

Sociohistorical Context and Adult Social Development:  
New Directions for 21<sup>st</sup> Century Research

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## 1 Abstract

2 To date, most explanations of adult social development within the field of psychology assume  
3 universal age-related processes. The majority of these explanations, however, stem from  
4 studies on a limited number of cohorts that were socialized in specific social contexts. As a  
5 consequence, the current knowledge on adult social development confounds age-related and  
6 contextual influences. We argue that it is essential to disentangle these influences in order to  
7 better understand adult social development. In this article, we apply the theoretical framework  
8 of developmental contextualism and provide explanations for adult social development that  
9 are firmly based on the sociohistorical context that a cohort experienced during young  
10 adulthood. This hypothesis is discussed with the example of romantic relationships. We argue  
11 that the relatively strong value that today's older adults ascribe to close social ties might be  
12 rooted in experiences of limited life-path options, existential concerns, and stressful historical  
13 events (i.e., Great Depression, World War II, post-war era) during their young-adult years.  
14 Today's young adults, conversely, are socialized in rapidly changing social structures with  
15 increasing diversity in life-path options and in relative security with regard to basic material  
16 and security needs. We explore how these experiences might shape the future social  
17 development of today's young adults with respect to relationship contexts (e.g., living  
18 arrangements, digitalization) and relationship needs (e.g., exploration, self-actualization). We  
19 conclude with theoretical and methodological recommendations for future research that will  
20 be amply equipped to systematically investigate both age-related and contextual influences  
21 that drive development in any previous, present, and forthcoming cohort.

22 *Keywords:* adult social development, age-related differences, cohort differences,  
23 contextualism

24

25 Abstract: 250 words



1 Lampe, & Steinfield, 2009). Given these accelerating and interwoven changes, it is essential  
2 to rethink research on adult social development in light of the modern era.

3         In this article, we argue that adult social development needs to be conceptualized and  
4 studied in view of the respective cohort's socialization; that is, in view of the idiosyncratic  
5 social experiences and social motivations of a cohort. The notion of a cohort is important here  
6 given that people of each cohort have different opportunities and resources available (Caspi,  
7 1987; Edmunds & Turner, 2005; Hartup & Stevens, 1997), but are also confronted with  
8 distinct challenges and obstacles. In addition, a person who, for example, passed their young  
9 adulthood in Europe during World War II may have different experiences than a person in the  
10 same cohort who lived in the United States of America or East Asia. Hence, cohort  
11 differences result from differences in both time and place, and persons born in different  
12 cohorts tend to not only differ in their mean levels of behavioral characteristics but also in  
13 their developmental trajectories (e.g., Baltes & Smith, 2004). In what follows, we discuss the  
14 hypothesis that each cohort transfers their experiences and motivations from young adulthood  
15 (roughly ages 18–30), which is a particularly malleable and formative life stage with respect  
16 to building adult social roles (Arnett, 2000), through midlife (roughly ages 30–60) to late  
17 adulthood (roughly age 60 years and older; Hutteman, Hennecke, Orth, Reitz, & Specht,  
18 2014). This hypothesis is discussed with the example of romantic relationships.<sup>1</sup>

19         To elaborate on this contextualized view, we first review previous findings on adult  
20 development in the social domain in terms of age-related and cohort differences. Second, we  
21 introduce contextualism as a theoretical framework for understanding and conceptualizing  
22 adult social development in the light of sociohistorical circumstances. Third, we describe the  
23 modern era with its affordances and opportunities and characterize the sociohistorical context  
24 of today's young adults. Fourth, we derive implications for young adults' later social  
25 development. We close with theoretical and methodological suggestions for future research.

26         Before doing so, we wish to emphasize that the described social-structure changes

1 apply to young adults of industrialized, Western societies. The social structures, experiences,  
2 needs, and values of young adults in other countries might be different. It is, however, to  
3 assume that the development in industrialized countries that we describe here has—with some  
4 delay but then at an accelerated tempo—occurred in developing countries as well; in terms of  
5 increasing material wealth (Krausmann et al., 2017), mortality decline (Brenner, 2005), health  
6 improvements (Popkin & Gordon-Larsen, 2004), increasing standards of living (Easterlin,  
7 2000), increasing access to education including increasing democratization and scientization  
8 (Schofer & Meyer, 2005) and secularization (Inglehart, 2007), and women’s entrance to the  
9 workforce (Herr & Shahnasarian, 2001).

### 10 **Adult Development in the Social Domain**

11 According to Bronfenbrenner’s theoretical system (e.g., Bronfenbrenner, 1979), a  
12 person’s environment is constituted as nested structures, which range from micro- and  
13 mesosystems to exo-, macro-, and cronosystems. Here, we will focus on the patterns of the  
14 exo-, macro-, and cronosystem (e.g., social conditions, culture, history) that a cohort has  
15 experienced in their young adulthood and which are thought to shape a person’s social  
16 network at the level of micro- and mesosystems (i.e., individual’s relationships with others in  
17 their immediate social environment and the interconnections between these relationships)  
18 (Bronfenbrenner, 1979). This network stems from repeated interactions, which are based on  
19 direct involvement and mental representations of the relationships (e.g., with family members,  
20 romantic partners, friends), to single interactions and zero acquaintances, which imply less  
21 involvement (e.g., Wrzus et al., 2013). Social networks can roughly be characterized  
22 according to their structure (i.e., objective characteristics including size, contact frequency,  
23 and composition) and their quality (i.e., a person’s evaluation of the relationship as positive  
24 and/or negative; Antonucci, Ajrouch, & Birditt, 2014).

