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Dynamics of Identity Development in Adolescence: A Decade in Review

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One of the key developmental tasks in adolescence is to develop a coherent identity. The current review addresses progress in the field of identity research between the years 2010 and 2020. Synthesizing research on the development of identity, we show that identity development during adolescence and early adulthood is characterized by both systematic maturation and substantial stability. This review discusses the role of life events and transitions for identity and the role of micro-processes and narrative processes as a potential mechanisms of personal identity development change. It provides an overview of the linkages between identity development and developmental outcomes, specifically paying attention to within-person processes. It additionally discusses how identity development takes place in the context of close relationships.

Key words: adolescence – identity – within-person processes – adjustment problems

In the current review, we discuss progress in the field of identity research between 2010 and 2020. One of the key developmental tasks in adolescence and young adulthood is to develop a coherent sense of self and identity (Erikson, 1968). Personal identity refers to one's sense of the person one genuinely is, including a subjective feeling of selfsameness and continuity over contexts and time. From early adolescence onwards, adolescents begin to question and explore their identity, that is, the person they are and want to be, the roles they want to occupy in adulthood, and their place in society (Meeus, Van De Schoot, Keijsers, Schwartz, & Branje, 2010). They become aware of their distinctiveness and uniqueness from others, coherence and similarity across domains, and continuity across time and situations (van Doeselaar, Becht, Klimstra, & Meeus, 2018). As they try to find out who they are and what they want to become in their lives, adolescents re-examine the identifications they formed in childhood as they consider different identity possibilities (e.g., what kind of occupation fits my interests and abilities, what kind of relationships do I want to have), and form new commitments to identifications.

One way in which adolescents attempt to create continuity and self-sameness is by integrating their past, present, and future selves into a personal narrative about their lives (McAdams, 2001; Pasupathi & Mansour, 2006). By constructing a sense of

identity in the form of autobiographical stories, adolescents recognize that they are the same person across time and different contexts. Importantly, these life narratives are based on real experiences but are also highly subjective, as adolescents form them according to their own understanding of what was important for who they have become, and are also subject to change, as what adolescents find important for their identity may change over time. Individuals' life stories differ in certain characteristics that are seen as indicative of identity, such as their level of autobiographical reasoning, complexity, dominant themes, and structure.

Dual-cycle identity models focus on development of the dynamic identity processes of exploration and commitment that operate along two interrelated cycles. In the identity formation cycle, adolescents consider identity alternatives (i.e., inbreadth exploration) and form identity commitments. The identity maintenance cycle serves the function to maintain and further strengthen chosen commitments in a dynamic between identity commitment and in-depth exploration of current commitments. When adolescents' in-depth exploration results in increased identity uncertainty about their commitments, they may reconsider their commitments and go back to the identity formation cycle (Crocetti, 2017). Moreover, self-concept clarity, or the extent to which individuals describe themselves

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consistently and feel sure of themselves (Campbell, 1990), has been described as a key ingredient of personal identity (Schwartz et al., 2011). Whereas dual-cycle models of identity account for how the self-concept is formed, self-concept clarity might indicate how well the process of developing one's own identity is going (Schwartz et al., 2011), or one's identity synthesis.

Personal identity concerns self-sameness and continuity of perceptions of who one is across multiple domains or aspects in life. Salient domains of identity during adolescence are the educational and vocational domain, which involve questions such as which kind of education or profession one wants to obtain, and the relational domain, which involves questions such as what kind of friendships or intimate relationship one wants to have. Other important identities are gender identity, ethnic identity, religious identity, and (mental) illness identity. Although global personal identity reflects the integration of one's self-concept across these domains, individuals do not necessarily experience similar levels of self-sameness and continuity in all domains, particularly in adolescence when identity is still under development. At the same time, experiences in different domains will be intertwined and mutually influence each other. This distinction between global and domain-specific identity is also apparent in the narratives that individuals construct. Individuals may construe narratives about several life domains, and their narratives may differ depending on the life domain (e.g., Dunlop, 2015; Galliher, McLean, & Syed, 2017) and on whether these narratives encompass one or multiple life domains (McLean, Syed, Yoder, & Greenhoot, 2016).

Personal identity is also strongly intertwined with social identity, which concerns those aspects of individuals' self-concept that are derived from the social groups they belong to. Individuals try to maintain a balance between their social identity of belonging to certain groups in comparison with outgroups, and their personal identity, which contains elements of distinctiveness in comparison with other members of the group. Those aspects of social identity that reflect individual's social orientations or attitudes toward that domain can be considered a part of personal identity (Schwartz, Zamboanga, & Weisskirch, 2008). For example, whereas one's social gender identity reflects the extent to which one perceives oneself as belonging to men, women, or other groups, one's personal gender identity reflects the extent to which one perceives oneself as unique within the specific gender group. Personal and social identity are likely to

reinforce each other and are integrated in the self-concept (Crocetti, Prati, & Rubini, 2018) and identity narrative (Galliher et al., 2017). In the current review, we do not focus on social identity per se but include aspects of social identity that are relevant for adolescents' personal identity, such as their engagement in exploration of their social-cultural background and forming a clearer sense of what this background or group identity means for their self-concept.

Even though adolescents increasingly know who they are and who they want to become, identity continues to develop into young adulthood (Schwartz, Côté, & Arnett, 2005). Contemporary Western society is characterized by prolonged education and a delay of transitions into adult roles such as work, stable partner relationships, and family life (Schoon, 2015). Thus, it might take well into adulthood before individuals reach a mature identity across these various identity domains and are able to create a coherent and relatively stable narrative of their self. The process of establishing a coherent sense of identity can be very stressful. For instance, ongoing identity uncertainty in adolescence and young adulthood has been related to the development of a range of psychosocial adjustment problems (for reviews see Meeus, 2011; van Doeselaar, Becht, et al., 2018; van Doeselaar, Klimstra, et al., 2018). Understanding how and why some individuals develop a coherent identity, whereas others remain highly uncertain about who they are and want to become, is therefore vital for supporting healthy development.

Aim of the Current Review

This review aims to synthesize research on the development of personal identity during adolescence. The review will predominantly focus on studies from the perspectives of the dual-cycle models of identity development (e.g., Crocetti, Rubini, & Meeus, 2008; Luyckx, Goossens, & Soenens, 2006; Meeus et al., 2010) and of narrative identity (McAdams, 2001; McLean & Pasupathi, 2012), but will also include research using other approaches to personal identity, such as studies focusing on self-concept clarity or identity processing styles. Narrative processes may be considered one of the key mechanisms of personal identity change (e.g., van Doeselaar, McLean, Meeus, Denissen, & Klimstra, 2020; McLean & Pasupathi, 2012), and such a synthesis may thus provide more insight into both strands of research, as well as their intersection. This focus aligns with the

recently proposed framework for the study of identity development by Galliher et al. (2017), in which identity is understood as enacted at the micro-level of real-time interactions. In these interactions, different personal identity domains are pivotal and intersect, creating an integrated subjective sense of self. These micro-processes take place within the context of the social roles that adolescents uptake.

