity dispositional unipolar; AID-F = authenticity/inauthenticity dispositional with friends and peers; AID-G = authenticity/inauthenticity dispositional general (not context-specific); AID-P = authenticity/inauthenticity dispositional with parents and authority figures; AID-R = authenticity/inauthenticity dispositional in romantic relationships; AIS = authenticity/inauthenticity state. [a] = multidimensional scale for authenticity used (the rest were unidimensional or treated as such).

Fig. 2 Nomological network for authenticity and inauthenticity, all types and forms, direct relationships only
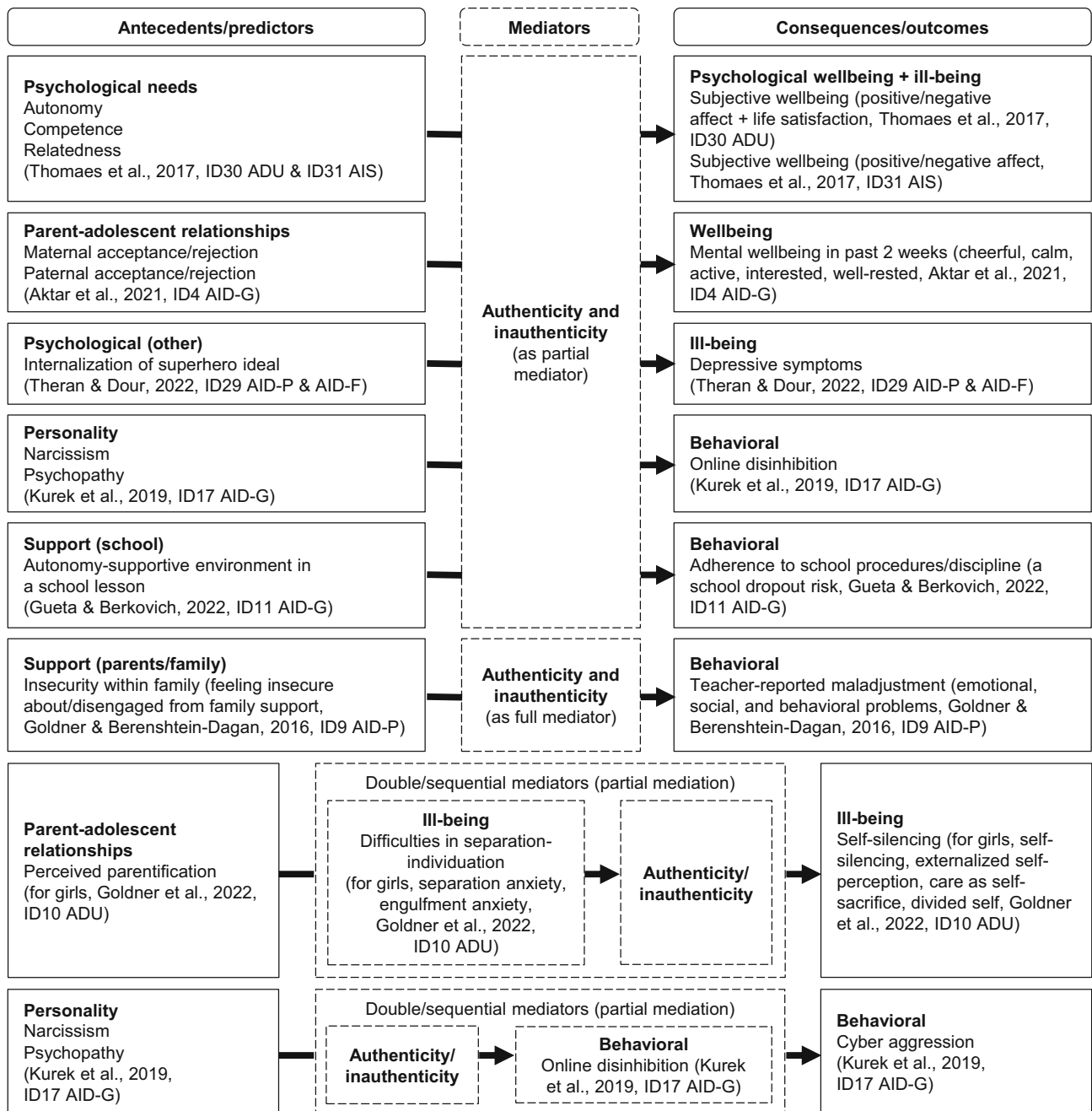
Note. ID = study identity (see Table 2 for details). ADU = authenticity dispositional unipolar; AID-F = authenticity/inauthenticity dispositional with friends and peers; AID-G = authenticity/inauthenticity dispositional general (not context-specific); AID-P = authenticity/inauthenticity dispositional with parents and authority figures; AIS = authenticity/inauthenticity state. All authenticity and inauthenticity measures (unipolar or bipolar) associated with variables in this diagram were unidimensional or treated as such.

Fig. 3 Nomological network mediation paths, with authenticity and inauthenticity as mediator(s)

Overall Nomological Network

Figure 2 shows all direct antecedents/predictors and consequences/outcomes of authenticity and inauthenticity for all types and forms. Mediation paths within the nomological network are shown in Figs. 3, 4, and 5 with authenticity and inauthenticity as the mediator, consequence/outcome, and antecedent/predictor, respectively. Many concepts were investigated once, indicating research in this field is emergent. Prominent themes included relationships with parents and peers, social support or isolation/loneliness, wellbeing or ill-being, and personal psychological characteristics. Many antecedents/predictors and some consequences/outcomes have been linked to relational connectedness,

Note. ID = study identity (see Table 2 for details). ADU = authenticity dispositional unipolar; AID-F = authenticity/inauthenticity dispositional with friends and peers; AID-G = authenticity/inauthenticity dispositional general (not context-specific); AID-P = authenticity/inauthenticity dispositional with parents and authority figures. All authenticity and inauthenticity measures (unipolar or bipolar) associated with variables in this diagram were unidimensional or treated as such.

Fig. 4 Nomological network mediation paths, with authenticity and inauthenticity as outcome(s)

through support, acceptance, autonomy, and relatedness; or linked to difficulties in relationships due to rejection, feeling controlled, lack of support, parentification, and feeling isolated or ignored. Wellbeing and ill-being themed variables were often viewed as outcomes, with fewer forms of ill-being (e.g., depressive symptoms) and no indicators of wellbeing (e.g., affect, self-esteem) or meaningfulness investigated as antecedents. The most frequent variable investigated across studies in connection with authenticity and inauthenticity was depressive symptoms, which suggests they have a complex relationship affected by, emerging from, or interacting with, adolescents' social contexts. Depression and self-esteem were the only variables to have been analyzed in four or more studies. While certain psychological characteristics and identity-based values predicted authenticity and inauthenticity, few mainstream aspects of personality did (only one of the Big 5 personality traits directly predicted dispositional

authenticity/inauthenticity in adolescents; Hill et al., 2013). Few antecedents were value-oriented, despite theories emphasizing values as important for authenticity (e.g., Kernis & Goldman, 2006). Few behavioral outcomes were investigated. Overall, there were more negative than positive outcomes investigated.