25 Age-related differences in the social network—both the structure and quality—have  
26 received strong attention in the scientific literature. There is broad consensus that a person’s

1 relationship network tends to shrink across adulthood, and that a person's satisfaction with  
2 his/her social relationships tends to increase with age (e.g., Luong et al., 2011; Wrzus et al.,  
3 2013). Both of these findings have been found in cross-sectional and longitudinal studies and  
4 are commonly explained by universal age-related mechanisms: Selectivity of invested  
5 resources is proposed as the main age-related explanation of changes in the structure and  
6 quality of relationship networks (see Rook & Charles, 2017).

7 Cohort differences, conversely, have often been overlooked when deriving  
8 explanations, although the findings thus far may be confounded by cohort effects (e.g., due to  
9 historical events or the cultural climate that a cohort has experienced). Considering such  
10 cohort differences is particularly warranted given that participants in the majority of studies  
11 on old age (even in the existing longitudinal studies)<sup>2</sup> were adults socialized during the Great  
12 Depression, World War II, or the post-war era. These specific socialization circumstances  
13 raise the question whether the given findings would be replicable when today's young  
14 adults—who have been socialized in very different social circumstances and have distinct  
15 social experiences—reach old age. In fact, studies using a sequential design (i.e., combining  
16 cross-sectional and longitudinal data assessment) have revealed differences between the  
17 cohorts in how the structure and quality of their relationships change longitudinally.

18 For example, examining the association between loneliness and partnership status in  
19 Germany, Böger and Huxhold (2018) found that among persons of later born cohorts (born in  
20 the 1950s), the association between partnership status and loneliness was less strong than  
21 among persons of earlier born cohorts (born in the 1920s), and later born single people were  
22 more satisfied with being single than their earlier born counterparts. The authors explain that  
23 these differences may be because persons in the earlier born cohort placed a higher  
24 importance on romantic relationships as a source of economic security and instrumental  
25 support, and considered long-term romantic relationships and marriage to be a normative part  
26 of the life course. In addition, a study by van Tilburg, Aartsen, and van der Pas (2015)

1 conducted in the Netherlands found that divorced persons of later born cohorts (aged 54–65 in  
2 2012) reported less loneliness than those of earlier born cohorts (aged 54–65 in 1992), a trend  
3 that—according to the authors—may reflect improvements in the social position of people  
4 who dissolve a committed partnership. Similarly, Grühn et al. (2008) found inconsistencies  
5 between cross-sectional (US participants' age 10–87 years) and longitudinal (US participants  
6 assessed from 1992 to 2004) age differences in empathy, indicating more empathy in later  
7 born cohorts but no longitudinal change in empathy. The authors speculate that it might be  
8 more acceptable and normative for individuals from later born cohorts to talk about their own  
9 and others' feelings than for individuals who grew up during an earlier era.

10 To conclude, the age differences that were found in both the structure of social  
11 networks and the quality of social relationships might not only be a question of age-related  
12 processes but also a matter of cohort differences. As we will discuss later, considering age  
13 differences or cohort differences in isolation is insufficient, and only the combination of both  
14 factors provides a comprehensive explanation of social development. As a consequence, the  
15 perspective of Age × Cohort interactions is needed, which implies that age leads to different  
16 trajectories of adult social development depending on cohort. Emphasizing the role of such  
17 interactions distinguishes our elaboration on adult social development from both a  
18 sociological perspective (that often tends to overlook universal age-related processes in favor  
19 of cohort effects) and a developmental-psychology perspective (that often tends to overlook  
20 cohort effects in favor of age-related processes) (for similar conclusions, see for example  
21 Alwin, Felmlee, & Kreager, 2018; Gilleard & Higgs, 2016). We see a synergy between both  
22 perspectives as leading to a more nuanced understanding of adult social development, which  
23 makes developmental contextualism an useful theoretical framework.

#### 24 **Developmental Contextualism as a Theoretical Framework**

25 It is a generally accepted perspective that people's lives are embedded in and shaped  
26 by broader societal and historical contexts (i.e., exo-, macro-, and cronosystems;

1 Bronfenbrenner, 1979) that contribute both to short- and long-term changes in developmental  
2 trajectories that are different between cohorts (e.g., Antonucci et al., 2014; Baltes & Smith,  
3 2004; Bronfenbrenner, 1979; Caspi, 1987; Elder, 1994; Greenfield, 2018; Hartup & Stevens,  
4 1997; Rogler, 2002; Schaie, 1965). Examples of these contexts are economic depressions,  
5 wars, social revolutions, major epidemics, technological advances, major educational  
6 changes, changes in the demographic structure and modernization, as well as changes in the  
7 content and practices of nutrition and other forms of health behavior (Baltes & Smith, 2004).  
8 The theoretical framework of developmental contextualism takes these contexts into account  
9 and suggests that “relationships between historical events and individual behavior produce  
10 lasting orientations among persons born in the same time period” (Rogler, 2002, p. 1013). In  
11 the following, we elaborate on (1) how these lasting orientations arise, (2) when people are  
12 most susceptible to sociohistorical contexts, and (3) how these orientations are translated into  
13 later parts of adulthood (see also Greenfield, 2018; Inglehart, 2007; Rogler, 2002).

