
Does Identity Precede Intimacy? Testing Erikson's Theory on Romantic Development in Emerging Adults of the 21st Century

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Abstract

Erikson stated that healthy identity development during adolescence is a precursor of intimacy in romantic relationships during emerging adulthood. However, from a developmental contextual perspective, there are reasons to question this strict developmental ordering. Using interview and questionnaire data from a longitudinal study on 93 adolescents, the authors tested whether ego development in middle adolescence predicts intimacy in emerging adulthood. Second, the authors examined whether identity achievement at the transition to adulthood mediates this link. Results revealed direct links between early ego development (age 15) and intimacy in romantic relationships (age 25). No paths were found from earlier intimacy to later ego development. No gender differences occurred. Relational identity achievement, an integrative identity construct measured at age 24, fully mediated the association between earlier ego development and later intimacy. This study confirms Erikson's old ideas on

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the developmental ordering of identity and intimacy for youngsters in the 21st century. Moreover, it highlights the integrative function of relational identity for later mature intimacy.

Keywords

Erikson, identity, intimacy, ego development, longitudinal study

The ability to have high-quality intimate partnerships is an important developmental marker for young adults (Collins & Sroufe, 1999; Feldman, Gowen, & Fisher, 1998). Despite the recognized importance of intimacy, our knowledge about the developmental roots of such unions is incomplete (Collins & Sroufe, 1999). Most research to date focused on the contributions of earlier close relationships, demonstrating that intimacy in close friendships during adolescence is later on transferred to relationships with the romantic partner (Seiffge-Krenke, 2000; Shulman, Laursen, Kalman, & Karpovsky, 1997), whereas the contribution of the identity of both partners has been sadly neglected. A theoretical model developed 40 years ago by Erikson (1968) proposed that having achieved a confident sense of identity provides the base from which mature forms of relational intimacy develop. According to Erikson, the capacity to commit to a partner without “fear of ego-loss” (Erikson, 1968, p. 264) is a central task for young adults.

In the past, life was more institutionalized and transitions from one stage to another were more clearly regulated by society norms and rules (Buchmann, 1989). Young people were socialized by learning from their parents, relationships with partners were governed by traditional rules that were beyond questioning, and parents and other adults served as models of identity and intimacy development. Although achievement of a mature identity and subsequent establishment of committed and intimate partnerships are still widely regarded as developmental tasks of today’s young people, this developmental transition has now become quite challenging to traverse (Arnett, 2004; Côté, 2000). The growing need for identity exploration may disconnect young people from commitment in intimate, enduring partnerships. Therefore, our study examines whether the developmental sequence proposed by Erikson is still valid today, in a changing developmental context hallmarked by a postponement of most developmental tasks for young adults (Arnett, 2004), including stable committed partnerships.

The Theory of Developmental Ordering of Identity and Intimacy

Erikson's (1968) theory of life-span development suggested that developmental progression involves the subsequent mastery of eight stages. Progression to the next stage requires the successful resolution of the crisis inherent at a particular stage. These hierarchical stages emerge in a fixed sequence; working through the crisis of a stage and integrating earlier experiences strongly increases the likelihood of achieving a positive outcome in the subsequent stage. In Stage 5, Erikson spoke of the crisis of Identity versus Role Confusion. In this phase, adolescents try to figure out what is unique or distinctive about themselves. Positive outcomes of this stage are awareness of uniqueness of self, knowledge and integration of roles in society, feelings of continuity of the self over time, and fidelity. Negative outcomes are reflected in the inability to identify with appropriate roles in life. Erikson strongly argued that adolescents who fail to find a suitable identity may have difficulty forming and maintaining long-lasting close relationships with romantic partners. In Stage 6, Erikson described the crisis of Intimacy versus Isolation. During this period, the focus of emerging adults is on developing close, intimate relationships with others. Positive outcomes of this stage are the development of close friendships and loving, sexual relationships. Negative outcomes are reflected in loneliness, isolation, and fear of relationships. Erikson added that these difficulties may stem from an earlier failure to develop a strong identity. In a later contribution, Erikson (1982) argued that although other forms of intimacy are part of normal development, it is only possible to experience genuine intimacy with another person after a reasonable sense of identity has been established because "the condition of twoness is that one must first become oneself" (p. 101). Optimally, adolescents enter adulthood with a mature desire and capacity for intimacy based in a solid sense of self. As such, Erikson's theory stresses the idea of hierarchical integration—that is, true intimacy builds upon, enlarges, and incorporates what has gone before, that is, a strong sense of identity (Kroger, 2007).