State Authenticity/Inauthenticity—Conceptually Bipolar

State authenticity/inauthenticity in adolescents was first investigated in 2017 (Thomaes et al., 2017) and is largely unexplored. As shown in Fig. 2, autonomy, competence, and relatedness predicted state authenticity/inauthenticity and state authenticity/inauthenticity predicted affect (Thomaes et al., 2017). State authenticity/inauthenticity partially mediated the relationship between those three psychological needs and affect (Thomaes et al., 2017). A critical finding was that experimentally inducing autonomy satisfaction
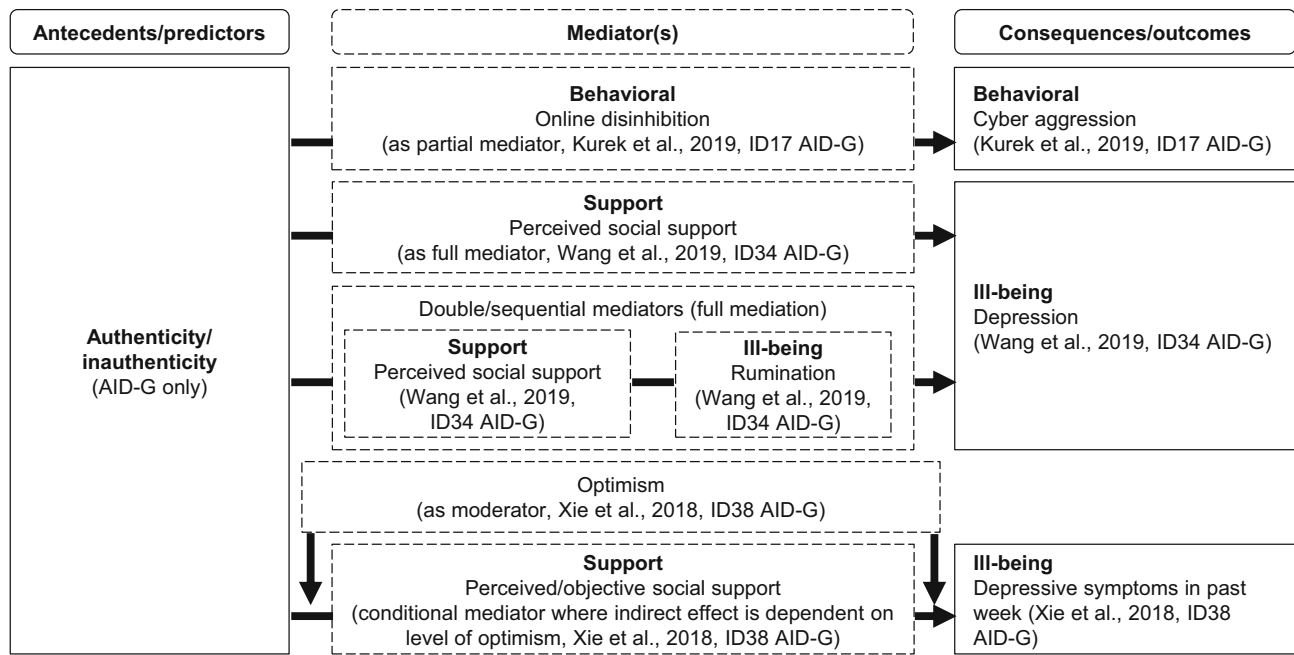
Note. ID = study identity (see Table 2 for details). AID-G = authenticity/inauthenticity dispositional general (not context-specific). All authenticity/inauthenticity measures associated with variables in this diagram were unidimensional.

Fig. 5 Nomological network mediation paths, with authenticity and inauthenticity as antecedent/predictor(s)

(writing about a recollection of autonomy satisfaction, but not objectively or subjectively measured) had a medium causal effect on state authenticity/inauthenticity compared to a neutral control condition (Thomaes et al., 2017). Further, state authenticity/inauthenticity fully mediated the relationship between experimentally induced autonomy satisfaction and affect (Thomaes et al., 2017), suggesting while autonomy satisfaction causally influences state authenticity/inauthenticity, autonomy and state authenticity/inauthenticity are not identical concepts, and autonomy is not the only contributing element to state authenticity/inauthenticity.

Dispositional Authenticity/Inauthenticity, General—Conceptually Bipolar

Figures 2, 3, 4 and 5 illustrate few studies investigated positive antecedents or outcomes of general (i.e., not context-specific) dispositional authenticity/inauthenticity. One assessed recent mental wellbeing as an outcome (Aktar et al., 2021) and was the only study which separated out any form of wellbeing that was not operationalized as self-esteem, from indicators of ill-being. Therefore, there is a gap in understanding how authenticity and inauthenticity relate to adolescent wellbeing in terms of flourishing and thriving. General dispositional authenticity/inauthenticity functioned as a partial mediator between parental acceptance/rejection and wellbeing (Aktar et al., 2021), suggesting it has an

influential role between a context-specific antecedent and non-context-specific wellbeing. However, patterns involving depressive symptoms across general and context-specific dispositional authenticity/inauthenticity suggest social support is interwoven in the process. While general dispositional authenticity/inauthenticity had a direct relationship with depressive symptoms (Luthar et al., 2021; Xie et al., 2018), perceived social support can fully or conditionally (dependent on level of optimism) mediate that relationship (Xie et al., 2018).

A more supportive school environment (Gueta & Berkovich, 2022) and greater parental acceptance (Aktar et al., 2021) predicted greater general dispositional authenticity (bipolar), and greater general dispositional authenticity (bipolar) predicted greater social support (Wang et al., 2019; Xie et al., 2018). However, the picture was nuanced for adolescents who reported a high level of fear of missing out combined with a low level of perceived social support, as this combination predicted greater, not less, general dispositional authenticity (bipolar) in online social networking environments (Wang et al., 2018). This effect may be due to those adolescents receiving less social support in an offline context (although the social support measure was not context-specific to offline or online environments), so tended to seek supportive connections by being more authentic online than adolescents with greater social support (Wang et al., 2018). An additional complexity is girls reported greater general dispositional authenticity (bipolar) in an online

social networking context than boys, and older adolescents reported less authenticity than younger adolescents (Wang et al., 2018).

General dispositional authenticity/inauthenticity has a nuanced relationship with features of personality. While changes in extraversion and conscientiousness across a year each coincided with changes in the same direction for general dispositional authenticity/inauthenticity, only emotional stability predicted general dispositional authenticity/inauthenticity a year later (Hill et al., 2013). Given the influence of narcissism and psychopathy on online problematic behaviors was partially mediated by general dispositional authenticity/inauthenticity (Kurek et al., 2019), it is possible differences in emotional stability aligned with subtypes of psychopathy (Sellbom & Drislane, 2021) and narcissism (Czarna et al., 2021) may help explain why general dispositional authenticity/inauthenticity functions as a mediator.

Finally, a measure of dispositional authenticity/inauthenticity was developed based on interviews with adolescents and while a two-factor solution initially emerged (False Self and Social Concern), further analyses supported a single-factor solution (Weir & Jose, 2010). Its test/re-test reliability was moderately high when administered 14 months later (Weir & Jose, 2010). A translation of the same scale, followed by exploratory and confirmatory factor analyses, confirmed a two-factor structure and its test/re-test reliability (Akin et al., 2013).

Dispositional Authenticity/Inauthenticity with Parents and Authority Figures—Conceptually Bipolar

Three motives were aligned with different levels of adolescents' authenticity with parents—role experimentation was aligned with the highest level of authenticity, a desire to please others came next, and devaluing oneself was aligned with "engaging in false-self behavior" (Harter et al., 1996, p. 370) although all three average scores remained above the midpoint of the bipolar scale. The role experimentation finding is particularly important, as it implies adolescents can safely try out new features of identities in this context. Two motives may be connected to boundary dissolution with parents, which predicted authenticity/inauthenticity (Goldner et al., 2017), as triangulation may strain an adolescent's desire to please by transactionalizing potential benefits normally arising from mutual reciprocity, and guilt-oriented control could lead to devaluing oneself. Only one study (Theran & Dour, 2022) assessed internalization of an extrinsic pressure or ideal in the parental context. The "superhero ideal [is] the socially prescribed desire for achievement … [across many life domains and which] … is driven by a need to demonstrate achievement to others [and involves being] disconnected from the relational aspects of

[oneself]" (Theran & Dour, 2022, p. 1), which suggests psychological needs for autonomy and relatedness were only being partly satisfied, which may also affect general dispositional authenticity/inauthenticity.

On average, adolescents who felt secure in their family (Goldner & Berenshtein-Dagan, 2016) or felt they received a high or moderate level of support from their parents (Harter et al., 1998) were more authentic with their parents than adolescents who did not feel this way. Hope about future parental support appeared to be a powerful driver for authenticity/inauthenticity with parents, as it had a direct relationship and also fully mediated any effects of level or quality (conditional/unconditional) of parental support on authenticity/inauthenticity (Harter et al., 1996). Hope may prevent emotional, social, and behavioral issues at school through its influence on authenticity, as the relationship between feeling insecure about family support and issues at school was fully mediated by authenticity/inauthenticity with parents (Goldner & Berenshtein-Dagan, 2016). Having higher perceptions of social support from family was important for adolescents who reported a low level of authenticity with authority figures (composite of mother, father, and teacher), as they reported less depressive symptoms than adolescents who reported less support (Theran, 2010).

The fact adolescents in higher grades reported less authenticity with parents across grades 7–9 (Theran, 2011) might indicate the developmental processes of separation-individuation, identity exploration, and role experimentation were in full swing, however, it remains unclear whether this trend continues, stabilizes, or pivots toward greater authenticity with parents for adolescents in grades 10–12, as general dispositional authenticity/inauthenticity progressively increases from grades 8–12 for girls (Impett et al., 2008), although this period has not been explored for boys.