By focusing on the underlying processes of identity development, and providing examples from a variety of identity domains, we integrate the current knowledge and offer directions for future research. We cannot give a full account of all the different identity domains, and instead, we focus predominantly on mechanisms underlying personal identity development, thereby giving examples from different identity domains. In our review of the adolescent identity field between 2010 and 2020, we address recent developments on the role of life events and transitions in identity development and discuss the role of within-person microprocesses in identity development. We particularly focus on the daily experiences and relational contexts with parents and peers in which identity emerges and is enacted, as these real-time experiences are the driving mechanisms of intraindividual identity development.

INTRAINDIVIDUAL PROCESSES AND INTERINDIVIDUAL DIFFERENCES

Mean Level Development of Identity

The development of personal identity has predominantly been studied using dual-cycle models of identity (Crocetti et al., 2008; Luyckx et al., 2006; Meeus et al., 2010). Longitudinal studies have shown that these identity processes mature systematically (for a review on development of commitments see van Doeselaar, Becht, et al., 2018; van Doeselaar, Klimstra, et al., 2018), but these changes are modest and there is also quite some evidence for stability in identity processes during adolescence and young adulthood. For instance, decreasing mean levels of identity reconsideration in the educational and relational domain indicate that with age, adolescents become more certain about the commitments they have made (Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010), vet mean levels of educational and relational identity commitments are relatively stable in adolescence (Klimstra et al., 2010) and young adulthood (Shirai, Nakamura, & Katsuma, 2016). In addition, the less adaptive identity statuses of diffusion and

moratorium, which are characterized by relatively weak commitments, systematically decrease, while the frequency of the most advanced identity status, identity achievement, increases from early-to-late adolescence (Hirschi, 2012; Meeus, van de Schoot, Keijsers, & Branje, 2012; Meeus et al., 2010). Despite these changes, however, the majority of individuals remains in the same identity status during adolescence (ages 12-20, Meeus et al., 2010) and young adulthood (ages 25-29, Carlsson, Wängqvist, & Frisén, 2015). A study using daily measures of identity in 15 weeks spread across a period of 5 years also found mostly stable patterns: Around 50% of the sample showed relatively high and stable commitment levels, while the other 50% of adolescents experienced a temporal discontinuity of identity commitments, indicated by a dip in commitments during middle adolescence (Becht et al., 2016).

Moderate increases during adolescence have been found for self-concept clarity as well. Although one study showed that self-concept clarity significantly increased over time in a sample of 12- to 21-year-olds (Wu, Watkins, & Hattie, 2010), this study did not further differentiate age to examine age-related change patterns. Two other longitudinal studies showed that levels of self-concept clarity between the ages of 13 and 18 were stable for girls and slightly increasing and then decreasing for boys (Crocetti, Moscatelli, et al., 2016) and that self-concept clarity developed nonlinearly between the ages 17 and 23, with an initial decline from 16 to 17 years of age, followed by an increase until age 23 (Crocetti, Rubini, Branje, Koot, & Meeus, 2016).

For development of cultural and gender identity, the evidence thus far also suggests stability combined with some increase. In a sample of Black American boys, the centrality of race and gender to the self and the personal evaluation of one's race and gender were either stable or decreased (Rogers, Scott, & Way, 2015). No developmental changes between the ages 15 to 18 were found in ethnic exploration and belonging of American adolescents with Latinx American, Asian, and European backgrounds (Kiang, Witkow, Baldelomar, & Fuligni, 2010). Comparably, among Asian American adolescents followed over a 4-year period, ethnic Asian American identity remained stable, yet American identity increased over time (Kiang, Witkow, & Champagne, 2013).

Overall, these findings show that there is considerable stability in identity synthesis, identity statuses, and the underlying identity processes of commitment, exploration, and reconsideration across adolescence and young adulthood, but when there is developmental change, this change is mostly in the direction of maturation in identity. Also, there is substantial heterogeneity in development of identity processes across individuals and domains, with some adolescents showing changes toward lower self-certainty and more identity confusion, and some domains showing more stability than others.

Most individuals may not reach a mature identity characterized by an integrated sense of self across multiple identity domains until well into adulthood (Branje & Koper, 2018; Kroger, Martinussen, & Marcia, 2010). Attesting to this principle of ongoing identity maturation, changes in commitment and exploration processes in educational and interpersonal identity domains have been found to become more strongly intertwined over time into late adolescence (Albarello, Crocetti, & Rubini, 2018). Also, young adults (18–23 years of age) showed relatively high identity congruence when comparing developmental patterns of identity commitment across identity domains, such as intimate relationships, parents, and education (Kunnen, 2010). That is, 73% of the young adults showed similar patterns in four out of six identity domains, and by young adulthood, most individuals showed an achieved identity as indicated by strong commitments and high levels of exploration across domains. However, only a limited amount of congruence in young adults' identity statuses was found across vocational and relational identity, with only 18% showing strong commitments in both domains (Luyckx, Seiffge-Krenke, Schwartz, Crocetti, & Klimstra, 2014). Similarly, a secondorder factor analysis showed that global identity processes could only partly explain domain-specific identity processes in young adulthood (Vosylis, Erentaitė, & Crocetti, 2018). Thus, also in young adulthood, it remains important to distinguish between identity domains.

Beyond Mean Level Identity Development

More recently the focus of research has shifted from understanding mean level change to understanding the more complex developmental mechanisms underlying identity maturation. Studies have increasingly focused on intraindividual processes of identity development, and on the transitional periods or salient life events that might require adolescents to reconsider who they are and change their identity. Moreover, in addition to the annual or biannual measures of identity typically employed, micro-level assessments of identity processes have emerged to offer a more detailed picture of the mechanisms underlying identity development.