14 As for (1), long-lasting orientations and cohort differences are thought to arise from  
15 the social climate and historical events that a cohort has experienced. More specifically,  
16 sociohistorical contexts influence individuals’ (social) behavior through expected social roles  
17 and cultural values (Finkel, Hui, Carswell, & Larson, 2014; Greenfield, 2018; Inglehart,  
18 2007), as well as through opportunities and resources (e.g., Edmunds & Turner, 2005) that are  
19 available to a particular cohort (Hartup & Stevens, 1997). According to this perspective, the  
20 focus of today’s older adults on close social ties, preferably within a family, might be  
21 explained by their limited life-path options and experiences of existential concerns (e.g.,  
22 relative poverty). Experiences of existential concerns might have motivated people from these  
23 cohorts to search for secure environments; these environments are, in the social domain,  
24 provided by stable social relationships such as close relationships and family ties.

25 Supporting this view, longitudinal research from the Netherlands investigating the  
26 effect of socioeconomic status (indicating different levels of existential concerns) on older

1 adults' social relationships found that people with lower socioeconomic status tended to have  
2 smaller networks than those of higher socioeconomic status and that they relied more on kin  
3 than non-kin relationships for instrumental and emotional support (Broese van Groenou &  
4 van Tilburg, 2003). Similar findings are known from studies on persons belonging to ethnic  
5 and racial groups that tend to differ in socioeconomic status. For example, African Americans  
6 (more likely to be of lower socioeconomic status) tended to have smaller and more kin-  
7 dominated networks than Caucasian Americans (see Antonucci et al., 2014).

8         Existential concerns might not only lead to differences in the structure of social  
9 networks, but also to differences in the quality of social relationships. The probably most  
10 influential insights in this regard stem from the work by Glen Elder (e.g., Elder, 1994) in his  
11 study on children of the Great Depression in the United States of America: Teenage boys and  
12 girls who experienced families' economic deprivation showed positive psychosocial  
13 development, such as higher life satisfaction in their adulthood. They were readier to take on  
14 responsibilities and to work together toward the communal goal of getting the family through  
15 hard times, which Elder identified as an effective training in initiative, responsibility, and  
16 cooperation. Similarly, a longitudinal study on differences in psychosocial adult development  
17 between older and younger US baby-boomer cohorts (born in 1946 vs. born in 1957) showed  
18 that the earlier cohort (that was forced to compete economically with a larger number of age  
19 peers) reported a steeper increase in favorable psychosocial development across adulthood  
20 than the later cohort (Whitbourne, Sneed, & Sayer, 2009). In line with our argument, the  
21 authors conclude that differential socialization experiences can alter the course of  
22 psychosocial development throughout adulthood.

23         As for (2), people adapt to the broader social and physical environments by adopting  
24 values (e.g., Finkel et al., 2014; Greenfield, 2018; Inglehart, 2007) and by making use of  
25 available opportunities, chances, and resources (e.g., Caspi, 1987; Edmunds & Turner, 2005;  
26 Hartup & Stevens, 1997). As such, sociohistorical contexts interact with age-graded

1 influences in that Person × Environment interactions predict behavior (e.g., Featherman &  
2 Lerner, 1985). This interplay, however, is thought to differ depending on a person's life stage.  
3 It is argued that the sociohistorical contexts of young adulthood are particularly formative for  
4 the development of their adult social relationships for the following reasons: Young adulthood  
5 is seen as a dynamic and fluid life period (Arnett, 2000), characterized by critical transitions  
6 from social roles of dependency (e.g., in one's family of origin) to roles of adult  
7 responsibilities (e.g., in one's own family and/or in the working field).

8         Young adults might be particularly vulnerable to sociohistorical influences because  
9 they find themselves in a significant period of questioning who they are, experimenting with  
10 different roles, and searching for a niche in society (e.g., Hutteman et al., 2014). They seek to  
11 acquire new information in order to explore and to develop their own values, identities, social  
12 roles, and life paths (Arnett, 2000; Carstensen, Isaacowitz, & Charles, 1999; Greenfield,  
13 2018; Rogler, 2002). We note that people already adopt values within the family context in  
14 middle childhood (e.g., McAdams & Olson, 2010), but that it is in young adulthood that  
15 people experience a consolidation of or a shift in their values (e.g., Biddle, Bank, & Slavings,  
16 1990). In young adulthood, pre-existing values select people into particular environments,  
17 such as college (i.e., selection effects), and experiences within these environments reinforce  
18 existing values or change values (i.e., socialization effects). This makes young adulthood a  
19 life stage, in which external stimuli, such as social climates, historical events, and social  
20 experiences, are particularly formative (Biddle et al., 1990; Elder, 1994).