On average, girls reported greater authenticity than boys with their parents (Harter et al., 1996) and mother (Goldner & Berenshtein-Dagan, 2016), whereas boys reported greater authenticity with their father than girls (Theran, 2011). Adolescents' authenticity with their mother tended to be greater where maternal education level was higher, but when parental education was combined a trend toward greater authenticity with parents only applied for girls (Theran, 2011), which suggests the level of paternal education may explain some of the difference in levels of father-oriented authenticity/inauthenticity between the two genders. For girls (boys were not studied), greater authenticity with authority figures (mother, father, and teacher) predicted greater friendship quality with a close friend (Theran, 2010). Adolescents who felt they received a high or moderate level of support from teachers were more authentic with teachers than adolescents who received less support (Harter et al., 1998). Finally, one study noted the

way adolescents viewed themselves—self-drawings of their whole self were professionally assessed—did not predict authenticity with parents or with classmates (Goldner et al., 2016), which implies subjective interpretation by individual adolescents is essential.

Dispositional Authenticity/Inauthenticity with Peers and Friends—Conceptually Bipolar

Both girls and boys reported being more authentic with close friends than classmates (Harter et al., 1998), however, girls reported being more authentic than boys with close or best friends (Harter et al., 1998; Peets & Hodges, 2018; Theran, 2011) and female classmates (Harter et al., 1998). Girls and boys both reported higher authenticity with same-gender than other-gender classmates (Harter et al., 1998). An important finding in this review in relation to gender orientation is that boys classified as androgenous (reporting higher feminine and higher masculine characteristics) reported higher authenticity with close friends (non-gendered), but lower authenticity with classmates (boys or girls), than boys classified as masculine (reporting lower feminine and higher masculine characteristics; Harter et al., 1998). This is elaborated on in the discussion.

Information regarding dispositional authenticity/inauthenticity with best friends across school grade levels was conflicting. One study indicated adolescents in grade 9 reported greater authenticity with best friends than those in grade 6 (Peets & Hodges, 2018), while another indicated as grade increased from 7 to 9 authenticity decreased (Theran, 2011). The picture may be even more intricate because average authenticity with best friends increased across grades 8–12 for girls, but within-person variability data showed for some girls it decreased or stayed similar across time, rather than increase (Impett et al., 2008; within-person variability for boys remains unexplored). A close look at all three studies indicated the conflicting results were unlikely to be attributable to operationalized conceptual or methodological differences, or country.

Adolescents who felt they received a high or moderate level of support from their close friends or classmates (Harter et al., 1998) were more authentic than adolescents who did not feel this way. However, the picture is nuanced regarding classmates, as hope about future support from them fully mediated the relationship between level of support and authenticity/inauthenticity for adolescents in grades 6–8, but only partially for adolescents in grades 9–12 (Harter et al., 1996), which suggests the role of hope becomes less critical developmentally as maturity and autonomy increase, but remains influential in later adolescence. Greater authenticity with peers was particularly beneficial for adolescents who turned to parents less consistently (but not rarely) than other adolescents when they

felt upset, as they received more prosocial experiences (Theran, 2021).

Three motives were aligned with different levels of adolescents' dispositional authenticity (bipolar) with peers: role experimentation was aligned with the highest level of authenticity, a desire to please others came next, and devaluing oneself was aligned with low authenticity (Harter et al., 1996). Adolescents indicated the most important motive for inauthentic behavior involved a desire to please others (Harter et al., 1996). Dispositional authenticity (bipolar) with close friends or same-gender classmates was greater than authenticity with parents or teachers (Harter et al., 1998), suggesting peer relationships are a more important context for expression of authenticity during this developmental phase.

There were clear predictive links between dispositional authenticity/inauthenticity with peers and self-esteem (Impett et al., 2008; Peets & Hodges, 2018; Theran, 2010; Tolman et al., 2006), with longitudinal data for girls showing those who had greater authenticity when younger (grade 8) or gradually became more authentic across time (from grades 8–12) experienced greater increases in self-esteem by year 12 (Impett et al., 2008). This suggests early peer relationships which support safe identity exploration and expression (essential for authenticity and self-esteem) are important. Longitudinal data for boys has not been investigated.

Dispositional Authenticity/Inauthenticity in Romantic Relationships—Conceptually Bipolar

Two studies investigated this context, and girls reported greater authenticity than boys (Shulman et al., 2009; Sippola et al., 2007). Depressive symptoms were the only outcome investigated and no predictive relationship was found between authenticity/inauthenticity and depressive symptoms three months later (Shulman et al., 2009).

Dispositional Authenticity—Conceptually Unipolar

For dispositional authenticity (unipolar), the main finding was that this unipolar form predicted similar types of negative outcomes as bipolar forms (see discussion section). Concepts involving autonomy or relatedness and their frustration directly predicted authenticity whether they were investigated in general (Thomaes et al., 2017) or were connected to parenting (Ngai, 2015). However, the influence of authoritative parenting (operationalized items were indicative of autonomy and relatedness) on online dispositional authenticity was fully mediated by moral identity for older and younger adolescents, and "the relationship between moral identity and online [dispositional authenticity] was stronger for older adolescents" (Morgan &

Table 6 Contexts authenticity and inauthenticity in adolescents have been investigated or experienced in

Context category and subcategory	No. of different measures	Study ID	No. of studies
Social			
Friends	$n=8$	13, 15, 16, 20, 23, 26, 27, 28, 29, 33, 37	$n=11$
Parents	$n=5$	7, 8, 9, 12, 13, 20, 26, 27, 28, 29, 37	$n=11$
Classmates	$n=4$	7, 8, 9, 12, 13, 26, 27, 28, 37	$n=9$
Teachers	$n=2$	13, 26, 27, 28	$n=4$
Romantic relationships	$n=2$	24, 25	$n=2$
Life domains			
School	$n=2$	13, 15, 20	$n=3$
Family	$n=1$	15	$n=1$
Environments			
Online	$n=5$	14, 19, 34, 35, 38	$n=5$

Study ID details are in Table 2. An expanded table identifying which measures were mapped to each context subcategory is available at https://doi.org/10.17605/OSF.IO/F3958

Fowers, 2022, p. 194). This suggests moral identity may be a developmental precursor of online authenticity (Morgan & Fowers, 2022). Parental care (a form of relatedness) and control (degree of autonomy) had a distinctive connection to gender differences in authenticity—although girls reported greater authenticity than boys, this relationship reduced in strength by 37% when these parental elements were controlled for (Ngai, 2015). This suggests intergenerational gender socialization processes affect authenticity.

Another study investigated dispositional authenticity in an online context and found no differences in the proportion of adolescents who reported low, medium, or high authenticity across age groups (12–14, 15–16, 17–18) or platforms (for intensive users of Instagram and TikTok; Hernández-Serrano et al., 2022). The two items which represented authenticity—being a preference to use real-self information and actually using one's real photo online (Hernández-Serrano et al., 2022)—may not be sufficiently broad, as subscales of a comprehensive authenticity measure predicted internet addiction in adolescents (Anli, 2018).

Qualitative Research Findings

Nartova-Bochaver et al. (2021) qualitatively explored adolescents' "everyday ideas of authenticity" (p. 3), which overall showed adolescents value their own authenticity and mostly experience authenticity rather than inauthenticity. When adolescents described themselves, they prioritized their "self-identity/not to create the false self" (p. 9), independent behavior and thoughts, and self-oriented feelings/attitudes. (These ideas correspond with features of authenticity involving congruence, self-coherence, and self-determination; see Table 4.) Some adolescents indicated they always behaved and felt like their true selves. (This may

align with the feature of self-consistency in Table 4; but may also represent lack of developmental awareness regarding a false self, see Harter et al., 1997.) Adolescents often mentioned experiencing the same feelings of authenticity with or without other people. Some adolescents (25%) could not specify situations when they felt like their true self, but for those that could, the most frequently mentioned situation involved "contact with others and their confession" (p. 12). When adolescents were asked about situations when they "cannot understand themselves" (p. 13), adolescents most frequently responded they do not lose themselves, but if they do, it involves vulnerability to other people. Regarding self-recovery after self-alienation, adolescents typically struggled to respond (35% no answer), indicated they don't experience self-alienation, or gave a diverse range of responses (although infrequent, the top two involved being relaxed or with other people). A unique contribution of Nartova-Bochaver et al.'s (2021) study is the idea of self-recovery after self-alienation and should be investigated further, as recovery from vulnerability to others sometimes involves being with people, which may also apply to self-alienation.

Methylphenidate—a medication prescribed for managing symptoms of attention deficit and hyperactivity disorder—can alter adolescents' sense of authenticity (Fleishmann & Kaliski, 2017). Some adolescents felt it supported greater expression of authenticity, some felt it suppressed authenticity (i.e., disruption to self-coherence; Table 4) or was imposed to induce conformity to social expectations (i.e., hindrance to self-determination; Table 4), while others viewed themselves as similarly authentic but qualitatively different with and without medication (Fleishmann & Kaliski, 2017). This finding has methodological implications for research designs involving this population,

especially those which assess authenticity at specific times of day (when medication is most active or has worn off).