Two assumptions follow from Erikson's (1968) tenet of successive development of identity and intimacy. First, the largely ignored idea of developmental ordering (Dixon, 1998) is central to the theory. The underlying assumption in Erikson's approach is a relatively fixed order of identity and intimacy. Implicitly, an unresolved identity crisis may result in developmental arrest (Côté, 2000). In line with this, the second assumption relates to conditionality. As mentioned, Erikson proposed that adolescents who fail to find a suitable

identity may have difficulty forming and maintaining long-lasting, close, personal relationships thereafter (e.g., fear of closeness and intimacy). Both of these assumptions are a strong call for long-term longitudinal research as a test of this theory.

Empirical Evidence for the Developmental Ordering of Identity and Intimacy

In the past, several studies were conducted to test Erikson's theory. In one of the first studies, Orlofsky, Marcia, and Lesser (1973) used semistructured interviews to assess identity status (Marcia, 1966) and intimacy status (Orlofsky, 1976) in a male college sample. Using these cross-sectional data, they showed that males in the identity achievement status (i.e., males who made commitments after a period of exploration) appeared to have the greatest capacity for engaging in intimate interpersonal relationships, whereas identity diffusion individuals (showing a lack of commitments coupled with little systematic exploration) were least intimate and most isolated. In a similar cross-sectional study, Schiedel and Marcia (1985) added that this pattern particularly held for males, with females only showing a weak link between identity status and intimacy. In a more recent cross-sectional study, Rotenberg, Schaut, and O'Connor (1993) showed that marital success and satisfaction in adult couples, both revealing high intimacy, were associated with greater identity achievement in individuals. The experience of an identity crisis clearly was associated with less stable and less satisfying marriages.

Other cross-sectional evidence comes from studies in which identity is conceptualized and measured using Loevingers' theory on ego development (Loevinger & Blasi, 1976). According to this theory, ego development serves as a mechanism to maintain coherence in one's identity, for instance, by mature impulse control, understanding oneself in relation to others, and experiencing oneself as a coherent self over time. Bakken and Huber (2005), using Loevinger's Sentence Completion Test (SCT; Hy & Loevinger, 1996), showed that strong ego development was associated with better interaction in intimate relationships. Montgomery (2005), using the Erikson Psychosocial Index (Rosenthal, Gurney, & Moore, 1981), added that strong identity development is an independent predictor of psychosocial intimacy, after controlling for a series of background variables. Similarly, based on cross-sectional data, Lacombe and Gay (1998) demonstrated that middle-adolescent high school students provided more identity resolutions compared to intimacy resolutions in answering to scenario situations. These studies suggest that younger individuals are more concerned with identity than intimacy issues and, furthermore,

that older individuals who show mature identity levels also have concurrently high levels of intimacy.

Two short-term (1-year interval) longitudinal studies also confirmed Erikson's basic premise. Fitch and Adams (1983) showed that in college-aged males and females, identity formation as assessed with Marcia's semistructured interview contributed to advanced intimacy status (Orlofsky et al., 1973) a year later. Marsh, Allen, Ho, Porter, and McFarland (2006) demonstrated that strong ego development at age 13 not only explained concurrent levels of intimate behavior with friends and felt security in friendships but also predicted increases over time in these variables.

Taken together, these findings from cross-sectional and short-term longitudinal studies confirm the proposed link between identity and intimacy development, but none of them provides an ideal test for Erikson's tenets of developmental ordering and conditionality. Cross-sectional studies do not allow tests of development, and the short-term longitudinal studies only covered one life period (either early adolescence or emerging adulthood), whereas Erikson (1968) placed identity formation in adolescence and intimacy in emerging adulthood. Testing developmental ordering and conditionality thus calls for adequate research designs and models (Dixon, 1998). One such model is the cross-lagged model covering a long time span, in which it can be tested whether differences in identity or ego development during adolescence predict relative changes or growth in intimacy during emerging adulthood.

Changes in Identity and Intimacy From a Developmental Contextual Perspective

There are many indicators of a changing developmental context during the last decades (Arnett, 2004) that challenge Erikson's basic tenets. Although identity achievement according to Marcia (1966) is generally considered the most mature developmental identity status and diffusion the least mature, some scholars argue that there is no normative developmental pathway indicating how individuals progress through the identity statuses (van Hoof, 1999). This might be particularly true during the last decade, where adolescents often go through a period of active questioning and broad exploration of various options (Luyckx, Goossens, Soenens, & Beyers, 2006) without committing themselves to certain goals and ideals (Berzonsky & Adams, 1999; Bosma & Kunnen, 2001). Particularly, individuals who attend college are able to delay adult commitments or to spend a number of years exploring life alternatives without the burden of permanent adult responsibilities (Arnett, 2000). An overview of identity status research based on the model by Marcia

(1993) clearly showed that moratorium and the diffuse identity status are on the increase and the achievement status is on the decrease.