Intraindividual associations among identity processes. Research has typically examined developmental changes in identity processes and their associations by focusing on the group level, such as changes in means or interindividual differences. In line with the dual-cycle model of identity formation, studies have consistently shown negative associations between commitment making and exploration in breadth, positive associations between exploration in depth and identification with commitments, and negative associations between reconsideration and identification with commitments (Waterman, 2015). Although these studies offer valuable knowledge about why some individuals develop differently than others, they have not captured the intraindividual processes of identity development, such as whether and how intraindividual changes arise over time. For example, a mean change in identity commitments across adolescents does not tell us how these changes unfold within-individual adolescents. Additionally, despite relatively stable interindividual differences in adolescent identity, changes within individuals may occur, as processes at the group level are unrelated to processes at the individual level (i.e., at the within-person level, Molenaar, 2004).

The importance of examining intraindividual processes becomes evident when investigating central theories of identity development more closely. These theories in fact describe developmental processes at the intraindividual level; adolescents' identity formation is expected to take place within individuals across time. For instance, adolescents are thought to experience an identity crisis before developing a clear and stable identity (Erikson, 1968). Tests of this hypothesis with interindividual analyses have shown that adolescents who experience more uncertainty about the self than their peers, for example by having weaker commitments and exploring more, typically remain more uncertain than those peers across adolescence (Meeus et al., 2010). One might conclude from this research that an identity crisis is not necessary for developing a coherent and mature identity, but these findings do not rule out that individual adolescents go through periods of uncertainty before establishing a more mature identity, irrespective of their level of identity certainty relative to their peers.

In the last decade, research has increasingly focused on how these reorganizations occur withinindividual adolescents. At the within-person level, although the pattern of concurrent associations is similar to between-person associations, the overtime patterns seem to be different. In a 5-year study among Dutch adolescents (Becht et al., 2017), withinperson cross-lagged models showed that within the same waves, reconsideration was moderately to strongly negatively associated with commitment in the educational and interpersonal domain. That is, in years when adolescents reported higher than usual reconsideration, they also reported lower than usual commitments. Prospectively, when adolescents reported lower educational commitments in a particular year, they reported higher than usual reconsideration in the subsequent year. For interpersonal identity, however, higher reconsideration in a particular year was followed by stronger commitments the next year (Becht et al., 2017). Relatedly, within-person cross-lagged models indicated that when adolescents scored higher on identity synthesis than usual, they reported higher proactive exploration processes than usual 1 year later (Bogaerts et al., 2019). These within-person findings suggest that reaching a degree of identity synthesis is a prerequisite for proactive identity exploration, and that reconsideration goes hand in hand with weaker commitments, but might be a prerequisite to find new commitments, consistent with the shift from the evaluation cycle to the formation cycle of identity. These findings offer initial support for the Eriksonian idea that commitments result from identity uncertainty.

Development of identity in relation to life transitions and events. Adolescents and young adults develop a sense of self during a phase of life that involves many role changes. These salient transitional periods, such as entering tertiary education, initiating intimate relationships, and joining the workforce, may form an important context that increases the salience of identity processes, and may go hand in hand with identity change. Indeed, much of the narrative tradition is built on the idea that individuals need to integrate important experiences in their lives into their identity (McAdams, 2001). Also, identity theory (Bosma & Kunnen, 2008; Marcia, 1966; Waterman, 1982) predicts that identity maturation occurs as the result of individuals' investment in social roles that require them to engage in mature and socially responsible behavior.

In the last decade, empirical research has increasingly focused on the associations between transitions to new roles and the development of identity. Interindividual differences in identity may affect how individuals navigate through life transitions and take on new social roles. A study of over 1000 adolescents found that educational and relational identity processes in adolescence did not predict involvement in work or an intimate relationship in young adulthood 5 years later, but did predict vocational and relational identity processes in young adulthood (Branje, Laninga-Wijnen, Yu, & Meeus, 2014). These findings suggest that identity processes in adolescence contribute to successful fulfillment of adult roles once these role transitions in young adulthood are made. At the same time, transitions might also affect identity processes. A study on heterogeneity in the development of educational identity across the transition to tertiary education (Christiaens, Nelemans, Meeus, & Branje, 2021) revealed that many adolescents show stable patterns of commitment and reconsideration surrounding this transition, yet a sizable minority has either more or less adaptive patterns after the transition, which are meaningfully associated with sociodemographic, academic, individual, and relational characteristics. Thus, transitioning into adult roles may foster the development of the self, but might also confront some adolescents with challenges to their identity.

In addition to normative life transitions, incidental and stressful life events, such as the death of a relative, a breakup of a relationship, or an accident, can serve as turning points in the development of identity (Slotter & Gardner, 2011; Waterman, 2020). Stressful life events can induce feelings of discontinuity and force adolescents to reconsider their identity. In particular, traumatic events, such as the experience of war, might result in a diminished sense of sameness and continuity of the self (Erikson, 1968). This may be reflected in weaker commitments and more exploration reconsideration especially in identity domains related to the event (Kroger, 1996), and an overall sense of identity diffusion (Penner, Gambin, & Sharp, 2019). The sense of discontinuity may make individuals reconsider their identity and try to integrate the experienced event into a new sense of identity (Anthis, 2002; McAdams, 2001). This autobiographical integration of the event into one's identity is thought to alleviate stress and restore one's sense of self-continuity (Habermas & Köber,

Two recent studies examined the longitudinal associations between stressful life events and identity processes. The first study (van Doeselaar,

Becht, et al., 2018; van Doeselaar, Klimstra, et al., 2018) used a two-sample design and did not find evidence for longitudinal effects between interpersonal commitments and stressful life events in either sample. Although bidirectional negative effects were found between career commitments and stressful life events in one of the samples, only an inconsistent effect of career commitment on subsequent stressful life events was found in the other sample. Thus, adolescents who experienced more negative life events had weaker career commitments, but the evidence for longitudinal effects remains inconsistent. The second study examined within-person effects of specific life events on identity commitments, exploration, and reconsideration (de Moor, van der Graaff, van Dijk, Meeus, & Branje, 2019). Adolescents with fewer commitments and higher levels of reconsideration were more likely to repeat a grade, but the study found no evidence that the experience of a single life event resulted in subsequent changes in identity processes. Hence, while theory suggests that events should be important for identity change, this is not found empirically. A closer focus on how adolescents deal with events and integrate them into their identity may be needed to better understand the role of life events in identity formation.

Micro-processes of identity. In the last decade, researchers have paid increasing attention to the micro-level processes that underlie developmental changes in identity commitment and exploration (Lichtwarck-Aschoff, van Geert, Bosma, & Kunnen, 2008). These micro-level processes refer to the realtime experiences and expressions of identity in adolescents' daily lives and are thought to accumulate in the macro-level development of identity processes (Bosma & Kunnen, 2001; Grotevant, 1987; Kerpelman, Pittman, & Lamke, 1997; Korobov, 2015). That is, identity commitments are thought to emerge from the here-and-now interactions of adolescents in their daily context. These real-time micro-processes are sensitive to context and are more variable than macro-level identity processes.