Contexts Authenticity and Inauthenticity in Adolescents have been Investigated or Experienced in (RQ3)

Context-specific operationalizations were used in over half of the studies, although not all measures were constrained to a single context (e.g., asks about family, school, and friends; see Hill et al., 2013). Table 6 shows research has been primarily focused on close social contexts involving friends, parents, and classmates, which are developmentally influential contexts. Only two studies investigated any form of authenticity and inauthenticity in general life domains such as school and family, which likely reflects the importance researchers place on relationships between individuals as the proximal space where authenticity emerges, and is developed, shaped, and expressed. Girls with a feminine orientation reported a lower level of dispositional authenticity (bipolar) in a school context (comprising male classmates and teachers) than in a private context (comprising parents and close friends; Harter et al., 1998). They also reported a lower level of dispositional authenticity (bipolar) in school contexts than girls with an androgenous orientation, which was partly attributable to the lower level of support they received (Harter et al., 1998). No studies assessed context-specific state authenticity/inauthenticity. The type of social activity being undertaken at the time state authenticity and inauthenticity are assessed may add insight, given adolescents described feeling more authentic in the situation involving "others and their confession" (Nartova-Bochaver et al., 2021, p. 12).

Across studies in this review, only the Authentic Living subscale of three available subscales from Wood et al.'s (2008) authentic personality measure had been adapted for online contexts and the internal consistency reliability remained below an acceptable level (Morgan & Fowers, 2022). This may have occurred due to "greater uncertainty about what authenticity looks like within online environments" (Morgan & Fowers, 2022, p. 197).

Methodological Approaches used to Investigate Authenticity and Inauthenticity in Adolescents (RQ4)

As seen in Table 2, most studies were quantitative, non-experimental, cross-sectional, observational (self-report), and used Likert-type surveys to assess authenticity and inauthenticity, although two also used pictorial paired-choice measures. Four quantitative studies were longitudinal (Table 2), ranging from three months to five years. The only experimental study used a recollection task involving

autonomy to induce state authenticity (Thomaes et al., 2017). The most common analytical approach involved structural equation modelling ($n=17$) with little conceptual overlap across studies (Fig. 2), which suggests the links between authenticity and inauthenticity in adolescents and other concepts are still being explored. Other frequent approaches were regressions ($n=13$) and analyses of variance ($n=12$).

The two qualitative studies investigating authenticity and inauthenticity used inductive thematic analysis. One took a grounded-theory approach, interviewers personally knew the participants, and interviews were semi-structured (Fleishmann & Kaliski, 2017). The other partly drew on existing authenticity theories to generate structured interview questions, and participants anonymously completed the questionnaire in a classroom where the researchers were present (Nartova-Bochaver et al., 2021).

Discussion

As authenticity and inauthenticity rise in prominence during adolescence, and authenticity is considered important for wellbeing throughout the lifespan, it is necessary to understand the phenomena and their place in adolescent's lives. This is the first scoping review focused on research regarding adolescents' authenticity and inauthenticity, and has identified how authenticity and inauthenticity have been understood, defined, and characterized in this field, what is known about authenticity and inauthenticity, the contexts authenticity and inauthenticity have been investigated in, and methodological approaches used to ascertain this knowledge.

Understandings, Definitions, and Characterizations of Authenticity and Inauthenticity in Adolescents (RQ1)

Many understandings derived from literature focused on a specific aspect of authenticity and inauthenticity (e.g., true/false-self behavior; Harter et al., 1996) or processes surrounding authenticity and inauthenticity within a larger theoretical framework (e.g., self-determination theory; Ryan & Deci, 2017). There were three likely reasons for the prominence of Harter et al.'s (1996) framework: adolescents qualitatively contributed to the evolution of ideas and their words are embedded in it (e.g., "behaving the way *I* want to behave and not how someone else wants me to be"; Harter et al., 1996, p. 360); the framework is practical and not complex; and the accompanying measure is short with three items, contextualized per relationship. Comprehensive theoretical constructs of authenticity (e.g., Kernis & Goldman, 2006) infrequently formed the basis for understanding

adolescents' authenticity and inauthenticity. Frameworks which are less complex are beneficial for targeting specific aspects of phenomena, however, phenomena exist within greater psychological and sociocultural ecological systems and, in the case of authenticity and inauthenticity, span a lifetime. Each of the ways adolescents' authenticity and inauthenticity have been understood so far are valuable, as some frameworks were focal, some theories were life-time oriented, and others resided within sociocultural world-views. However, some perspectives primarily prioritized adulthood with little attention given to adolescent developmental progressions of identities, transitional identity exploration, and increasingly diverse social connections that occur during adolescence. As awareness of one's own capacity to be inauthentic only emerges during early adolescence (Harter et al., 1997), it suggests that trait-like dispositional perspectives of authenticity and inauthenticity need to be theoretically reframed for younger adolescents. While most research was quantitative, it was encouraging to see qualitative research prioritizing adolescents' own understandings and experiences, as both methodological approaches are necessary to understand aspects of authenticity across cultures and generations, with new insights gleaned by hearing adolescents' voices.

Definitions and operationalizations of authenticity and inauthenticity used in studies in this review were typically characterized by two conceptual features (Table 4). The first feature of congruence/incongruence/self-coherence/disruption has overt elements readily recognized as ways to describe being true to oneself or not, such as thoughts, feelings, behavior, an overall sense, and sometimes awareness. In essence, this feature represents the how process—how individuals sense, express, and usually identify authenticity and inauthenticity. The second feature of self-determination/self-creation/hindrance taps into elements such as motivation, intention, degree of psychological need satisfaction, and support. This feature represents the why process—psychological reasons why people tend to be or feel more or less authentic or inauthentic. A less common feature was self-consistency/inconsistency, which might be broadly simplified to when and where—this feature helps people infer whether a person's degree of authenticity and inauthenticity remain consistent within or across contexts, situations, or roles, or tend to vary. Its less frequent use across definitions and measures suggests self-consistency may not be an essential element of authenticity and inauthenticity for adolescents, as variability while experimenting with roles (Harter et al., 1997) and identities (Erikson, 1970) is a normative process during adolescence. Further, while some adolescents indicate they are their true selves all the time (Nartova-Bochaver et al., 2021), other adolescents feel it is "desirable and appropriate to be different in different relational contexts", and "you can't always be the same person and probably shouldn't be" (Harter, 2012, p. 385). Results of this review demonstrate two conceptual features of authenticity and inauthenticity—functionality/dysfunctionality and self-discovery/stalling—are not theoretically relevant during adolescence, as only one item in one measure related to functionality, and there was no evidence in qualitative studies of either feature. The absence of material representing authenticity as a lifelong process involving discovering one's essential self, indicates a contemporary sociocultural shift away from a worldview generated during eras where beliefs regarding divine predestination and biological determinism were being explored (see Golomb, 1995).

Increased clarity regarding antonyms of authenticity and their meaning is required to facilitate expansion of theoretical and applied knowledge, as half of the reviewed studies assessing inauthenticity omitted defining it and there was insufficient alignment between theories or frameworks and operationalizations for more than one third of studies. While inauthenticity can be challenging to define, clarity could be achieved when creating initial working definitions by reversing bipolar measure items oriented to authenticity and describing their conceptual opposite. Additional research with adolescents is required to answer Wood et al.'s (2008) question regarding whether certain antonyms are "part of the same higher order factor as [dispositional, personality-oriented] authenticity" (p. 397). Peterson and Seligman's (2004) list of measures used to assess authenticity, honesty, and integrity may be a helpful starting point to begin identifying differentiating antonyms.

Most studies investigated dispositional perspectives of authenticity (Table 5). State authenticity is a newer type being explored with adolescents, being defined "conceptually and operationally, as the subjective sense of being one's true self" (Thomaes et al., 2017, p. 1053), and is currently being approached as conceptually distinct from existing dispositional conceptualizations (see Sedikides et al., 2019 for an overview of their approach). Considering authenticity and inauthenticity from a state-based viewpoint opens new avenues for research, such as investigating facilitating, enabling, affordance, inhibiting, and disinhibiting (e.g., Suler, 2005) factors influencing authenticity and inauthenticity in the here-and-now. A state-based viewpoint could help researchers investigate the transient involvement of specific character strengths, values, and morality as antecedents to the expression or suppression of authenticity and inauthenticity. Characterizing state authenticity and inauthenticity experiences based on patterns of state psychological phenomena may be helpful, as research with adults showed that patterns of relationships between authenticity experiences and psychological phenomena, when compared to inauthenticity experiences, are not necessarily linear; and, not all experiential patterns involve the same constructs

(Lenton et al., 2014). Not all prescriptive criteria considered essential for dispositional authenticity or inauthenticity showed ecological validity in adults' state experiences (e.g., value-behavior violations were often connected with feeling inauthentic, whereas value-consistent behavior was rarely mentioned when feeling authentic; Lenton et al. 2013a). While some researchers are approaching state authenticity/inauthenticity as conceptually distinct from dispositional constructs (see Sedikides et al., 2019 for an overview; Schmader & Sedikides, 2017, for an example of a model), there are additional ways states and their connection (if any) to dispositions can be approached in psychology more generally, that may be appropriate (see Chen, 2019; Endler & Kocovski, 2001; Endler et al., 1991; Fridhandler, 1986; Kiken et al., 2015; Nezlek, 2007; Ruch et al., 1997). State authenticity and state inauthenticity have not been investigated as unipolar concepts with adolescents.