Such a period of exploring options and opinions appears to be essential for achieving an ego identity that provides some sense of unity and direction in a life that has become more and more complex. However, extended moratorium can also induce confusion in young people for whom the seemingly limitless possibilities are intimidating and disequilibrating (Schulenberg, Bryant, & O'Malley, 2004). Late-modern societies appear to be increasingly chaotic and less supportive of young people (Côté, 2002), and some parents may not be able to optimally support exploration in identity concerns (Beyers & Goossens, 2008; Bowlby, 1980) or to serve as a model for committed partnerships (Amato & Booth, 2001). Studies on emerging adults indeed established a ruminative cycle of continued exploration (Luyckx et al., 2008). Research on the postponement of marriage and parenthood (Arnett, 2004; Seiffge-Krenke, 2006) additionally suggests that establishing interdependent, committed, and intimate relationships with a partner may be compromised by this continued process of identity exploration. Thus, the question arises whether an achieved identity is postponed nowadays and, additionally, whether this postponed identity has consequences for intimacy development.

During emerging adulthood, young people are expected to become involved in romantic relationships of longer duration (Carver, Joyner, & Udry, 2003), to engage successfully in intimate, affectionate, long-term, and deep relationships (Brown, 1999; Collins, Welsh, & Furman, 2009). However, finding a mate has become a rather prolonged process in Western cultures, in which marriage often is postponed to the late 20s or early 30s. Moreover, unlike early adolescent romantic relationships, which are often transient and capricious (Feiring, 1996), or middle adolescent romance, which is highly passionate and sometimes idealistic (Collins & Sroufe, 1999; Connolly & McIsaac, 2008), romantic relationships at the transition to adulthood are characterized by passion, affiliation, and intimacy (Connolly & Goldberg, 1999). Typical conflicts to be solved at this stage of romantic development pertain to the balance of commitment to the partnership and autonomy, characterized by questions such as "Can I be committed to this person?" "Are we compatible?" and "Can I tolerate his or her shortcomings, values, and lifestyle?" (Korobov & Thorne, 2006). Although the presence of commitment may lead to long-term relationships, fun and exploration typical for the age period of emerging adulthood (Arnett, 2000) might make emerging adults avoid these questions and as such postpone engagement in intimate committed relationships.

This study is conducted on a German sample, and thus the findings of a nationwide German survey, the Shell Youth Study (Hurrelmann & Albert, 2006), are of

special relevance here. German young people, similar to their American age mates, share a pragmatic view with respect to professional competence and close relationships, and emphasize fun. Although a substantial part of young, emerging German adults had partnerships (between 50% and 65% were engaged for a longer time and deemed closeness, intimacy, and fidelity as very important), they were hesitating toward a more firm commitment. For example, 70% found it important to have a close relationship with a partner, but only 30% consider marriage as an adequate partnership model for themselves. Furthermore, expectations for partnerships have changed (Kümmerling & Hassebrauck, 2001). Similarly, identity commitments are postponed and a feeling of “in-between” is frequently reported (Hurrelmann & Albert, 2006).

Gender as a Moderator of the Identity-Intimacy Link?

There has been controversy about Erikson's (1968) suggestion that the developmental ordering of identity and intimacy is more typical for males than females. It was argued that the studies designed to support Erikson, such as those by Marcia (on adult men), are often casted in a language of achievement (Gilligan, 1982), whereas women develop their identity in close interaction with significant others. This idea of a mutual development of “the self in relationships” for women was also put forth by Kegan (1994). The idea of an androcentric bias (Sorell & Montgomery, 2001) in the theory of Erikson was addressed in several studies but resulted in inconclusive findings. Although some studies confirmed that intimacy and identity are largely overlapping or that intimacy indeed might spur identity development in women (e.g., Lacombe & Gay, 1998; Schiedel & Marcia, 1985), other studies found no gender differences in the identity-intimacy link (e.g., Montgomery, 2005). Particularly, Kroger (1997), based on a review of empirical studies, rejected the idea of strong gender differences in both identity structure and in the way relationships are used in the identity formation process.