To understand the micro-processes that unfold within individuals over shorter periods of time and their associations with macro-level identity processes, researchers have developed daily identity measures. A study among 13-year-old Dutch adolescents measured daily identity processes for commitment and reconsideration in the interpersonal and educational domain across three 5-day weeks (Klimstra et al., 2010), and found that interindividdifferences in daily commitment and ual

reconsideration in the interpersonal identity domain were negatively and reciprocally related, but daily reconsideration in the educational domain negatively predicted next-day commitment. A study using the same data (Schwartz et al., 2011) showed that adolescents with higher levels of reconsideration reported less self-concept clarity the next day, but self-concept clarity and commitments were reciprocally associated across days, in which adolescents with stronger global identity commitments on a particular day were more likely to have a clearer self-concept the next day and vice versa. These studies reveal that dayto-day changes in identity processes are associated with each other, and that daily processes differentiate adolescents from each other. How these daily identity processes operate might differ across different identity domains, however.

These findings suggest that especially identity reconsideration might trigger daily change in commitments. When adolescents start reconsidering alternative commitments, it may be functional that the strength of the individual's current commitment decreases to open-up the possibility to explore and commit to new identity choices. However, to be able to draw such conclusions regarding how adolescents' daily identity processes play a role in identity formation at the individual level, we need to investigate intraindividual identity processes at the micro-level, particularly as such within-person analyses at the macro-level suggested that reconsideration was followed by an increase in commitments (Becht et al., 2017). Applying an intensive longitudinal design among 31 female university students, van der Gaag, de Ruiter, and Kunnen (2016) showed that when students reported more than usual daily commitment in the educational domain, they reported less than usual exploration of fit (resembling exploration in depth) and reconsideration, and more than usual exploration of self at the within-individual level. The negative association between commitment and exploration at the within-person daily level was consistent with the within-person association at the annual level (Becht et al., 2017). However, the study by Van der Gaag and colleagues also revealed a large amount of heterogeneity between individuals in these within-person day-to-day associations. Although about 50–60% of individuals showed a negative correlation between exploration and commitment, a minority showed a positive or negligible relation. These results stress the importance of examining which individual and contextual factors can explain the large variation that

exists in within-person, micro-level identity processes.

Even though these studies on micro-processes of identity have offered new insights into the dynamics of identity development across different time scales, so far micro-processes have mostly been assessed in a rather abstract and global way, for example by asking whether adolescents felt certain on a particular day regarding their identity. Alternative, more concrete ways to grasp the real-time experiences that contribute to identity formation are needed, particularly as many identity processes might be unconscious (Schachter, 2018). A recent qualitative study examined the concrete micro-level exploration behaviors adolescents engage in during real-time interactions with their peers and showed overarching interaction patterns advanced exploration: creating a safe environment for exploration, clarifying and elaborating an idea, and a process in which finding a keyword and repeating it helped adolescents explore an aspect of identity and find tentative, emerging commitments (Sugimura, Gmelin, van der Gaag, & Kunnen, 2021). Also, among students conducting a clinical internship, real-time fulfillment versus frustration of the need for competence, relatedness, and autonomy was related to stronger and weaker commitments, respectively (Kunnen, 2021). Future research should include such meaningful assessments of the concrete micro-level behaviors adolescents engage in to form their identity (see also Klimstra & Schwab, 2021). Particularly, micro-level assessments during transitional periods are required to understand identity change.

Daily emotions and identity processes. Daily emotions and experiences may play a particularly important role in the heterogeneity of identity processes, as emotions might have a feedback function to the individual that is relevant to their identity and identity processes in daily life might thus be strongly related to emotions (Kunnen, Bosma, van Halen, & van der Meulen, 2001). Using withinperson analyses of daily associations between identity processes and mood in early adolescence, Klimstra et al. (2016) showed that negative mood was positively associated with educational and interpersonal reconsideration, and weakly positively with in-depth educational exploration. In addition, negative mood was weakly negatively associated with interpersonal commitment, and strongly negatively with educational commitment. Thus, experiencing negative emotions can elicit uncertainty regarding one's identity and lead to increased exploration, while experiencing positive emotions can reinforce identity commitments, resulting in increased identification with current identity-relevant choices. However, the process of identity formation can be stressful and might itself also elicit mood disruptions (Erikson, 1968).

In addition to mood, van der Gaag, Albers, and Kunnen (2017) showed that among first year university students, both positive and negative emotional experiences that were personally important and had impacted their attitude toward their education were related to increases in micro-level educational commitment. The study used weekly measures of commitment, exploration, and emotional experiences across 22-30 weeks. For most individuals, emotional experiences had a stronger impact on commitment than exploration. Surprisingly, for a minority of students, positive experipredicted a decrease in educational commitment. As the content of the experiences did not necessarily relate to the domain of education (e.g., forming a romantic relationship), it might be that positive experiences competing with educational commitment resulted in a decrease of educational commitment. Similarly, negative experiences in other domains might result in an increased commitment to one's education. The finding that negative emotional experiences resulted in increased commitment could also be due to assimilation processes. Following the assimilation-accommodation perspective (Bosma & Kunnen, 2001), a single negative experience might result in assimilation, in which the interpretation of the experience changes to keep the commitment intact. When negative experiences accumulate, individuals may need to accommodate, resulting in a decrease in commitment (Kunnen, 2006). Thus, both positive and negative emotional experiences are important in microlevel educational commitment development. Future research should explore which adolescents are more likely to assimilate their experiences into their identity commitments and how positive and negative emotional experiences within and outside current commitments accumulate to result in identity change.

Narratives as micro-processes. Narrative processes are also considered micro-processes that can be studied to examine how individuals engage in commitment and exploration processes. For instance, individuals' narratives about personally relevant moments in their lives (e.g., low points, high points, and turning points) are thought to be important accounts of continuity or change in their

identity (Kunnen & Bosma, 2000). Moreover, the function of narratives of creating continuity (McAdams, 2001; Pasupathi & Mansour, 2006) is thought to be related to establishing commitments (Erikson, 1968). For example, young adults with gender narratives reflecting equality positions reported higher identity exploration and lower commitment than young adults with traditional gender narratives, suggesting that identity exploration is related to engagement with alternative narratives and that engagement with traditional narratives is related to conventionality comparable to identity foreclosure (McLean, Shucard, & Syed, 2017). Also, increases in young adults' ethnic identity commitments were not only related to changes in narrative themes, but also to changes in narratives about prejudice or connection to culture (Syed & Azmitia, 2010).