Knowledge About Authenticity and Inauthenticity in Adolescents (RQ2)

This review revealed this field of research is emergent, as many variables related to authenticity and inauthenticity were only investigated once and only two variables were analyzed in more than three studies (Fig. 2). It also revealed adolescents' dispositional authenticity generally increased or remains stable across time, although within-person variability can occur where some become less authentic/more inauthentic. The increasing trajectory aligns with the developmental process of gradually resolving the identity versus identity confusion task (Erikson, 1968) and moving from introjection to integration (Ryan & Deci, 2017). Understanding what positively influences authenticity early in adolescence and facilitating increasing those positive influences may have a beneficial effect on other developmental outcomes (Impett et al., 2008). A mixed-methods approach which adds qualitative research at various time-points in longitudinal quantitative studies may help researchers gain greater insight into what aspects of adolescents' lives (e.g., developmental, social, identity, environmental, motivational, medical) adolescents' think are continuing to support, hinder, or changed their authenticity and inauthenticity. Future longitudinal research may consider incorporating state and dispositional measures to explore whether frequency or degree of state authenticity and inauthenticity across time, or in certain contexts, predicts dispositional authenticity (bipolar) or alterations to dispositional authenticity (unipolar). Knowing whether longitudinal changes in dispositional authenticity/inauthenticity in specific contexts (e.g., parents, friends, online) coincide with longitudinal changes in autonomy satisfaction or frustration within those contexts may provide areas of focus where supportive programs may be helpful. Further,

adding qualitative exploration to state-based phases across longitudinal investigations may help identify what adolescents think is enabling their authenticity at specific time points across adolescence, contributing to a positive stream of research aimed toward understanding longer-term links with wellbeing and flourishing. Key findings relating to specific types/forms/contexts of authenticity and inauthenticity are discussed next, and are followed by topic-based subsections which provide an integrated discussion of results across all types/forms/contexts of authenticity and inauthenticity.

State Authenticity/Inauthenticity

A critical finding in this review was that autonomy satisfaction causally influences state authenticity/inauthenticity (Thomaes et al., 2017). To some extent this is unsurprising, as part of how autonomy is defined in self-determination theory (Ryan & Deci, 2017) is inherent in several definitions of authenticity presented in the introduction—both ideas involve thoughts, feelings, and volitional behaviors which represent the true self. Autonomy satisfaction is therefore part of the experience of authenticity. A psychologically healthy developmental trajectory requires an increase in autonomy as adolescents move toward adulthood, so environments where carers and significant adults continue to be overprotective or controlling, or where autonomy regarding identity choices is restricted (e.g., vocational, intimate relationships, interests, religious, political), will inevitably affect adolescents' overall sense of authenticity.

Dispositional Authenticity/Inauthenticity, General

The finding that greater dispositional inauthenticity was predicted by negative personality factors (narcissism and psychopathy; Kurek et al., 2019), and predicted greater moral disengagement (Abraham et al., 2018a) and not being disciplined at school (Gueta & Berkovich, 2022) suggests that some adolescents may be adopting a negative identity. Negative identity is a psychologically detrimental resolution to the developmental identity task (Erikson, 1968), but may be necessary for survival to alleviate identity distress when adolescents have extensive exposure to many negative adult role models (e.g., violent or lazy; Hihara et al., 2018), so adopt similar negative elements.

Dispositional Authenticity/Inauthenticity with Parents and Authority Figures

Erikson's approach to development across the lifespan has an intergenerational developmental component where generative (in contrast to stagnating) adults help adolescents

flourish by "fostering, recognizing, and affirming the development of [adolescents'] identities" (Schacter, 2018, p. 317) and provide opportunities for them to explore "tentative identities" (Schacter, 2018, p. 318) safely. Even though role experimentation is one motive for false-self behavior, an important finding was that adolescents themselves are appreciative of parents who encourage role experimentation, as this motive was aligned with higher authenticity with parents (Harter et al., 1996).

Dispositional Authenticity/Inauthenticity with Peers and Friends

Gender orientation is an important part of identity exploration during adolescence, however, of all studies in this review, only Harter et al.'s (1998) study investigated gender orientation, and drew on questionnaires published between 1975 and 1991 to identify masculine, feminine, or androgenous characteristics. They described femininity as including "sensitivity, warmth, empathy, expressions of affection, enjoyment of babies and children, gentleness, and concern for others" (p. 895). Masculinity included "competitiveness, ability to make decisions, independence, risk taking, confidence, athleticism, mechanical aptitude, individualism, leadership, and enjoyment of math and science" (p. 895). Adolescents were classified as androgenous if they scored high on femininity and masculinity measures. Although this research is dated with regard to descriptions of gender orientations, it is important to recognize that social constructions of gender impact developmentally important relationships with friends and peers (as adolescents rely more on peers than parents for social support in late adolescence; Bokhorst et al., 2010). In particular, as boys with an androgenous orientation reported more authenticity with close friends than boys with a masculine orientation (Harter et al., 1998), inclusive social contexts where features of Harter et al.'s descriptors of femininity are encouraged or normalized may support more boys to experience greater authenticity in close relationships, thereby increasing opportunities for improved wellbeing through greater social support. The opposite pattern was found for classmates, which suggests school contexts may be less supportive for boys who equally value masculine and feminine characteristics. Gender conceptualizations have expanded since 1998 and contemporary adolescents' views regarding gender orientations and expressions in relation to their sense of authenticity and inauthenticity remain unexplored.

Dispositional Authenticity/Inauthenticity in Romantic Relationships

Too few studies have investigated this context, and both studies reported several unexpected results in relation to gendered predictions (Shulman et al., 2009; Sippola et al., 2007). Of note, for girls and boys, having the skill of managing conflict well in other-sex non-romantic relationships meant they could be more like their true selves in romantic relationships (Sippola et al., 2007), however, the genders involved in romantic dyads (i.e., other-sex or same-sex) were not identified.

Dispositional Authenticity (Unipolar)

A key overall finding for this form is that having a lower level of an authentic personality (which is not necessarily equated to inauthenticity; Wood et al., 2008) predicted negative interpersonal, intrapersonal, and behavioral outcomes, which were similarly evident for dispositional authenticity/inauthenticity constructs (non-context specific; see Fig. 2). Figure 2 shows this unipolar form was predicted by similar categories of concepts as for conceptually bipolar forms (state, dispositional general, and dispositional with parents) which implies they are tapping into the same underlying latent principle.

The following subsections provide an integrated discussion of results for RQ2 across all types/forms/contexts of authenticity and inauthenticity. They are structured around themes displayed in the overall nomological network in Fig. 2: relationships/social and psychological; wellbeing and ill-being; and other (gender, behavior).