Going Beyond Replication: Conceptual Refinement, Multiple Methods, and a Focus on Development

To summarize, although developmental theory posits that young people are concerned with a more coherent sense of who they are and achieving greater intimacy, the question whether there is a clear developmental ordering, or whether identity and intimacy development are concurrently interrelated, is in need of rigorous testing. Answering this question is of great practical value as well. Although it is easy to romanticize the past in this context, there is

reason to be concerned that young people today are not receiving a benign guidance in their identity formation (Côté, 1997). Ongoing cultural change is evident in the formation of intimate relationships as well, leading to rapid changes in expectations, quality, and duration of romance (Seiffge-Krenke et al., in press). A study clarifying the developmental ordering and conditionality in identity and intimacy development may shed some light on factors and deficits that can be approached in prevention and intervention.

However, analyzing the question of developmental ordering of identity and intimacy is not just a question of practical relevance. Erikson himself was quite aware that some of his concepts might be too time-bound, when he asked that "if changes are suggested by changing times, can our terms retain their original significance and contribute to each others' meaning?" (Erikson, 1982, p. 13). Indeed, a rigorous testing needs to go beyond replication of earlier studies. It needs to capture the multifaceted view of identity, described as a complex system of self-definition shaped within a social context (Erikson, 1968; Kroger, 2004), and of intimacy, as the close, trustful bond between two partners with an identity (Erikson, 1982).

In this study, we employ two conceptualizations of identity, which together bring a complete view of Erikson's description of identity development. Marcia's (1966) identity status approach is the most commonly used paradigm for research on identity formation (Schwartz, 2001) and has showed considerable validity. Characteristic to his approach are four prototypical ways of dealing with identity relevant issues, based on a combination of two underlying dimensions, exploration, and commitment. More recently, identity domains were introduced in this approach (Schwartz, 2001), including the relational context of identity formation. Marcia's (1966) Identity Status Interview, however, was almost exclusively applied in research on adults, prevailing males, and has not yet been extended to adolescent or emerging adult populations. In contrast, Loewinger's (1998) theory and measure of ego development was examined in research on adolescents. Her concept of ego development as a search for a coherent self across development, similar to Erikson's theory, stresses the interrelationships between the social world and the self and emphasizes the integrative function of the ego.

Both paradigms to assess identity offered rich qualitative data based on semistructured oral or written questions and exhibited high validity (Kroger, 2004; Loewinger, 1998; Schwartz, 2001). Given the central meaning of hierarchical integration in the theory of Erikson, one of the core questions in this study is how earlier expressions of identity, measured as ego-development scores, are linked to later scores in ego development and identity status, and whether there are indications of the integrative function in which later

indicators of relational identity and intimacy build on, enlarge, and incorporate what has been learned before.

Similarly, intimacy experienced in partner relationships in emerging adulthood builds on earlier intimacy that is first experienced with close friends (Sharabany, 1994) and later with romantic partners (Collins et al., 2009; Seiffge-Krenke, 2000), and it incorporates different facets such as trust, closeness, and intimate sharing during early and middle adolescence, and intimacy and passion during late adolescence. How these earlier romantic qualities with presumably different partners (Seiffge-Krenke, 2003) are incorporated and add to intimacy with romantic partners at emerging adulthood remains an open question.

Earlier research on the links between identity and intimacy not only suffered from a conceptually narrow framework that ignored the relational aspects when assessing identity but also lacked a developmental perspective, visible in the cross-sectional design of most studies. A rigorous testing of Erikson's tenet of conditionality, however, needs to capture the change in identity and intimacy and prove whether they are developmentally related from adolescence to young adulthood and build on each other in the typical sequence Erikson suggested.

Research Questions and Hypotheses

The present study aimed to test Erikson's hypothesis of a developmental ordering of identity and intimacy in a longitudinal study. As outlined above, many of the developmental tasks previously thought to characterize adolescence (including constructing an identity) now extend to emerging adulthood (Arnett, 2000). Thus, it is reasonable to question whether Erikson's theory of developmental ordering of identity and intimacy is still valid or alternatively whether the developmental processes of identity and intimacy now simply are overlapping, correlating developmental tasks. Similarly, some have suggested (e.g., Brown, 1999) that in modern society, intimacy in close relationships already develops during adolescence and precedes identity development. Finally, others even stated (e.g., van Hoof, 1999) that above all there is substantial interindividual variability in the timing of identity and intimacy issues, leading to an overall unlinking of these two developmental tasks.