Forming commitments can also change the narratives that individuals construe. For example, Swedish young adults who were in identity achievement generally reported a deepening of their life narrative across 4 years, in terms of the way they derived meaning from new experiences, handled changes, and determined their own direction in life (Carlsson et al., 2015). However, no clear pattern of narrative development was found for young adults in the stably committed status of identity foreclosure. Also, in a sample of Dutch adolescents, autobiographical reasoning and agency were found to be related to commitment and exploration processes both cross-sectionally and longitudinally (van Doeselaar et al., 2020). However, the size of these associations was small, indicating that narratives and dual-cycle processes may capture different parts of adolescents' identity. Thus, narrative processes might be linked to processes of commitment and exploration and might form the underlying mechanism behind identity development more broadly. Future research should further explore how these different approaches toward studying identity development can be used to complement and extend one another.

The role of variability in the development of the self. Another aspect of micro-level processes relevant for identity development is the amount of variability in identity processes, or the withinperson fluctuations in commitments and exploration across days and weeks. A dynamic system approach suggests that identity micro-processes fluctuate and change on a daily basis (Lichtwarck-Aschoff et al., 2008). Developmental changes are thought to be nonlinear (Lewis, 2000) and may particularly occur at times of transitions or life events

that motivate identity development. These transitional periods are thought to be marked by a substantial temporary increase in intraindividual variability (Lichtwarck-Aschoff et al., 2008), or fluctuations in identity processes, after which a restabilization occurs and a more mature identity emerges. Indeed, when adolescents showed a temporal increase in their educational commitment fluctuations across days (i.e., more ups and downs in their commitments), they reported higher educational commitment levels 1 year later (Becht et al., 2017). These temporal fluctuations might indicate a period of active reflection on present commitments to support identity development. Identity processes also have been found to be meaningfully related to variability in identity salience among ethnically diverse adolescents (Wang, Douglass, & Yip, 2017). Adolescents with stronger ethnic-racial identity commitment reported higher daily mean salience and less variability in salience 6 months later, and adolescents who reported more daily variability in salience engaged in more exploration 6 months later, suggesting that daily experiences might trigger exploration and that commitment might be consolidated in daily ethnic salience experiences. Thus, variability in micro-processes of identity may be the underlying mechanism that marks the dynamic of identity development.

Although higher variability may be necessary for individuals to adapt and reorganize themselves effectively in response to varying contextual changes (Moskowitz & Zuroff, 2004), higher levels of variability might also indicate behavioral lability, or variability in behavior that is not well-controlled or very adaptive (Charles & Pasupathi, 2003). So far, with the exception of Becht et al. (2017) and Wang et al. (2017), higher levels of fluctuations in identity processes have mostly been associated with poorer outcomes in several domains. Stronger fluctuations in reconsideration (but not commitment or self-concept clarity) across days were assowith lower levels of macro-level interpersonal and educational commitments and higher levels of reconsideration (Klimstra et al., 2010), as well as with later symptoms of anxiety and depression, controlling for previous levels of anxiety and depression (Schwartz et al., 2011). These findings suggest that reconsideration might particularly create a sense of disequilibrium and distress when this sense of uncertainty fluctuates across days, regardless of the level of reconsideration.

Thus, while these findings mostly suggest that variability in identity processes is negatively related to psychosocial functioning, stronger increases in variability in specific transitional periods may also reflect developmental changes in identity. Variability in transitional periods might be associated with poorer well-being because individuals experience the period as stressful, resulting temporarily in declines in adjustment. To shed light on the role of fluctuations in identity processes in macro-development of identity, future research should examine variability in identity and self-concept clarity during transitional and nontransitional periods and link this variability to developmental processes in identity.

In sum, instead of focusing on interindividual differences, recent studies have sought to analyze identity processes at the intraindividual, microlevel—that is, at the level where development is taking place: within the person, in here-and-now experiences. Knowledge of these micro-level processes might be particularly informative for interventions in youth who struggle with identity development. For example, Blaauw et al. (2019) recently developed the u-can-act platform, a tool to study individual processes of identity development in the context of early school leaving and the preventative behaviors of youth's mentors to help youth cope with their educational identity development at individual level.

IDENTITY AND PSYCHOSOCIAL **ADJUSTMENT**

Identity is quite consistently related to a broad range of psychosocial adjustment outcomes across cultures, underlining the importance of identity in adolescents' lives. Adolescents with stable and strong identity commitments have consistently been found to report higher levels of psychosocial adjustment over time than adolescents with ongoing identity uncertainty (Crocetti et al., 2008; Hatano, Sugimura, & Schwartz, 2018; Meeus et al., 2010). Prior studies revealed that adolescents with a weaker sense of identity and ongoing reconsideration of identity alternatives are at increased risk for the development of aggressive behavior (Becht et al., 2016; Crocetti, Klimstra, Hale, Koot, & Meeus, 2013; Morsunbul, 2015), delinquent behavior (Levey, Garandeau, Meeus, & Branje, 2019), and substance use (de Moor, Sijtsema, Weller, & Klimstra, 2020). Similarly, adolescents with ongoing identity uncertainty were more likely to show increasing (school) anxiety levels over time (Becht et al., 2016), higher loneliness (Kaniušonytė, Truskauskaitė-Kunevičienė, Žukauskienė,

Crocetti, 2019), and higher levels of depressive symptoms (van Doeselaar, Becht, et al., 2018; van Doeselaar, Klimstra, et al., 2018; Meeus et al., 2012).