21         As for (3), the experiences of young adulthood have long-lasting effects until late life:  
22 Older adults tend to recall a higher number of autobiographical memories from the second  
23 and third decades of their lives compared to other periods and to do so more easily (Rubin &  
24 Schulkind, 1997), and their values have been found to reflect conditions that were present  
25 during their pre-adult and young-adult years (Inglehart, 2007). Young adulthood reflects a  
26 period in which processes of meaning-making emerge and consolidate (McAdams & Olson,



1 young adulthood. In contrast, today's young adults in industrialized societies live in relative  
2 physical security in terms of increasing material wealth (Krausmann et al., 2017), mortality  
3 decline (Brenner, 2005), health increase (Popkin & Gordon-Larsen, 2004), and increasing  
4 standards of living (Easterlin, 2000). Other societal changes include increasing access to  
5 education, democratization, and scientization (Schofer & Meyer, 2005), globalization  
6 (Stiglitz, 2002), and digitalization (Ellison et al., 2009). Such modernization processes are  
7 associated with increasing variation in pathways to adult roles as well as with shifts in  
8 attitudes, needs, and norms (e.g., Allan, Hawker, & Crow, 2001; Zaidi & Morgan, 2017), and  
9 with instabilities in educational and working contexts (e.g., Lent, 2018). These modernization  
10 processes and variations feed back into the sociohistorical context, that is, into how people  
11 form and maintain their social relationships (e.g., Kislev, 2018). In the following, we discuss  
12 romantic relationships as a sample case.

### 13 **The Sociohistorical Context of Today's Young Adults**

14 Over recent decades, individuals have tended to “shift away from long-term, steady  
15 arrangements and move toward temporary, noncommittal, and consumerist arrangements both  
16 professionally and romantically” (Kislev, 2018, p. 2245). Not only has sequential partnering  
17 become more common, but satisfaction with being single has increased and attitudes towards  
18 separation, singledom, and re-partnering have become more liberal (e.g., Böger & Huxhold,  
19 2018; Teachman, Tedrow, & Crowder, 2000). These changes have resulted in a decline in the  
20 status of marriage and in an increasing proportion of unmarried individuals (Wang & Parker,  
21 2014). In the same vein, the prevalence and acceptance of divorce has increased and  
22 cohabitation outside marriage has become more common (Coontz, 2007); more men and  
23 women are deciding not to marry/have children or to postpone marriage/childbearing, and  
24 more women are entering higher education and occupational careers (Lesthaeghe, 2014). As a  
25 consequence, relationship careers have become more complex (Oberg & Bildtgård, 2018).

26

## 1 **Romantic Relationship Contexts**

2           **Singledom and living alone.** Single-person households are the most rapidly growing  
3 type of living arrangement in developed countries (OECD Family Database). In almost all  
4 OECD countries, marriage rates have declined over the past decades (OECD Family  
5 Database): While in 1970, the average rate in OECD countries was 8.2 marriages per 1,000  
6 people, it was 5.7 in 1995, and 5.1 in 2017. These trends are commonly explained by the  
7 postponement of partnership formation and parenthood during a prolonged exploration stage  
8 (i.e., emerging adulthood; Arnett, 2000, 2015; Shulman & Connolly, 2013) as well as by the  
9 expansion in higher education (Bellani, Esping-Andersen, & Nedoluzhko, 2017).

10           Not all adults who are not married or live alone are single in the sense of not being  
11 involved in a romantic relationship. Nevertheless, the number of people not involved in a  
12 romantic relationship has been increasing across countries (e.g., Fokkema & Liefbroer, 2008).  
13 After World War II, when marriage was the norm and up to 80% of adult people lived with a  
14 marriage partner (US Census Bureau), those who stayed single tended to be so due to  
15 circumstances (e.g., poverty, family roles, or cultural norms). Today, being married is less  
16 likely to be considered a key part of adulthood, and more and more people report having  
17 freely chosen to stay single; this is particularly prevalent among higher-educated women  
18 (Bellani et al., 2017). As such, chosen singledom does not reflect a deficit or attachment  
19 insecurity, but may rather represent a personal choice that is positively linked to overall  
20 satisfaction (Pepping & MacDonald, 2019).

21           **Modern romantic relationships.** Although the status of singlehood is becoming more  
22 prevalent, it is yet not the most preferred long-term status. In fact, only 14% of never married  
23 adults indicate they do not want to get married (Pew Research Center, 2017). This implies  
24 that most young adults will probably aspire to be involved in a romantic relationship at some  
25 point of time. A romantic relationship today, however, is lived differently than some decades  
26 ago. Modern relationships have become less institutionalized (Campbell & Wright, 2010) and

1 more diverse and fluid (Roseneil & Budgeon, 2004), and material criteria have become less  
2 crucial to mate selection (Sweeney, 2002). Instead, attributes such as involvement in domestic  
3 work or companionship are more important (Dykstra & Poortman, 2010), and relationships  
4 are more strongly grounded in perceived similarity in values and interests or gaining  
5 emotional benefits of the relationship (Campbell & Wright, 2010; Coontz, 2007).

6         Modern couples do not necessarily live in a shared household. In fact, there is an  
7 increasing number of couples that live apart together (hereafter, *LAT*; in Western societies,  
8 with a proportion of LAT couples from ages 18 to 74 years ranging between 6–15%;  
9 Reuschke, 2010), which means that they agree that they are a couple, but they live in separate  
10 homes (Levin, 2004). Some of them—particularly long-distance LAT couples—have  
11 developed due to the labor market and are mostly situated within metropolitan regions  
12 (Reuschke, 2010). Others put individuality over relational commitment, which is a goal more  
13 likely to be furthered through a LAT arrangement (Poortman & Liefbroer, 2010). Although  
14 the motives for a LAT living arrangement are diverse, LAT couples have in common that they  
15 live a new form of intimacy: Care and support flows between individuals with no biological,  
16 legal, or socially recognized ties to each other, and a shared domestic space is not defining of  
17 a couple or a family (Roseneil & Budgeon, 2004). This new form of intimacy is also observed  
18 in other arrangements of modern relationships, such as consensual non-monogamies  
19 (Mogilski, Memering, Welling, & Shackelford, 2017), or relationships that blur the  
20 boundaries between friendship and sexual relationship (Roseneil & Budgeon, 2004; Shulman  
21 & Connolly, 2013). These new relationship contexts are likely to relate to the needs that  
22 young adults aspire to fulfill.