In our study, we test these hypotheses on the basis of a 10-year longitudinal study in Germany. We assessed the constructs of identity and intimacy in adolescence (age 15) and emerging adulthood (age 25) using multiple measures, including qualitative and quantitative data, in a cross-lagged design. Ego development at ages 15 and 24 and identity achievement at age 24 served as indicators of identity formation; intimacy development at age 15

and intimacy status at age 25 were used as indicators of intimacy. This longitudinal multimethod design allows to test the order of sequencing and to explore the conditionality: Does identity precede intimacy or does intimacy precede identity development? Or, as detailed above, do both processes simply develop concurrently and overlapping? Strong evidence for Erikson's (1968) theory would follow from a significant cross-lagged path from identity in adolescence to intimacy in emerging adulthood and no cross-lagged path from adolescent intimacy to identity development at a later age.

If Erikson (1968) is right, then the following question arises: What explains this link between ego development in adolescence and intimacy 10 years later? We suggest that identity achievement at age 24, more specifically the integrative capacity of relational identity achievement, may be important in this process. Our multimethod approach is based on the idea that no single measure can capture the complexity of the identity construct. Several studies underscored the idea of a complex underlying structure of identity (Kroger, 2004; Loevinger, 1987) by showing that ego development and identity achievement are strongly related (Adams & Fitch, 1981; Adams & Shea, 1979; Berzonsky & Adams, 1999; Ginsburg & Orlofsky, 1981). Actually, a strong link between ego development in middle adolescence, which is characterized by exploring one's own interests but nevertheless taking expectations and opinions from others in mind (i.e., the self-protective and conformistic stages of ego development; Loevinger, 1987), and identity achievement in emerging adulthood completely is in line with process models of identity development (e.g., Grotevant, 1987; Luyckx et al., 2006), which state that true identity achievement is preceded by a period of exploration and questioning.

In addition, Orlofsky et al. (1973) argued that identity achievement in late adolescence clearly predicts the solution of the Intimacy versus Isolation crisis in emerging adulthood. Males in their study with an achieved identity more often showed true intimacy. In fact, several of the studies cited above actually pointed to a clear link between identity, particularly relational aspects of identity (see, for example, Kroger, 2004), and intimacy in this specific age period. Consequently, a further aim of this study is to test the mediating role of identity achievement in the link between ego development in adolescence and intimacy in emerging adulthood.

Method

Sample

The sample was part of an ongoing longitudinal study. Data from 93 participants (52 females and 41 males) who were invited to participate at all waves

during a period of 10 years were used for the present study. Assessments were made in a total of eight waves with varying intervals. For this study, data from Wave 2 during adolescence (mean age = 15.3 years; $SD = 1.0$) and from Waves 7 and 8 in emerging adulthood (mean age = 24.1 years; $SD = 1.2$ and mean age = 25.3 years; $SD = 1.4$, respectively) were used. Most participants came from intact families (83.1%) and belonged to a broad socioeconomic strata (53.1% of the families belonged to the middle class; Hollingshead, 1957). Ninety-one percent of the sample was German nationals. The percentage of those having a partner increased continuously over the years of the study and relationships became more stable. At age 15, 32% reported having a romantic partner (mean duration of partnership was 5.1 months; $SD = 1.3$ month), and at age 25, 62% of the participants reported a partnership (mean duration was 3.2 years; $SD = 2.6$ years). At age 25, 5 participants were married, and 4 of them were parents. Roughly half of the participants were in an apprenticeship or already pursuing a profession and half were university students. According to the German Federal Bureau of Statistics (Statistisches Bundesamt, 1991), at the time of the first measurement, the sample can be considered as representative of German families according to the above-mentioned variables.

Combined across all variables and waves of this study, a total of 13.4% of the data was missing, primarily due to missing intimacy scores at Wave 2 and dropout in later waves. Careful analyses showed that missing data were not related to age, gender, parents' marital status, family's socioeconomic status (SES), or type of school the participant attended. A global test including all variables in this study confirmed that data were missing completely at random (MCAR; Little's test: $\chi^2(56) = 43.84$, *ns*). Therefore, missing values were estimated using a procedure of multiple imputations and the NORM software (Schafer, 1997). As a result, the sample size (N) amounted to 93 for all subsequent analyses.

Measures

Ego development. The Washington University Sentence Completion Test (WUSCT; Hy & Loevinger, 1996) was employed at Waves 2 (adolescent version; Form 2-77) and 7 (adult version; Form 81) by using a gender specific version for males and females. Altogether, 36 incomplete sentences (e.g., "When I am criticized . . .," "My mother . . .") had to be completed. Responses to sentence stems were coded by two raters using the manual by Hy and Loevinger (1996) and was based on the model of ego development by Loevinger (1985) entailing nine ego stages: infancy, impulsive stage, self-protective stage, conformistic stage, self-aware stage, conscientious stage,