Relationships/Social and Psychological

A very important finding across studies was the influence of social support. Concepts reflecting social support, autonomy, acceptance, and inclusion (versus lack of support, excessive control, social isolation, or loneliness) were recurring themes across studies in the review. Perceived social support or hope about future support predicted authenticity (bipolar) and mediated (Harter et al., 1996; Wang et al., 2019; Xie et al., 2018) or moderated (Wang et al., 2018) relationships between authenticity (bipolar) and other variables, suggesting that even though adolescents may not frequently mention the involvement of other people (Nartova-Bochaver et al., 2021), the support they feel those people provide or are likely to provide is important to their overall experience. In studies where dispositional authenticity/inauthenticity was operationalized as context-specific, the antecedent link between level of support and authenticity/inauthenticity was fully mediated by hope about future social support (Harter et al., 1996), which may

function similarly to how dispositional optimism moderated the impact of social support in the consequential relationship between general dispositional authenticity/inauthenticity and depressive symptoms (Xie et al., 2018). A key developmental task during young adulthood involves resolution of intimacy versus isolation—that is, to have a strong network of fulfilling and close relationships, rather than being disconnected (Erikson, 1968). Successful resolution of that task depends on experiences of giving and receiving social support (for true intimacy) as well as resolution of the identity task during the prior developmental period of adolescence (Årseth et al., 2009). That is, an adolescent's developing sense of self and experiences of authenticity associated with that self are formative processes closely linked to social connectedness which are vital during later adolescence and young adulthood. Based on the findings for state authenticity/inauthenticity and dispositional authenticity (unipolar), it is reasonable to assume the degree of satisfaction or frustration of autonomy (beyond the school environment), competence, and relatedness needs may also predict general and context-specific dispositional authenticity/inauthenticity. Further research is required into the effects of social support from parents versus friends on authenticity/inauthenticity for 16–18 year old adolescents specifically; as this is the only age group where the level of support from friends may exceed that of parents, rather than being similar (Bokhorst et al., 2010) and coincides with the final developmental transition toward emerging adulthood where new vocational identities are being considered (e.g., career). Finally, although adolescent romantic relationships may sometimes be short and the role of hope of future support likely tenuous, it may be helpful to assess the degree of autonomy and relatedness satisfaction and frustration adolescents experience in the relationship and its predictive effects on authenticity and inauthenticity.

Motives

Few studies investigated motives associated with adolescents' authenticity and inauthenticity, possibly due to the dispositional and reflective nature of research operationalizations used. As adolescents' most important motive for inauthentic behavior involved a desire to please others (Harter et al., 1996), researchers developing studies involving self-reported inauthenticity may need to structure research so potential effects of acquiescence bias are minimized. Given 31% of adolescents rated devaluation of self as an important motive for being inauthentic (dispositional, bipolar) with peers (Harter et al., 1996), future research should explore this concept in state authenticity/inauthenticity settings. Hope about future support is a reaction to previous support received (level or quality) and serves as a motivator for dispositional authenticity/inauthenticity

(Harter et al., 1996). Adolescents were less authentic with parents and more authentic with peers when devaluation of self was the motive (which adolescents noted was the second most important reason for inauthenticity), but more authentic with parents and less authentic with peers when role experimentation was the motive (Harter et al., 1996). So, despite devaluing oneself in peer relationships, risks of being authentic may be less when adolescents are with their peers than parents. Further research is needed to establish whether adolescents a) feel they can experiment with roles more safely with parents than peers, or b) experiment with a wider variety of roles with peers than parents.

Ryan and Deci's (2017) self-determination theory offers two useful levels for investigating motivation in adolescents: specific types, and causality orientations. Specific types of motivation are intrinsic, extrinsic, and amotivation. Intrinsic motivation occurs when an activity (social or physical) is naturally interesting to an individual, perceived as inherently enjoyable or aligns with their values, the social context is supportive, and a person autonomously engages in it. It is likely part of the experience of authenticity. Extrinsic motivation occurs when an activity appears likely to offer useful benefits, rather than being inherently beneficial (e.g., social approval or achieving a goal). The more autonomous extrinsic motivation feels (internalized), the more it aligns with one's own values and beliefs for the situation (identified). The more those values and beliefs are embedded in one's broader values and beliefs (integrated), the more it is perceived as authentic in a situation. If extrinsic motivation feels imposed (external regulation), or is reluctantly adopted (introjected), this feels external to the self and inauthentic. This suggests some extrinsic motivations may be associated with authenticity, and others with inauthenticity. According to Ryan and Deci, amotivation is when a person lacks motivation. They may feel completely ineffective, helpless, indifferent, or resistant (choosing non-action, despite having competence). These feelings and expectations can occur just prior to behavior and continue during behavior, so are essential to the phenomenological experience of authenticity and inauthenticity and may interest researchers investigating state authenticity and inauthenticity.

The other level Ryan and Deci (2017) offer is causality orientations, which are "individual differences in, and priming of, motivational orientations … [arising from] … persistent differences in contextual supports versus deprivations … over time" (p. 216). There are three orientations: autonomy, controlled, and impersonal. People "high in the autonomy orientation … tend to use the identified and integrated styles of regulation and to have a high level of intrinsic motivation" (p. 217). People "high in the controlled orientation … tend to use the external and introjected styles of regulation and to have a low level of intrinsic

motivation [and be] acutely occupied with 'what others might think' and/or with what external judgments or contingencies might attend their actions" (p. 218). People high in impersonal orientation tend to be "relatively passive and are easily overwhelmed by environmental forces and by their own internal drives and emotions" (p. 218). All three are developmental in form, so may interest researchers investigating adolescents' dispositional authenticity and inauthenticity.

Morality

Studies revealed moral identity is important for dispositional authenticity (Morgan & Fowers, 2022), and self-alienation predicted moral disengagement (Abraham et al., 2018a, 2018b). Connections between morality and general dispositional authenticity/inauthenticity have not been investigated, despite the theoretical relevance (see Kernis & Goldman, 2006). Additional research is required to investigate adolescents' state-based experiences of inauthenticity, as when adults recalled an instance of inauthenticity, they "felt more impure and less moral, and experienced a greater desire for physical cleanliness… [which] made them more likely to behave prosocially" (Gino et al., 2015, p. 994). However, if they used hand sanitizer, "the relationship between inauthenticity and prosocial behavior was eliminated" (Gino et al., 2015, p. 994) which suggests while experiences of inauthenticity may lead to prosocial outcomes, they may contribute to maladaptive behaviors (i.e., cleansing as a frequent compensatory activity). Adolescents have an "authentic inner compass … [which helps them resist] … peer-pressure to engage in antisocial behaviors" (Assor et al., 2020, p. 346), however, the relationship of this construct to adolescents' authenticity and inauthenticity remains unexplored.

Values

While theoretical literature emphasizes values as integral for authenticity (Kernis & Goldman, 2006), few value-oriented antecedents had been explored with adolescents in this review, particularly as predictors or in the context of authenticity/inauthenticity with parents, or in everyday experiences for state authenticity/inauthenticity. Some authenticity and inauthenticity measures refer to values and beliefs in a general sense (e.g., Thomaes et al., 2017; Wood et al., 2008), however, adolescents may not know what values actually are, so lists of behavior- and goal-oriented values (e.g., Rokeach, 1973) may be helpful.

Being Alone or with Others

The finding that adolescents frequently mentioned experiencing the same feelings of authenticity when they were alone as with others (Nartova-Bochaver et al., 2021) suggests this is a variation of authenticity (social versus non-social) requiring qualitative exploration with adolescents who experience different feelings of authenticity when they are alone. It is possible some adolescents may feel more authentic during solitude (as opposed to loneliness). In adults, the level of trait authenticity moderated the likelihood of experiencing state authenticity in social (higher trait authenticity) and non-social (lower trait authenticity) situations (Ito & Kodama, 2007).

Sexual Orientation

Sexual orientation is a facet of identity development which becomes salient during adolescence around age 13 (Hall et al., 2021) but was not investigated in studies in this review. Adolescents who face cultural or social resistance (reduced or no autonomy, or little social support) in this regard are likely to experience inauthenticity (Son & Updegraff, 2023). If adolescents lack opportunities to consider orientation, so commit to an orientation on the basis of other peoples' perspectives rather than their own, the status for that part of their identity becomes foreclosed (Marcia, 1980).

Wellbeing and Ill-being

Two more recurring themes across studies were wellbeing and ill-being, with greater authenticity (bipolar and unipolar) predicting greater wellbeing, which parallels adult literature (Sutton, 2020). Only two variables (depression and self-esteem) were analyzed in four or more studies, which means more research is required to determine whether the remaining variables are connected to authenticity and inauthenticity for most adolescents worldwide. The current review's scope was broader than Sutton's (2020) meta-analysis and consequentially identified additional studies where wellbeing measures had been used in relation to authenticity in adolescent samples. Only one article was identical in both reviews (being Thomaes et al., 2017), as the other studies in Sutton's review contained samples which exceeded the age parameters of this current review.