### 23                   **Relationship Needs and Values of Today's Young Adults**

24         In line with previous research (Greenfield, 2018; Gubernskaya, 2010; Zaidi &  
25 Morgan, 2017), we argue that the main psychological mechanism through which  
26 sociohistorical circumstances translate into social behavior are shifts in needs and values.

1 When people decide to enter a romantic relationship, they attach expectations to and  
2 anticipate need fulfilment from these relationships. Today, as in the course of relative  
3 affluence with respect to basic material needs (Easterlin, 2000; Krausmann et al., 2017), the  
4 emancipation of women and educational improvement (Herr & Shahnasarian, 2001; Schofer  
5 & Meyer, 2005) combined with increased individualism and autonomy (Lesthaeghe, 2014),  
6 relationship-specific needs and values have been moving away from the traditional and  
7 economic norms of marriage and childbearing (Gubernskaya, 2010). The balance has tended  
8 to shift from romantic relationships being expected to serve needs of security, reliability, and  
9 support, to romantic relationships being expected to provide emotional benefits in terms of  
10 happiness, passion, and love (e.g., Campbell & Wright, 2010; Coontz, 2007) and to allow for  
11 self-actualization and self-realization (Finkel et al., 2014). The expectations attached to need  
12 fulfillment have a two-fold connotation: On the one hand, in modern relationships, there are  
13 more opportunities to negotiate the tasks, roles, and needs of both couple members (Botkin,  
14 Weeks, & Morris, 2000); on the other hand, this opportunity might also imply challenges for  
15 the modern couple, resulting in more relationship-specific monitoring and evaluations,  
16 potentially rendering such relationships more fragile (Coontz, 2007).

### 17 **Implications for Adult Social Development in the 21<sup>st</sup> Century**

18 In line with the postulates of contextualism, we argue that the contexts and needs of  
19 today's young adults will shape the structure and satisfaction of their future relationships.

#### 20 **Structure of Social Relationships**

21 With regard to relationship structures, today's young adults might continue to develop  
22 their social relationships toward diversity and complexity. This includes a variety of family  
23 and partnership forms, living arrangements, and a high prevalence of singlehood, which  
24 together might constitute "the new normal" (Walsh, 2012, p. 3). This variety might  
25 continuously become more accepted: Today, compared to the 1960s, considerably fewer  
26 children are growing up in a traditional family of two parents in a first marriage (46% vs.

1 73%; Pew Research Center, 2015). In addition, in many countries, fertility rates have  
2 decreased over the past 50 years (for instance, in the OECD countries, from 2.7 children per  
3 woman in 1970 to 1.7 in 2017; OECD Family Database). This has resulted in the situation  
4 that the percentage of today's young adults who have grown-up in single-child families has  
5 increased (as compared to today's middle-aged and older adults; Cohen, 2003). Hence, it is  
6 arguable that these young people will consider diverse family structures (e.g., living in a  
7 household with one or two parents, being only child or having siblings, being child of same-  
8 gender parents) and family contexts (e.g., step parents, single parents, working fathers and  
9 mothers, blended family) as even more usual and acceptable than previous generations (Allan  
10 et al., 2001).

11 In addition, the greater emphasis on independence, self-fulfillment, and autonomy of  
12 today's young adults might render their social networks more dynamic and less stable when  
13 they get older. Such dynamism would make re-partnering and alternative partnership  
14 arrangements more common and the attitudes toward them more liberal, which has a twofold  
15 implication. First, romantic relationships might become more instable: Having experienced  
16 previous endings of relationships and knowing about the fragility of relationships might  
17 decrease relationship stability. Internet dating platforms further provide opportunities to find a  
18 new partner (McWilliams & Barrett, 2014), which might increase the perceived probability of  
19 re-partnering and, thus, make the dissolution of an unsatisfying relationship more appealing.  
20 Conversely, the choice to re-partner, even without marriage, makes relationship histories and  
21 trajectories more fluid, thereby protecting against the loneliness that can be associated with  
22 unwanted singlehood. This fluidity is, again, enhanced by technologies that enable people of  
23 any age to enter the partner market (McWilliams & Barrett, 2014).

24 As described, relationship dynamics might be shaped by online technologies and  
25 digital devices, such as computers, smartphones, or tablets. Such technologies have been  
26 described as being both a "social connector and separator" (Waytz & Gray, 2018, p. 474):

1 They allow people to maintain relationships across countries and continents (McWilliams &  
2 Barrett, 2014) and until old age (Antonucci, Ajrouch, & Webster, 2019), and might foster  
3 social abilities (e.g., empathy and emotion recognition) when they complement deep offline  
4 relationships or supplant relationships when offline relationships are difficult to attain (Waytz  
5 & Gray, 2018). Digital devices and online technologies, however, might also trigger  
6 relationship instability given that online communication sometimes complicates offline  
7 communication (Weinstein & Davis, 2015), and might impair social abilities when they  
8 supplant deeper offline connectedness (Waytz & Gray, 2018). As the use of digital devices  
9 and online technologies is rapidly increasing, both their connecting and disconnecting  
10 consequences for close social relationships are highly relevant in the present and will continue  
11 to be relevant in the future.