individualistic stage, autonomous stage, and integrated stage. Typically, adolescents exhibit modal ego levels from self-protective (i.e., to control self and others in order to further develop one's own interest) to conformist (i.e., attuned to the needs, expectations, and opinions of others), whereas the modal level for young adults varies between self-aware (i.e., awareness of being different from others) and conscientious (i.e., a strong sense of responsibility for one's thoughts and values), with females scoring higher than males (Westenberg & Gjerde, 1999). In the present study, typical ego stages at age 15 were conformistic (48%) and self-aware (36%) and at age 24 self-aware (48%), conscientious (31%), and individualistic (13%). Although there is no perfect correspondence of ego development stages with identity commitments or the process through which such commitments are formed, several studies cited earlier showed strong links between ego development assessed by Loevinger's measure and identity development. Therefore, this measure of ego development can be considered a good marker of identity during adolescence and at emerging adulthood.

Answers were transcribed completely, made anonymous, and randomized across the two independent raters. Kappa ranged from .63 to .83 for the individual items across 30 randomly selected protocols. A third rater provided the consensus scoring in case of disagreement. Furthermore, in line with Hy and Loevinger (1996), for each participant the total protocol rating (TPR) was calculated, which is based on the cumulative frequency distribution of the item ratings. Higher TPR scores indicate more advanced ego development. For the present analyses, the TPR ratings of Waves 2 and 7 were used. The 36 items TPR had an internal consistency (Cronbach's alpha) of .75 (adolescent version) and .78 (adult version).

Intimacy in adolescent romantic relationships. The German version of the Network of Relationship Inventory (NRI; Furman & Buhrmester, 1985) was used to assess the quality of relationships with romantic partners at Wave 2. The NRI contains 11 scales: companionship, conflict, instrumental aid, satisfaction, intimacy, nurturance, affection, punishment, admiration, relative power, and reliable alliance. Each of the 11 dimensions are assessed by three items to be rated on scales ranging from 1 (*little or none*) up to 5 (*the most*). Previous research underscored the reliability and construct validity of the NRI (Furman & Buhrmester, 1992; Seiffge-Krenke, 2000). The scale intimacy with romantic partner was selected for the present study. A sample item reads as follows: "I talk with him/her about my feelings and secrets." Internal consistency coefficient (Cronbach's alpha) for this scale was .83.

Intimacy in adult partnerships. We measured intimacy at Wave 8 using the semistructured interview designed by Orlofsky and Roades (1993). Questions

explore the balance between autonomy of the self and commitment to the partnership. Orlofsky (1993) provided nine 5-point rating scales on which each participant was rated: commitment, communication, emotionality, knowledge of the traits of the partner, perspective coordination, conflict resolution, autonomy, acceptance of autonomy of the partner, and detachment. Two independent raters scored the interviews based on these criteria. Kappa amounted to .67 for 30 randomly selected protocols. A third rater provided consensus scoring in case of disagreement. Overall intimacy was calculated by averaging the scores on the nine criteria (Cronbach's $\alpha = .94$). This aggregated score proved to be valid in previous studies (e.g., Winstanley, Meyers, & Florsheim, 2002). In this study, the total intimacy score matched with an intimacy status distribution (Orlofsky, 1993) of 48% intimate quality of partnerships, 38% pseudo intimate or stereotyped, 13% in merger status, and 3% isolated.

Identity achievement. The Identity Status Interview (ISI; Marcia, 1966) contains semistructured questions pertaining to three life domains (career, relationships, view of the world). Based on the criteria for exploration (e.g., activity directed toward gathering information, evidence of considering alternative potential identity elements) and commitment (e.g., activity directed toward implementing the chosen identity element, identification with significant others, projection of one's personal future), detailed in Marcia (1993) and Waterman (1993), every participant at Wave 7 was assigned to one identity status: achievement, moratorium, foreclosure, or identity diffusion. Interrater agreement (kappa) across 30 randomly selected interviews ranged from .76 to .80. Again, a third rater provided consensus scoring in case of disagreement. For this study, dichotomized achievement codings (0 = *not achieved*; 1 = *yes achieved*) of relational identity (46% achieved identity) and global identity (mean across the three domains; 50% achieved) were used.

Procedure

The current study was based on data collected when the participants were adolescents (Wave 2; age 15) and a decade later, when the participants were in emerging adulthood (Waves 7 and 8; ages 24 and 25 years, respectively). When the participants were 15 years old, their perceptions of intimacy with romantic partners were assessed via the NRI. At ages 15 and 24, they completed the WUSCT to assess ego development. Furthermore, at age 24, the Marcia Interview was conducted to assess the identity status. Intimacy with the partner was assessed via the Orlofsky Intimacy Status Interview at age 25. The interviews at ages 24 and 25 were conducted by different persons; they were

blind with respect to earlier findings (e.g., intimacy or identity status). To avoid shared method variance, completed tests (WUSCT at ages 15 and 24) and interviews (Marcia and Orlofsky Interviews at ages 24 and 25) were appointed in a randomized way to trained experts for scoring, so that data of the same participant at different ages were most likely scored by different experts.