Wellbeing was operationalized as self-esteem, positive mental wellbeing (e.g., feeling calm, active, interested; Aktar et al., 2021), or positive affect across dispositional authenticity/inauthenticity studies, although one study used a composite which included ill-being (depressive symptoms; Theran, 2010). Self-esteem was the main form of wellbeing investigated as an outcome of dispositional

authenticity/inauthenticity with parents, and while positive relations with others (such as friends) reflect an element of Ryff's (2014) eudaimonic psychological wellbeing construct, it may be valuable to explore to what degree adolescents feel their ability to be authentic with their parents relates to life satisfaction more generally. Life satisfaction has not been investigated in conjunction with adolescents' dispositional authenticity/inauthenticity. For state authenticity/inauthenticity, only affect and life satisfaction have been explored. Wellbeing was also operationalized as positive affect and life satisfaction for dispositional authenticity (unipolar) in studies in this review. There is a partial gap in knowledge regarding how authenticity (bipolar or unipolar) relates to adolescent wellbeing in terms of flourishing and thriving, not merely as an absence of ill-being (e.g., lower depressive symptoms). Ryff's (2014) perspective of eudaimonic psychological wellbeing is broader than has been explored in studies in this review, and includes "autonomy", "environmental mastery" (including competence), "personal growth", "positive relations with others", "purpose in life" (meaning), and "self-acceptance" (p. 12). Wood et al.'s (2008) measure of authentic personality has shown significant correlations with these aspects of eudaimonic wellbeing for adults. In this review, antecedents and outcomes which reflect some of Ryff's principles of eudaimonic wellbeing are spread across the overall nomological network for authenticity and inauthenticity (see Fig. 2); and, items reflecting some of those principles appear within some measures of authenticity (bipolar and unipolar) used in studies in this review (Table 3). Together, this suggests certain aspects of eudaimonic wellbeing and authenticity are closely intertwined.

The Warwick Edinburgh Mental Wellbeing Scale (NHS Health Scotland, 2008) is likely valuable for investigating adolescents' wellbeing in conjunction with state authenticity, as it contains 14 simply worded items which tap into wellbeing ideas such as optimism about their future, confidence, thinking clearly, feeling cheerful, relaxed, interested, useful, and close to others. Many of those items align well with variables in the nomological network (Fig. 2), such as antecedents involving relationships and hope, the moderating influence of dispositional optimism, and outcomes such as loneliness, anxiety, positive mental wellbeing, and affect. Flourishing (conceptualized by Seligman, 2011; operationalized in the PERMA-Profiler by Butler & Kern, 2016) has not been explored, and has indirect conceptual links to variables in the nomological network (Fig. 2), such as affect, anxiety, positive mental wellbeing, loneliness, competency, and relationships, but extends those ideas further into concepts such as flow (feeling absorbed in an activity), purpose, meaning, and sense of direction in life. The relationship between adolescents' authenticity and inauthenticity and seeking, understanding, or discovering a meaningful purpose in life (e.g., Steger et al., 2006) remains unexplored.

Indicators of ill-being across studies included negative affect, depressive symptoms, anxiety symptoms, self-silencing (the broader conceptualization by Jack & Dill, 1992), and internet addiction. As foreshadowed in the results section, hope of and perceptions of higher social support connected with dispositional authenticity/inauthenticity may function as preventative buffers against emotional, social, and behavioral issues, and depressive symptoms. In adults, a self-alienation component of dispositional authenticity (unipolar) has been associated with stress (Wood et al., 2008), although it is unknown whether this applies for adolescents. It is recommended that researchers remain aware of the intersection between distress symptoms and discrete and chronic stressors when determining whether their research is focused on state-based situations, cumulations across time, or dispositional orientations (Núñez-Regueiro et al., 2022). Negative affect was the only indicator of ill-being investigated in conjunction with adolescents' state authenticity/inauthenticity. State-based research into ill-being, especially when using mixed-methods approaches, may provide greater insight into whether and why other indicators of ill-being (e.g., anxiety) may function as predictors, outcomes, or covariates of authenticity and inauthenticity within certain contexts. In adults, the Self-Alienation subscale for dispositional authenticity (unipolar) usually showed the strongest relationships with ill-being and wellbeing indicators of anxiety, stress, negative affect, positive affect, self-esteem, and satisfaction with life (Wood et al., 2008). This suggests feeling confused, uncertain about, and disconnected from one's true self is particularly pertinent to wellbeing and ill-being, however, this subscale has to date, only been linked to internet addiction in adolescents (Anli, 2018).

Behavior

The scarcity of behavioral outcomes investigated across studies indicates more research is required to better understand what behaviors are likely to be predicted or influenced by dispositional authenticity and inauthenticity. Ryan and Ryan (2019) proposed authenticity can come into existence simultaneously with behavioral experiences, rather than functioning as an antecedent; so future state-based research is likely to shed light on the finer distinctions between general dispositional tendencies and state-based here-and-now experiences of authenticity and inauthenticity.

Gender

For studies involving contexts where gender differences in authenticity (unipolar, online) and authenticity/

inauthenticity were found (parents, mother, close friends, best friends, romantic relationships) girls reported greater authenticity than boys (Goldner & Berenshtein-Dagan, 2016; Harter et al., 1996; Peets & Hodges, 2018; Shulman et al., 2009; Sippola et al., 2007; Wang et al., 2018), with one exception, where boys' authenticity with fathers was greater (Theran, 2011). This tendency appeared in samples from different countries (China, Finland, Israel, United States, and Canada), suggesting it is not likely due to cultural differences. Controlling for parental care and control (which includes autonomy) substantially reduced the degree of difference in dispositional authenticity (unipolar) between genders (Ngai et al., 2015), so further research is required to identify whether specific aspects of gendered parenting practices toward boys are affecting their authenticity. Girls tend to perceive greater social support from friends than boys do (Bokhorst et al., 2010), which may help explain the tendencies for friend-oriented contexts. As mentioned in the subsection discussing authenticity and gender orientation with peers, the breadth and diversity of gender concepts have broadened considerably since 1998 and contemporary research is required to update knowledge in this area, particularly to help identify whether specific underlying assumptions or descriptors associated with different genders or gender identities tend to facilitate or hinder authenticity in everyday settings. Each individual's gender preferences may be simultaneously influenced by exposure to cultural, social, environmental, familial, and religious referents in the moment and across time, so gender-relevant experiences of authenticity and inauthenticity should be contextualized in order to be better understood.

Contexts Authenticity and Inauthenticity in Adolescents have been Investigated or Experienced in (RQ3)

Most research regarding context-specific dispositional authenticity/inauthenticity was focused on close, developmentally important relationships (friends, parents, and classmates), rather than broader life environments such as school, family/home, and leisure. Findings across this review indicated contexts involving peers are more conducive to expressing one's authenticity than contexts involving adults, although support and acceptance from people of any age emerged as important for strengthening adolescents' authenticity. It was rarely apparent in studies in this review whether instructions to participants regarding parents permitted them to choose another important adult in their lives who may be influential. Some adolescents may have difficult relationships with parents, and other adults may be greater contributors to an adolescent's authenticity, particularly in cultures where kinship groups are considered immediate family and may be equal to or of greater

importance than birth parents. Future research is required into context-specific state authenticity and inauthenticity, as it is likely to provide greater insight into proximal mechanisms that support, hinder, or facilitate authenticity and authenticity and immediate outcomes associated with state-based experiences, and may reveal mechanisms supporting greater authenticity in contexts of developmental, motivational, moral, or value-based relevance.

General dispositional authenticity (bipolar and unipolar) has been investigated in online contexts, however, no studies compared authenticity and inauthenticity with friends (or other people) in face-to-face settings versus online settings where technological affordances (e.g., using or not using video while chatting online; Vermeulen et al., 2018) may expand or restrict expression. Qualitative research which asks adolescents whether they think there is any difference in their authenticity in face-to-face settings versus online, combined with quantitative measures of general and state authenticity in online environments, may be helpful to provide insight into mechanisms which differ based on technological affordances (see Vermeulen et al., 2018, for an overview of affordances), especially as affordances are likely to change across time depending on popularity of certain platforms for different groups, or new technologies. Research focusing on affordance type (e.g., having the option to turn off video permits control over visual cues) combined with the length and frequency of temporal engagement, group size, and relationship distance (close friends versus acquaintances versus strangers) rather than specific platforms may provide more enduring comparisons when it comes to gauging authenticity and inauthenticity. Finally, no studies assessed authenticity in adolescents in anonymous online settings. Online settings can be beneficial for authentic identity development (Shankleman et al., 2021), particularly if adolescents feel they can be more authentic online than offline (Wängqvist & Frisén, 2016).

Methodological Approaches Used to Investigate Authenticity and Inauthenticity in Adolescents (RQ4)

Most studies used quantitative approaches, one study was experimental, two were qualitative, and mixed-methods approaches were not used. Quantitative approaches provide collective evidence of the existence and breadth of involvement of authenticity and inauthenticity in adolescents' lives. Qualitative and mixed-methods approaches (e.g., sequential or concurrent) offer two opportunities. Firstly, they ensure voices of adolescents are heard, so adolescents' perspectives, lived experiences, and contemporary needs continue to be incorporated into research which accurately represents them, and expands the

boundaries of what is known or assumed by seeking their input as experts in their own lives. The second opportunity is that the developmental relevance (emergence) of theoretical aspects of authenticity can be explored, as can developmental appropriateness of language and ideas within measures derived from adult-oriented literature (e.g., self-alienation). Qualitative researchers' philosophical approaches and degrees of subjectivity can vary substantially, despite using similar methods for data collection and analysis, so to support intergenerational understanding in this emerging field, researchers can briefly outline their overall worldview (e.g., constructivism, pragmatism) along with ontological, epistemological, and axiological positions (see Cresswell & Plano Clark, 2017, Chapter 2).