## 12 **Satisfaction with Social Relationships**

13 As for satisfaction with romantic relationships, we see at least three scenarios:

14 First, today's young adults will be equally satisfied with their new relationship  
15 conditions and partnership arrangements when they grow older as today's older adults are  
16 satisfied with their traditional conditions and arrangements: This might be the case because  
17 satisfaction with alternative or traditional social-life arrangements seems to heavily depend on  
18 a person's values, needs, and the social norms of the society and culture in which they live  
19 (Kislev, 2018). These values, as described above, are not set in stone but tend to reflect the  
20 conditions that were present during a person's young adulthood (Inglehart, 2007). In support  
21 of this view, a recent investigation found that satisfaction with romantic relationships is today  
22 more strongly based on increased egalitarian values than it was two decades ago (Hülür &  
23 Castano, 2019).

24 Second, today's young adults will be less satisfied with their new relationship  
25 conditions than are today's older adults with their conditions. This difference in satisfaction  
26 might be due to decreases in relationship stability, a higher likelihood to engage in short-term

1 relationships that might be less emotionally satisfying, and less investment in close  
2 relationships that would buffer against loneliness in old age (Hawkey, Wroblewski, Kaiser,  
3 Luhmann, & Schumm, in press). In addition, the displacement of offline social interactions by  
4 online communication might decrease satisfaction because online communication does not  
5 reach the same levels of emotionality and intimacy (Weinstein & Davis, 2015).

6 Third, there will be a polarization: Given today's young adults' higher relationship  
7 monitoring, their tendency to re-partner, and the generally less prescriptive norms about the  
8 permanence of relationships, it is likely that satisfying relationships will be continued while  
9 unsatisfying relationships will be dissolved. The quality of relationships might further be  
10 polarized by online technologies and digital devices: While some people are more sensitive to  
11 social media feedback, others are less sensitive (Burrow & Rainone, 2017). Constant  
12 monitoring of online feedback can potentially damage people's views of themselves and their  
13 relationships, particularly when they are associated with upward comparisons (Vogel & Rose,  
14 2016). As a consequence of this polarization, today's young adults' romantic relationships  
15 might become more fragile but, at the same time, relationships that persist might be more  
16 satisfying than were the long-term relationships during earlier times (Finkel et al., 2014).

### 17 **Future Directions**

18 The outlined findings, observations, and trends prompt suggestions for how to think  
19 about adult social development (i.e., content) and how to conduct the research associated with  
20 developmental processes (i.e., methods).

### 21 **Content**

22 First, although the study of cohorts is not new to the field of psychological research, it  
23 has received less attention than in other fields, such as sociology and history. Hence, in order  
24 to fully comprehend adults' social development, for which the concept of cohorts is relevant,  
25 it is essential to stimulate interdisciplinary exchange and research. Together with researchers  
26 working in other disciplines, psychologists can identify the contexts in which people have

1 been socialized (see also Elder, 1994; Gilleard & Higgs, 2016). An example of a  
2 multidisciplinary approach is the convoy model of social relationships (e.g., Antonucci et al.,  
3 2014): This model has been developed based on insights from sociological, anthropological,  
4 and epidemiological work and has the goal to investigate how the structure, function, and  
5 quality of people's social networks "are influenced by personal (e.g., age, gender) and  
6 situational (e.g., role demands, norms, values) characteristics" (Antonucci et al., 2014, p. 84).  
7 Another example is the work by Hareven (2018) that includes interdisciplinary, cross-cultural,  
8 and historical perspectives on contemporary family relations with the goal of investigating  
9 family as "the 'missing link' between individual lives and the larger processes of social  
10 change" (p. XV). Although these avenues are promising, interdisciplinary work focusing on  
11 sociohistorical contexts in the study of adult social development is still rare (for a similar  
12 conclusion, see Gilleard & Higgs, 2016).

13         Second, neither theories nor empirical findings are culture-independent; rather, they  
14 reflect the times and contexts within which they were proposed and derived (e.g., Arnett,  
15 2008; Gergen, 1973). As such, interdisciplinary work can be used for the (re)interpretation of  
16 given age-related differences in consideration of the specific contexts in which participants  
17 have lived (an example of a promising approach for how to use different existing longitudinal  
18 datasets to [re]interpret social processes in adulthood can be found in Blieszner, Ogletree, &  
19 Adams, 2019). We propose that, as a new standard, a thorough examination of the particular  
20 contexts in which participants have been socialized needs to be undertaken. This approach  
21 would involve a stronger focus on possible interactions between age-related and cohort-  
22 related influences on adult social development.

23         As an example, we consider the well-documented age-related increase in selectivity of  
24 the investment of resources (Rook & Charles, 2017) that might lead to different outcomes in  
25 different cohorts: Older people tend to strategically invest their resources into close,  
26 meaningful social relationships and tend to abandon investment in peripheral relationships.

1 This selective investment is thought to be driven by a combination of increasing scarcity of  
2 physical, cognitive, and material resources in older age (Braun, Rohr, Wagner, & Kunzmann,  
3 2018) and shifts in goals that are motivated by an awareness of approaching the end of life  
4 (Charles & Carstensen, 2010). It is an open question whether today's young adults—after an  
5 exploration stage—will set similar relationship priorities as previous generations; or whether  
6 today's young adults will have goals and needs in older adulthood that are more  
7 heterogeneous than those of previous generations.