In addition to negative psychosocial adjustment, individual differences in dual-cycle identity processes predict positive adjustment as well. For instance, those individuals with strong and stable identity commitments report higher self-esteem (Luyckx et al., 2013) and higher levels of experienced meaning in life (Negru-Subtirica, Pop, Luyckx, Dezutter, & Steger, 2016). Also, adolescents with an ethnic identity profile characterized by high exploration, strong resolution (resembling commitments), and high centrality of their ethnicracial background within their self-concept reported higher academic engagement, life satisfaction, and self-esteem than adolescents with an ethnic identity profile characterized exploration and resolution (regardless of centrality; Wantchekon & Umaña-Taylor, 2021). Although ethnic-racial identity exploration did not predict civic beliefs, adolescents who reported greater increases in ethnic-racial identity resolution across 2 years of middle school did report greater increases in civic beliefs on the need to advance the well-being of their communities (Bañales, Hoffman, Rivas-Drake, & Jagers, 2020). Moreover, a meta-analysis showed that stronger commitments and composite scores of ethnic-racial identity processes can buffer the associations of discrimination with adjustment problems, yet higher levels of exploration increased associations of discrimination with adjustment problems (Yip, Wang, Mootoo, & Mirpuri, 2019). Furthermore, identity processes have been linked to academic and career functioning. The development of career adaptability and vocational identity commitment are dynamically intertwined across adolescence (Negru-Subtirica, Pop, & Crocetti, 2015). Identity development in college students positively affected their sense of competence and motivational beliefs to master their study (Perez, Cromley, & Kaplan, 2014). In contrast, higher academic achievement predicted higher levels of commitment and lower levels of reconsideration (Pop, Negru-Subtirica, Crocetti, Opre, & Meeus, 2016), school engagement positively predicted information-oriented identity processing, while school burnout positively predicted the use of norand diffuse-avoidant identity styles (Erentaitė, Vosylis, Gabrialavičiūtė, & Raižienė,

Although evidence for the directionality of effects between identity processes and psychosocial and academic adjustment is not consistent, these

findings suggest that intervening in identity processes might be an auspicious way to promote adolescents' well-being. Indeed, the Identity Project intervention, which was designed for delivery in high school for youth in middle adolescence to target ethnic-racial identity exploration and resolution, showed promising effects on adolescents' identity processes and adjustment (Umaña-Taylor, Douglass, Updegraff, & Marsiglia, 2018; Umaña-Taylor et al., 2018). The intervention consisted of eight sessions that were designed to help adolescents understand between- and within-group differences and how various groups had been marginalized throughout history, and to help adolescents engage in activities to facilitate the exploration of their ethnic-racial background. The Identity Project intervention resulted in increases in adolescents' ethnic-racial identity exploration and, subsequently, increases in resolution or sense of clarity of their ethnic-racial identity (Umaña-Taylor, Douglass, et al., 2018). In turn, these changes in exploration and resolution were related to adolescents' higher global identity cohesion, lower depressive symptoms, higher self-esteem, and better grades 1 year later (Umaña-Taylor et al., 2018).

Characteristics of adolescents' narrative identity are also linked to psychosocial adjustment. The various narrative characteristics that have been studied in relation to adjustment can be categorized in one of three broader factors (Adler, Lodi-Smith, Philippe, & Houle, 2016; McLean et al., 2020): autobiographical reasoning (or integrative meaning), motivational and affective themes, and structure. Autobiographical reasoning refers to individuals' ability to reflect on their past, present, and future, and link these three together into a continuous narrative (Habermas & Bluck, 2000; McAdams, 2001). The making of self-event connections reflects individuals' autobiographical attempts to explicitly link an event to an aspect of their self (Pasupathi, Mansour, & Brubaker, 2007). Adolescents with better-developed autobiographical reasoning and more self-event connections report higher well-being (van Doeselaar et al., 2020; McLean, Breen, & Fournier, 2010). Initial findings further suggest that this association might vary by developmental period: Although autobiographical reasoning is related to better well-being in late adolescence, early adolescents who engage in autobiographical reasoning reported lower well-being than peers who do not (McLean et al., 2010; McLean & Mansfield, 2011). Moreover, different themes may be dominant in identity narratives, such as

redemption (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001), agency, and communion (Adler, 2012; McAdams, 2001). Adolescents who have identity narratives high on themes of redemption, agency, and communion tend to report higher well-being (van Doeselaar et al., 2020; Dunlop, Harake, Gray, Hanley, & McCoy, 2018; Holm, Thomsen, & Bliksted, 2018; McAdams & McLean, 2013). Finally, when comparing the structure of individuals' narratives in clinical and population samples, narrative coherence is generally lower in clinical samples (Adler, Chin, Kolisetty, & Oltmanns, 2012), and individuals who write more coherent narratives report fewer psychological difficulties and greater well-being (Reese et al., 2011; Waters & Fivush, 2015; Waters, Shallcross, & Fivush, 2013). This might show that identity in the initial stages of development might go together with uncertainty and lower adjustment.

In sum, there is a vast body of literature highlighting the associations between personal identity development and psychosocial outcomes, providing evidence that adolescents with a more welladjusted identity tend to fair better in many different areas of life. Conversely, this research underlines how adolescents with issues in their identity may be stuck in broader maladaptive development. Findings concerning the direction of effects are less consistent. Probably, different processes play a role for different groups of youth: In some, identity synthesis might result in better adjustment, in others adjustment problems might trigger identity uncertainty, and yet in others, external factors might result in a change in both identity and adjustment. More work is needed examining the direction of effects, particularly at the withinperson level, to gain a better understanding of developmental processes linking identity and adjustment and to improve interventions aimed at strengthening adolescents' identity processes.

Within-Person Associations of Identity and Psychosocial Adjustment

In the last decade, research has started to examine these within-person linkages between identity development psychosocial adjustment and (Lichtwarck-Aschoff et al., 2008). To this end, Becht et al. (2019) examined the intraindividual longitudinal linkages between identity and depressive symptoms in two large longitudinal Dutch and Belgian adolescent samples. In both samples, a withinperson increase in identity uncertainty predicted a within-person increase in depressive symptoms

1 year later but not vice versa. These findings suggest a role of ongoing identity uncertainty in the development of depressive symptoms over time. Similarly, Mercer, Crocetti, Branje, van Lier, and Meeus (2017) showed bidirectional intraindividual linkages between identity and delinquency, such that increasing delinquency predicted weaker identity commitments and more identity reconsideration and vice versa. When adolescents showed an increase of in-depth exploration, their delinquency levels decreased 1 year later. Together, these findings suggest that identity struggles might result in feelings of despair and ways of coping that help adolescents find an alternative (delinquent or negative) identity.

More generally, these findings speak to the importance of considering the content of adolescents' identity. In some cases, youth may develop a negative identity in which they identify with roles opposed to societal expectations (Hihara, Sugimura, & Syed, 2018), and psychopathology or deviancy may even become the content of identity (Cruwys & Gunaseelan, 2016). For instance, rejection of delinquent behaviors within society may further strengthen delinquent or negative identities for some youth, as illustrated in the example of radicalization of youth (Meeus, 2015). Critically, the longitudinal associations between identity processes and psychosocial adjustment might depend on the content of identity. For example, adolescents with achieved but content-wise distinct ethnic-racial identities might show different levels of adjustment on individual and group-relevant outcomes (Umaña-Taylor et al., 2014). Comparably, a recently proposed framework for understanding the associations of identity and psychopathology points out the many alternative ways in which identity and adjustment may be connected and suggests that when identity formation goes awry, psychopathology may become part of one's identity (Klimstra & Denissen, 2017).