Results

Descriptive Statistics and Correlations

Table 1 shows descriptive statistics and correlations among all variables in the present study, including background variables. Nonparametric Spearman correlations were calculated given the ordinal nature of some of the study variables (e.g., gender, partnership, identity achievement). Means showed a strong increase in ego development from age 15 to age 24. Furthermore, gender showed a clear pattern of correlations, with males showing lower levels of ego development together with somewhat higher levels of intimacy at age 15 but lower levels of intimacy at age 25. Males also were less likely to have a partner at age 25. Partnership was clearly related to higher levels of intimacy, both at age 15 and at age 25. Family status or SES was not related to any of the study variables. Following these correlations, gender and having a partner were controlled for in all further analyses. Ego development at age 15 was negatively related to intimacy at that age but positively related to ego development and identity achievement at age 24, and to intimacy at age 25. Intimacy at age 15 was only related to intimacy at age 25. Both global and relational identity achievement at age 24 were positively related to intimacy at age 25.

Identity in Adolescence Predicting Intimacy in Emerging Adulthood

A cross-lagged model was tested, predicting ego development and intimacy in emerging adulthood (ages 24 and 25) by ego development and intimacy in adolescence (age 15). This analysis and all further analyses were performed using Mplus 5.1 software (Muthén & Muthén, 2007) that allows using both continuous and ordered categorical variables in a model. Given the relatively small sample, the ordinal nature of some variables, and the resulting nonnormality in the data, multivariate $\chi^2(2) = 109.85; p < .001$, bootstrap standard errors were calculated using 1,000 bootstrap draws. Based on these standard errors, confidence intervals at the 95% level were inspected to draw conclusions

Table 1. Descriptive and Nonparametric Spearman Correlations Among Study Variables

	M (SD)	2	3	4	5	6	7	8	9	10
1. Gender	0.44 (0.50)	-.20*	.01	.01	-.37***	.25*	.06	-.19	-.17	-.28**
2. Partnership	0.62 (0.49)		-.12	.04	.08	.35***	.09	.10	.19	.55***
3. Family status	0.83 (0.38)			.08	.15	-.09	.02	.11	.08	-.05
4. Family SES	1.73 (0.69)				-.17	.09	-.19	-.12	-.09	-.13
5. Ego development at age 15	19.77 (6.96)					-.41***	.30**	.48***	.50***	.33***
6. Intimacy at age 15	11.83 (2.13)						-.11	-.16	-.12	.39***
7. Ego development at age 24	31.06 (10.27)							.10	.10	.14
8. Global identity at age 24	0.49 (0.50)								.89***	.25*
9. Relational identity at age 24	0.46 (0.50)									.35***
10. Intimacy at age 25	3.40 (1.07)									—

Note: SES = socioeconomic status. Means for gender, partnership, family status, and global and relational identity at age 24 represent the proportions of males, emerging adults having a partner, intact families, and emerging adults with achieved global or relational identity at age 24, respectively. * $p < .05$. ** $p < .01$. *** $p < .001$.

on the significance of both main and indirect effects. When zero is not in this confidence interval, an effect is significant at $p < .05$.

Initial separate analyses by gender, exploratory due to the small subsamples of males and females, revealed no gender differences in the cross-lagged paths. For both males and females, the path from ego development at age 15 to intimacy at age 25 was significant ($\beta = .57$ and $.45$; $p < .001$, respectively), whereas the path from intimacy at age 15 to ego development at age 24 was not ($\beta = .16$ and $-.17$, *ns*). Therefore, subsequent analyses combined both genders.

Figure 1 presents the standardized results of the cross-lagged model in the total sample. As can be seen, after controlling for (a) gender and having a partner at age 25, (b) the stability of ego development and intimacy (horizontal arrows), and (c) within-time relationships between ego development and intimacy (double arrows), ego development at age 15 strongly predicts intimacy 10 years later, at age 25 (raw estimate $b = .07$; 95% CI = $.03-.11$). Higher levels of ego development in middle adolescence predict higher levels of intimacy in close relationships during emerging adulthood. No significant path was found from intimacy at age 15 to ego development at age 24. Dropping this path from the model indeed resulted in excellent overall model fit: $\chi^2(1) = 0.43$, *ns*; comparative fit index = 1; root mean square error of approximation = $.00$.