8         As for the first option and as the theory of emerging adulthood suggests (Arnett, 2000,  
9 2015), today's young adults might prolong their exploration stage, but would subsequently  
10 have similar relationship needs as previous generations had (e.g., focus on close  
11 relationships). The expansion of the exploration stage might be an adaptive response to recent  
12 complexities in today's young adults' lives (Shulman & Connolly, 2013). In fact, although  
13 today's young adults experienced improvements in their physical resources, they are  
14 confronted with new modes of existential concerns, such as global climate change (Herington,  
15 2017) and insecurities of career and economic destinies (Leccardi, 2006; Shulman &  
16 Connolly, 2013).

17         As for the second option and as we argue in the present article, the age-related  
18 selectivity might be directed to other priorities in today's young adults when they become  
19 older—priorities that might be very heterogeneous given that the priorities of today's young  
20 adults are much more diverse than those of previous cohorts (Arnett, 2015). For instance,  
21 priorities might reflect more diverse family structures and contexts (Allan et al., 2001), more  
22 egalitarian values in romantic relationships (Hülür & Castano, 2019), or more online-based  
23 communication styles (Waytz & Gray, 2018).

24         Future research is needed to test whether today's existential concerns will foster adult  
25 social development that is postponed but similar to that of today's older adults, or whether  
26 today's young adults will experience a social development that is unique to this cohort. Such

1 open questions call for methods that explicitly consider age-related differences, cohort-related  
2 differences, and—most importantly—their interactions when studying adult social  
3 development.<sup>3</sup> In the following, we suggest methods suitable to such investigations.

#### 4 **Methods**

5 **Sequential designs.** It is well-known that a combination of cross-sectional and  
6 longitudinal designs is essential to arrive at a comprehensive picture of both age-related and  
7 cohort-related differences and their possible interactions (Baltes, Reese, & Nesselrode,  
8 1977). Conducting such sequential designs allow researchers to (1) compare different cohorts  
9 at a given time; (2) track these cohorts' trajectories over time; and (3) observe people of  
10 multiple cohorts developing over time (Baltes et al., 1977). Sequential designs permit  
11 researchers to disentangle cohort differences that emerge randomly (e.g., due to replicability  
12 problems) and cohort differences that are meaningful (i.e., based on the cohort's different life  
13 experiences). However, such designs are very costly, and, as a consequence, rarely adopted  
14 (for an example see Antonucci et al., 2019). Therefore, we propose three additional methods:  
15 comparative research, experimental research, and the use of new technologies.

16 **Comparative research.** Considering cultural differences might be a proxy for  
17 predicting cohort differences that result from differences in contexts (e.g., Greenfield, 2018).  
18 A promising approach in this area is cultural priming, which is based on the assumption that  
19 the presentation of culture-specific cues activates corresponding behavior (see Markus &  
20 Kitayama, 2010). For instance, Gardner, Gabriel, and Lee (1999) have shown that priming  
21 interdependence by pronouns such as *we* and *ours* (vs. independence; *I, mine*) led US students  
22 to endorse collectivistic values (e.g., belongingness, family safety, or social obligations) more  
23 strongly, whereas priming independence led Chinese students to endorse individualistic  
24 values (e.g., freedom, independence, or living a varied life) more strongly.

25 In addition, not only are investigations between cultures useful but examinations  
26 within the same culture are also important, such as studies of the “micro-historical” contexts

1 of sub-cultures (e.g., different ethnic groups; see Antonucci et al., 2014). In the same vein, the  
2 (lack of) sociohistorical effects on social development might be investigated in comparative  
3 studies, enabling researchers to uncover the processes that have existed across phylogeny and  
4 across cultures (Cacioppo et al., 2015). An example of this approach is a study on aging  
5 monkeys showing that age-related social selectivity is not exclusively human, but can also be  
6 found among Barbary macaques (Almeling, Hammerschmidt, Sennhenn-Reulen, Freund, &  
7 Fischer, 2016). Such research might hold the potential to disentangle universal age-related  
8 differences that are biologically or genetically influenced from more specific age-related  
9 differences that are driven primarily by (sub-)culturally specific contexts.

10       **Experimental research.** Experiments are particularly suited to investigate the  
11 processes that constitute specific adaptations to the respective ecologies of adult development  
12 (Freund & Isaacowitz, 2014). In the previous section, we discussed cultural priming as a  
13 promising experimental approach to simulate specific contexts that are hypothesized to drive  
14 social development. Another example of experimental research that directly focuses on adult  
15 social development is the study of future time perspective. There is some evidence that  
16 experimentally induced perception of restricted remaining life time leads young adults  
17 focusing on familiar social partners (e.g., Fredrickson & Carstensen, 1990; Fung, Carstensen,  
18 & Lutz, 1999), which would speak to cohort-independent but age-based social selectivity.  
19 However, in another study (Valero, Nikitin, & Freund, 2015), the same experimental  
20 manipulation enhanced motives in different life domains (i.e., affiliation, power,  
21 achievement), pointing to the possibility that restricting remaining life time enhances the  
22 selectivity for what people value, which might be very individual and cohort-specific.