More broadly, individuals' identities should be understood within the context in which adolescents are embedded. Syed, Juang, and Svensson (2018) provide a comprehensive theoretical framework for understanding ethnic–racial identity within ethnic–racial settings, or the objective and subjective nature of group representation within an individual's context. Similarly, identity narratives are shaped by the culture in which adolescents live (e.g., McAdams, 2001, 2006). The master narrative of the culture may provide important clues to individual members about how their narrative identity is supposed to look like in terms of structure and themes

(for an integrative framework, see McLean & Syed, 2016). This culture may also moderate the associations between young people's narratives and their well-being (Eriksson, McLean, & Ann Frisén, 2020; McLean & Syed, 2016). However, so far this work was situated in adult samples, and more research is needed to extend these findings toward adolescents.

IDENTITY AND RELATIONSHIPS

The development of a coherent sense of self and identity takes place in the context of close relationships, such as with family members and peers. Identity concerns not only the experience of selfsameness and continuity of the self, but also the extent to which this experience corresponds with the sameness and continuity of one's meaning to significant others. Interactions with family members and friends are therefore crucial. In these interactions, adolescents receive self-relevant feedback (Grotevant & Cooper, 1985; Koepke & Denissen, 2012), which they can use to strengthen or adjust their identity commitments. Supportive relationships with family members and friends who are sensitive and responsive to adolescents' changing need also form a secure base from which adolescents can confidently explore identity options. In interactions with close others, adolescents narrate about their life events and experiences and link these experiences to who they are and how they want to become. These interactions may help adolescents make sense of their experiences and ultimately create more coherent and meaningful identity narratives (e.g., through scaffolding behavior; Fivush, Reese, & Haden, 2006). For example, when young adults and their conversation partners agreed about the meaning that could be derived from the narrative they told, they were more likely to retain that meaning for a longer period (McLean & Pasupathi, 2011). In addition, as adolescents develop a clearer sense of identity, they are better able to engage in positive interactions with others (Swann, 2000; Swann, Milton, & Polzer, 2000).

Autonomy support is considered particularly important for identity development. As adolescents start to develop their identity, they also begin to renegotiate autonomy in their relationships with parents and peers. Parents and adolescents have to reallocate responsibilities and power in their relationships to become more egalitarian, with more reciprocity and equality in exchanges, power, and decision-making (Branje, Laursen, & Collins, 2012; de Goede, Branje, & Meeus, 2009). Adolescents'

relationships with friends also change toward greater autonomy. Toward middle adolescence, their increased perspective-taking skills and greater self-certainty allow friends to respect each other's individuality without jeopardizing their mutual sense of connectedness (Brechwald & Prinstein, 2011; Selfhout, Branje, & Meeus, 2009). Friendships also become more supportive over the course of adolescence (de Goede, Branje, Delsing, et al., 2009). When parents are unable to release control and adapt toward a more reciprocal relationship, and when friends have difficulties accepting each other's individuation, adolescents might be likely to develop a less optimal identity, characterized by internal conflict and feelings of alienation from one's sense of self.

Family Relationships and Identity Processes

Indeed, several recent studies provided evidence for the role of relationships with family members in identity development. Sugimura et al. (2018) found consistent negative associations of emotional separation and positive associations of parental trust with identity consolidation across Lithuania, Italy, and Japan. Although the identity processes commitment and reconsideration were reciprocally associated with support and conflict in relationships with parents and siblings in a six-wave study spanning from age 13 to 18 (Crocetti et al., 2017), commitment and in-depth exploration were more likely to positively affect relationship quality with parents and siblings than vice versa. Reconsideration was predicted by low levels of maternal support and worsened the quality of the paternal relationship. Parental support has also been found to be related to higher levels of adolescents' exploration of their romantic identity (Pittman, Kerpelman, Soto, & Adler-Baeder, 2012). Parental psychological control had a more complex and indirect relation with romantic identity: It was related to an elevated feeling of both avoidance and anxiety in romantic relationships, and while avoidance was in turn related to less exploration of romantic identity, anxiety was related to more exploration. On the level of parent-child interactions, adolescents whose parents stimulate them in their story-telling to derive meaning from experiences have been found to engage in more autobiographical reasoning (McLean & Jennings, 2012). For ethnic identity, parental ethnic socialization was positively related to adolescents' ethnic identity exploration and resolution (Hu, Zhou, & Lee, 2017), and significantly predicted ethnic identity

exploration and commitment 1 year later (Else-Quest & Morse, 2015). Moreover, at the withinperson level, increases in family cohesion were associated with increases in ethnic belonging (Kiang et al., 2010). These findings confirm that adolescents' identity development is strengthened in the context of close and supportive family relationships. In addition vice versa, adolescents who have higher commitment and in-depth exploration also improve their relationships with their family members. Adolescents' optimal development of identity goes together with high levels of closeness and relatedness.

In addition to parent-adolescent relationship quality and parenting characteristics, parents' own identities might affect adolescents' identity development (Schachter, 2018). Among Roma minority families, ethnic identity of both parents was strongly and positively associated with adolescent ethnic identity (Dimitrova, Ferrer-Wreder, & Trost, 2015). In a longitudinal study from early-to-late adolescence, parental self-concept clarity was found to unidirectionally predict adolescents' self-concept clarity (Crocetti, Moscatelli, et al., 2016). Also, caregiver identity commitment was significantly related to adolescent identity distress, over and above adolescents' own identity commitment and exploration (Wiley & Berman, 2012). Therefore, parents with a more coherent identity not only provide an example for adolescents as to how they can explore selfrelevant issues, but they also are better able to provide their children with support as they explore those issues and make commitments.