Experimental research was rare across studies in this review, however, adopting a state-based (here-and-now) approach to authenticity and inauthenticity presents opportunities to investigate situations as they are happening or very shortly after, while the experience is fresh in people's minds (e.g., Fleeson & Wilt, 2010). A state-based mixed-methods approach could capitalize on the benefits of quantitative data by augmenting it with concurrent qualitative insights gained from adolescents' immediate experiences. It may be particularly helpful when exploring ideas like technological affordances, such as asking why an affordance was or was not relevant for their experience of authenticity or inauthenticity. A sequential mixed-methods approach could be helpful if quantitative results indicate there is a difference in authenticity/inauthenticity between online and face-to-face interactions with the same person or group, as adolescents could be asked what aspects of the environment they felt contributed to those differences.

The broad range of measures used to quantitatively assess authenticity and inauthenticity in this review prevent a meta-analysis from being conducted in the near future, however, many items across those measures repeatedly tapped into the same features of authenticity. Researchers may like to consider collectively sharing and consolidating items in an open-access format similar to that used for the International Personality Item Pool (2022) at https://ipip.ori.org/ (Goldberg et al., 2006), which would allow researchers to honor theoretical approaches and classify groups of items according to conceptual features or components, facilitating more rapid and meaningful consolidation of knowledge in this field.

As the most important motive for inauthenticity with parents and peers was a desire to please others (Harter et al., 1996), future research designs should minimize or control for potential effects of acquiescence biases. There was no significant correlation between a measure of counterfeit self and Paulhaus' (1984) measure of socially desirable responding (Abraham et al., 2018a) and future research is needed to redress this imbalance.

Strengths of the Review

This review provides a comprehensive overview of peer-reviewed literature in the English language. This review included all studies where researchers identified a scale for assessing authenticity. The review kept the population of interest tightly focused on the developmental period of adolescence from when awareness of a false-self usually emerges (few adolescents 11–12 years of age are aware they can be inauthentic; Harter et al., 1997) and minimized crossovers with childhood and young adulthood. For scientific robustness, the review process adhered to the pre-registered protocol with one very minor extension during data extraction to broaden theoretical understandings (see Appendix).

Limitations of the Review

Future reviews that expand sources to other languages, consider grey literature (e.g., dissertations and theses), and include unpublished and non-peer-reviewed research may be beneficial. Given some researchers adapted the Divided Self subscale of Jack and Dill's (1992) self-silencing measure or used Harter et al.'s (1998) Level of Voice measure as a marker of authenticity, some researchers may wish to expand the search strategy to include research using those measures. Future reviews could exclude the VIA scale for character strength of authenticity/honesty (Park & Peterson, 2006; Peterson & Park, 2009) as the items solely assess honesty, rather than authenticity involving one's true self or real me. During screening it became evident there were studies where reducing the sample mean age for inclusion to 12 years and increasing the upper mean to 18 years may have been helpful, as in some countries students may reach 19 years of age while at secondary school and some definitions of adolescence commence around 11 years of age or younger.

Conclusion

Authenticity and inauthenticity in adolescents have been discussed in psychoanalytical and psychological literature for a century, and in everyday discussions are considered subjective indicators of adolescents' psychosocial health. A resource which broadly and systematically summarized primary research on this topic was lacking. This scoping review addressed this gap—including conceptualizations and research approaches—so will facilitate therapeutic interactions with adolescents and be a foundation for future research. Authenticity was typically characterized as involving thoughts, feelings, awareness, and a sense of being one's true self. Studies in this review revealed authenticity in adolescents tends to increase across time and social support (perceived, hope about, level of, and objectively) is very important for that process. Adolescents can be more authentic if parents facilitate adolescents' increasing independence and support role experimentation, as they explore and integrate different identities as part of their true self on their way to adulthood. Social constructions of gender influence how authentic boys can be with close friends, with boys who place equal emphasis on masculine and feminine characteristics benefiting the most. A critical finding was that autonomy satisfaction has an immediate, positive, and causal influence on state authenticity, so should become a target for inquiry and support in therapeutic settings. Future research which takes a state-based approach will help identify facilitating, enabling, and affordance factors influencing authenticity and inauthenticity. Adolescents' heightening sense of awareness regarding their own authenticity in comparison to others as they first enter adolescence, and their interest in striving for authenticity, means it matters to them personally. Knowledge is the foundation, awareness the launching point, and hope of support the scaffolding in facilitating adolescents' authenticity and healthy psychological development on their journey to adulthood.

Preregistration

The protocol for this scoping review was published with Open Science Framework (https://doi.org/10.17605/OSF.IO/PBM7F; available at https://osf.io/pbm7f). Protocol included research questions, study design, inclusion and exclusion criteria (participants, concept, context, types of sources/studies), and methods (search strategies, database-specific search strings, study selection and screening processes, piloted data extraction form, preliminary mapping processes).

Appendix: Data Extraction and Mapping

This appendix contains further details of the data extraction and mapping processes and should be read in conjunction with the main article. Some information is replicated here to facilitate comprehension.

Extraction

The data extraction tool developed and piloted for this review is available in the protocol. It includes definitions and instructions used to guide extraction. One reviewer extracted and mapped data for all studies. Four other reviewers (non-authors) each randomly selected different studies (total of 16 studies) and independently cross-checked extraction accuracy.

Mapping

Mapping methods were not proscribed a priori in the protocol. For RQ1, understandings were mapped into three categories: theory, framework, and stance. The main theories, frameworks, stances, and their authors were identified in each study (multiple classifications were permitted) and mapped in order of frequency of use across studies. Authenticity and inauthenticity were characterized according to: (1) conceptual features, (2) types, (3) forms, and (4) dimensionality. Definitions and operationalizations of authenticity and authenticity in the included studies were mapped onto pre-defined conceptual features. (The most logical way to map definitions was to align them with the understandings and operationalizations, so definitions were characterized according to their conceptual features.) Multiple classifications were permitted—if part of a study's definition or individual items within a measure contained an aspect of a conceptual feature, it was mapped to the feature. Frequency counts were used to map how many definitions and measures include specific conceptual features of authenticity and inauthenticity. Measures were also mapped according to the type (state or dispositional) and form (conceptually bipolar or unipolar) of authenticity and inauthenticity they represented, with data summarized in table form.

For RQ2, nomological network diagrams were used to map statistically significant antecedents/predictors and consequences/outcomes of authenticity and inauthenticity for quantitative studies. The diagrams represent conceptual relationships extracted from SEM, path analyses, and regression models, and exclude preliminary data like basic bivariate correlations. The networks were mapped based on the type and form of authenticity and inauthenticity, with separate networks for context-specific operationalizations if

there were sufficient studies available at that third level. Additional findings from remaining types of analyses (e.g., analyses of variance, confirmatory factor analysis) relating to the same type/form/context were summarized in the same sections as the diagrams. Where researchers controlled for variables, identified mediators or moderators, or conducted multiple levels of analyses (e.g., whole sample followed by group-based analyses), only those relationships or findings that remained significant were mapped or summarized. Non-significant findings were mentioned where they added depth to the review, or where all results were not significant for a particular study.

For RQ3, for the quantitative studies, contexts were mapped based on operationalizations, that is, where a specific context was mentioned in a measure item or in instructions to participants. Frequency counts were calculated as one count per context category (social, life domain, environmental, other) per study and summarized in table form. Contexts noted in qualitative study results were narratively summarized in the same section.

For RQ4, methodological approaches were itemized in the study characteristics table and summarized in narrative form. Frequency patterns across studies were the main mechanism used for mapping.

Minor Extension to Protocol—Data Extraction

During mapping, it became apparent that few researchers had clearly endorsed a theory of authenticity or inauthenticity, or a grand theory framework for the authenticity or inauthenticity segment of their research. As the intention of this review was to present a comprehensive impression of perspectives contributing to how authenticity and inauthenticity are understood, the specifiers were expanded from *clear* to *subjective*, and from *theory* to *frameworks* (including concepts originating pre-2000s) then additional data was extracted for this item. No other variations to protocol occurred.

Declarations

References

***Article contains a study/studies which met scoping review inclusion criteria—see Table 2.**

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