23       These contradictory findings might be explained by the fact that the experimental  
24 manipulations used in all these studies confounded time perspective and resources (such as  
25 health, availability of social relationships, or insecurity with respect to the future; see Valero  
26 et al., 2015). Thus, findings from these studies may be interpreted in the context of (lack of)

1 resources, which supports the argument of the present article. More importantly, these studies  
2 exemplify the crucial point of experimental designs with regard to this article's key  
3 hypothesis: the unambiguous experimental manipulation of specific context factor(s) that  
4 might drive cohort differences in adult development. To the best of our knowledge, with the  
5 exception of the aforementioned studies, there are no studies using experimental  
6 manipulations that would simulate adult social development and its mechanisms. However,  
7 there are examples of studies from other research fields, particularly from research on  
8 cognitive development that support the notion that experimental research is a promising path  
9 for studying adult development (Freund & Isaacowitz, 2014). Hence, applying the  
10 experimental approach to the hypothesis of the present article, future studies on adult social  
11 development might test whether priming material scarcity and existential concerns leads to a  
12 focus on close and kin relationships, whereas priming self-actualization and life-path  
13 opportunities leads to expanding the focus to diversity and non-kin relationships.

14       **New technologies.** The use of new technologies has been changing psychological  
15 research (e.g., Bleidorn & Hopwood, 2019; Martin, Weibel, Röcke, & Boker, 2018; Mehl,  
16 2017): Technological developments, especially smartphones, allow the tracking of people's  
17 social activities in their daily lives and collecting subjective close-to the moment data about  
18 their feelings and thoughts (Mehl, 2017). These snapshots allow the identification of the  
19 dynamics of daily social activities in context (Martin et al., 2018) and the use of machine  
20 learning research (Bleidorn & Hopwood, 2019). In a similar vein, people's daily virtual  
21 behavior (e.g., emailing, tweeting, blogging, or posting) can be analyzed with regard to  
22 socially relevant research questions. For instance, data on virtual behavior could be analyzed  
23 to study age-related and cohort-related differences in language use (e.g., the pronouns *I* and  
24 *we*) that express different levels of relatedness (for a review on natural language use, see  
25 Pennebaker, Mehl, & Niederhoffer, 2003). Combined with knowledge on sociohistorical

1 context, these technological innovations offer a promising and unique source of insights into  
2 adult social development in daily life contexts.

3 Taken together, we believe that interdisciplinary and comparative research can provide  
4 valuable insights into those sociohistorical contexts that interact with age in predicting adult  
5 social development. With regard to more fine-grained methods, we plead for experimental  
6 designs and the use of new technologies to identify, assess, and analyze contextual effects in  
7 their interaction with age-related processes on adult social development.

### 8 **Conclusion**

9 In this article, we discuss that—although age-related effects have been found in the  
10 social domain—age has been described as an “empty variable” (Neugarten, 1977, p. 633). To  
11 address this “emptiness”, we assert that the current knowledge on adult social development is  
12 confounded by the sociohistorical contexts wherein participants of the existing empirical  
13 studies were embedded. Highlighting that the “major theoretical principles are firmly wedded  
14 to historical circumstances” (Gergen, 1973, p. 315), we suggest for disentangling age-related  
15 and cohort-related effects on adult social development and use developmental contextualism  
16 as a theoretical framework. We discuss how the sociohistorical contexts in which young  
17 adults have been socialized shape their social development throughout adulthood, while not  
18 proposing that only young-adulthood experiences matter, or that these experiences leave  
19 indelible footprints on the person. As the core of this article, we provide theoretical and  
20 methodological directions for future research on adult social development. We hope that this  
21 article will motivate future collaborations across disciplines and cultures in the joint attempt  
22 to better understand the universal and context-specific mechanisms that underlie adult social  
23 development in the 21<sup>st</sup> century. Such research will be amply equipped to systematically  
24 investigate the processes that drive development of any previous, present, and forthcoming  
25 cohort.

26 Word count: 7,106 words.

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## 1 Footnotes

2 <sup>1</sup> A person's social context and network includes a variety of social relationships on  
3 the micro- and mesolevel (e.g., friendships, family relationships, romantic relationships;  
4 Wrzus et al., 2013). Each of these relationships can be discussed in light of a contextualism  
5 perspective. In this article, we argue that intimate romantic relationships are one of the closest  
6 and most important relationships (Reis & Rusbult, 2004). This leads us to elaborate our  
7 following proposition with regard to romantic relationships primarily.

8 <sup>2</sup> For example, longitudinal studies in a meta-analysis on social network changes and  
9 life events across adulthood last from 0.1 to 17 years with an average of 3.1 years (Wrzus et  
10 al., 2013). Although longitudinal studies including information on social relationships and  
11 spanning longer times exist (e.g., the German Socio-Economic Panel has started in 1984 and  
12 now spans 35 years), to the best of our knowledge there have been no more recent  
13 publications on cohort differences in adult social development spanning longer time intervals  
14 than those in the aforementioned meta-analysis by Wrzus and colleagues (2013).

15 <sup>3</sup> A worthwhile prospect for future studies would be to investigate how interactions  
16 between age-related and cohort-related differences unfold in very old age. For example, there  
17 is evidence showing that cohort-related increases in well-being disappear towards the end of  
18 life (e.g., Hülür et al., 2016), which calls for a more differentiated view on Age × Cohort  
19 interactions towards the end of life. For the present research, this would imply that very old  
20 adults, who are often in need of care, have similar needs irrespective of their socialization  
21 experiences. We, however, await future research to test these hypotheses among people in late  
22 adulthood.