Peer Relationships and Identity Processes

Although significantly less research has been conducted in this area, peer relationships are also positively related to identity development (for a review, see Ragelienė, 2016). In fact, a recent study found that especially support from friends, compared to support from parents, was related to relational and educational identity (de Moor et al., 2019). Having a high-quality relationship with one's best friend has also been associated with making redemption sequences and self-event connections in one's identity narrative (de Moor, van der Graaff, van Doeselaar, Klimstra, & Branje, 2021), both of which are seen as characteristics of well-adjusted narratives. On the level of interactions, adolescents whose friends listen more actively and who stimulate meaning-making tend to engage in greater autobiographical reasoning (McLean & Jennings, 2012; Pasupathi & Hoyt,

2009). A 4-year study of adolescents aged 14-18 years revealed that autonomy support from friends significantly predicted adolescents' reconsideration, and was predicted by in-depth exploration and, although less consistent, commitment (van Doeselaar, Meeus, Koot, & Branje, 2016). These findings suggest that higher autonomy support from a friend reduces adolescents' problematic educational reconsideration, and adaptive educaidentity processes foster autonomysupportive interactions. A study applying withinperson cross-lagged analyses indicated although relationship quality with parents—and not with friends-affected subsequent self-concept clarity, self-concept clarity affected subsequent relationship quality with both parents and friends, although results varied across reporters (Becht et al., 2017). Thus, higher friendship quality facilitates identity formation, and adaptive identity processes foster supportive and high-quality interactions.

The development of personal identity is also strongly embedded within the context of the broader peer group. Adolescents' identification with their classmates and with their group of friends over time predicted stronger interpersonal identity commitment and exploration, as well as lower reconsideration (Albarello et al., 2018). These findings suggest that when adolescents are comfortable and at ease in their larger peer groups, they have a basis from which they can explore their personal identity.

Identity is not only directly related to relationship quality; it also affects how susceptible youth are to the influence of others. Adolescents with lower self-concept clarity were more susceptible to the influence of their friends' delinquency and subsequently showed more delinquency themselves (Levey et al., 2019). Similarly, in more controlling peer groups, adolescents with stronger identity commitment engaged in less risk behavior than adolescents with weaker identity commitment (Dumas, Ellis, & Wolfe, 2012), suggesting that identity might protect against peer pressure. A clearer identity might help adolescents compare their views of themselves and the world to those of their peers, while at the same time differentiating themselves as a separate, autonomous person. As a result, they may have greater respect for their own boundaries and be able to resist negative peer influences.

In sum, adolescents who do not experience closeness or supportiveness in their relationships with parents and peers, or adolescents whose

parents and peers do not accept their individual needs, tend to experience more difficulties in developing a clear identity. In the process of discovering their own identity and negotiating their needs for autonomy, these adolescents might become overly dependent on others or, alternatively, struggle with feelings of dependence. This may especially be the case in Western cultures, because individuality is emphasized and dependence on others tends to be viewed as a sign of weakness that should be discouraged. Although most research has focused on the role of relationships with parents and friends in adolescents' identity formation, other relationships offer an important relational context for identity development as well. For example, adolescents with avoidant or anxious attachment, who are less comfortable with romantic partners, were found to have lower relational identity commitments and a higher tendency to use a diffuse/avoidant style for identity exploration (Kerpelman et al., 2012), and the extent to which teachers serve as role models predicts student identity development (Rich & Schachter, 2012).

CONCLUSION AND FUTURE DIRECTIONS

The current review discussed progress in the field of adolescent personal identity research between 2010 and 2020. Concerning mean level change, research in this decade has further confirmed that there is considerable stability in identity across adolescence and young adulthood. At the same time, there is substantial heterogeneity in identity development, and when there is developmental change, this change is in the direction of identity maturation.

Excitingly, studies have increasingly begun to go beyond the study of mean level identity change and examine the underlying mechanisms of identity development. It should be noted that many of the developments discussed in this review are emerging developments in the field of identity research, and more research is needed to replicate these findings and provide more knowledge on the robustness and strength of the findings. Nevertheless, these findings suggest identity development requires a focus on transitional periods that pose a challenge to adolescents' personal identity, as well as a focus on the micro-processes of identity development. Whereas theory suggests that life transitions and life events might trigger identity change, so far not much empirical support for the effect of life events on personal identity has been found. Future research should examine identity

development across life transitions and compare personal identity processes before, during, and after the transition. As the most used identity measures tap into quite global aspects of identity that might not always optimally reflect the process of personal identity formation (Waterman, 2015), measures tapping into more concrete commitment making and exploration processes are needed. Also, a closer focus on how adolescents deal with events and integrate them into their identity may be needed to better understand the role of life events in identity. So far, results suggest that micro-level and macro-level identity processes tap into qualitatively different processes. To further enhance our knowledge on how micro-level processes shape macro-level identity development, future research needs to incorporate the assessment of micro-level processes in long-term longitudinal studies that assess processes at the macro-level.

Recent findings on the associations of identity with psychosocial adjustment confirm that certainty about oneself and the direction one is going in is closely related to better functioning in multiple domains. Increased attention to the intraindividual associations between identity and adjustment (Lichtwarck-Aschoff et al., 2008) shows how within-person developmental processes in personal identity might affect future adjustment and wellbeing and suggests that ongoing identity uncertainty might result in feelings of despair and less adaptive ways of coping. In future research, we need to consider the content of adolescents' identity in addition to the process of identity formation, as psychopathology may become the content of identity when identity formation goes awry (Klimstra & Denissen, 2017).

Research on the social context of identity shows that identity development is closely embedded in relationships with family members and friends. Particularly, parents have an important role in shaping adolescent identity: Instead of turning away from parents, adolescents' development of identity is fostered by high levels of closeness and relatedness to parents. In addition, parents' own identities also affect adolescents' identity development. Although peers seem to have a weaker influence on adolescent identity development compared to parents, a more mature identity helps adolescents establish high-quality friendships. Identity is not only directly related to relationship quality; it also affects how susceptible youth are to the influence of peers, as adolescents with a more uncertain identity tend to be more vulnerable to negative peer influences.

Last, research is starting to empirically reunify the narrative and dual-cycle identity approach (e.g., van Doeselaar et al., 2020; McLean & Pasupathi, 2012), showing how narrative processes may be considered one of the key mechanisms of identity change, providing information on real-time identity processes. Excitingly, research on narrative processes has also recently started to examine factors such as developmental contexts and content of narratives that moderate the narrative identity-wellbeing link. To further this work, it is important that more studies adopt an approach that examines multiple narratives by the same individual, to understand better what aspects of narrative identity are specific to certain narratives, and which are true across narratives and life domains. Although several studies already do so (e.g., Lilgendahl & McLean, 2020; McLean, Syed, Yoder, et al., 2016), broader implementation of this approach is likely to yield exciting new, robust, and generalizable discoveries. Also, future research could examine narratives of adolescents prompted to discuss the same experience, such as a school transition, to allow for greater comparability between individuals and to enable a greater focus on the actual content of the narrative. Linking such narratives to long-term intraindividual identity formation processes will increase our understanding of the underlying real-time mechanisms in personal identity formation and offer more concrete tools for intervention.

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