Mediation Through Identity Achievement

Separate mediation analyses were performed for global and relational identity achievement. In both models, identity achievement at age 24 was tested as a mediator between ego development at age 15 and intimacy at age 25. Intimacy at age 15 was entered as additional control variable. Therefore, what is predicted is relative change in intimacy between middle adolescence and emerging adulthood. Mediation was only tested in the total sample because separate analyses by gender would capitalize on power issues involved in mediation (MacKinnon, Lockwood, & Williams, 2004).

First, a model was tested with global identity achievement at age 24 as a mediator. Results revealed that the indirect effect was not significant, due to a nonsignificant path from global identity achievement to intimacy at age 25 ($b = .17$; 95% CI = $-.02-.36$), after controlling for ego development at age 15. So, global identity did not mediate the path from ego development in middle adolescence to intimacy in emerging adulthood.

Second, relational identity achievement was tested as a mediator. Results of this analysis are shown in Figure 2. As can be seen, mediation occurred.

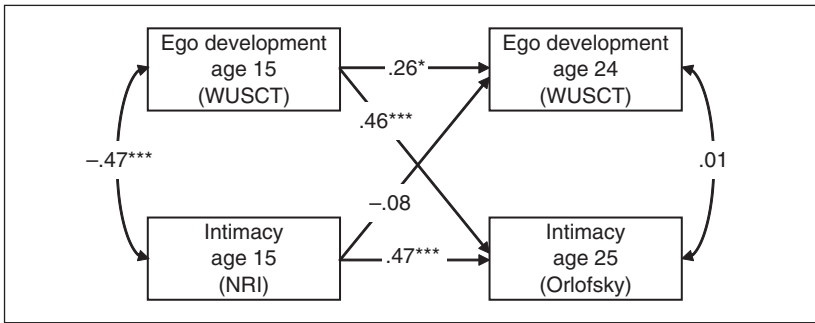


Figure 1. Cross-lagged path model of ego development and intimacy at ages 15 to 25
 Note: WUSCT = Washington University Sentence Completion Test; NRI = Network of Relationship Inventory. For reasons of clarity, effects of control variables (gender and partnership) are not shown. Significance based on bootstrap standard errors.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

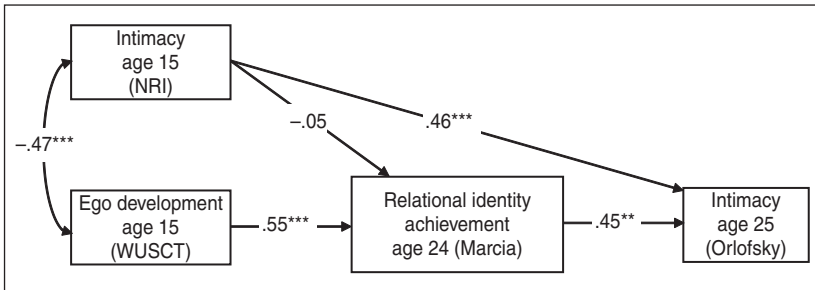


Figure 2. Relational identity achievement as a mediator of the link between ego development and development of intimacy
 Note: NRI = Network of Relationship Inventory; WUSCT = Washington University Sentence Completion Test; CFI = comparative fit index; RMSEA = root mean square error of approximation. Effects of control variables are not shown. Significance based on bootstrap standard errors. $\chi^2(1) = 1.28$ (ns); CFI = 0.99; RMSEA = .05.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

First, strong ego development at age 15 increased the odds of having an achieved relational identity at age 24. Second, after controlling for the previous, an achieved relational identity predicted higher levels of intimacy a year later, at age 25. The original direct path from ego development at age 15 to intimacy at age 25 ($\beta = .46$; $p < .001$; see Figure 1) dropped to a nonsignificant level ($\beta = .17$). Consequently, the indirect effect through relational

identity achievement at age 24 was significant ($b = .25$; 95% CI = .04-.46). Dropping the direct path from ego development at age 15 to intimacy at age 25 resulted in an excellent overall model fit (see Figure 2).

Discussion

Although of considerable importance for our understanding of interpersonal functioning, the theory of Erikson (1968), stating that identity precedes intimacy and that both constructs develop sequentially across the life cycle, was in need of rigorous testing until now. Covering a time span of 10 years, we were able to demonstrate that Erikson's hypothesis of a developmental ordering of identity and intimacy also holds for adolescents and emerging adults in the 21st century. This finding is of great practical importance, as a prolonged transition in identity and intimacy development has been found in many parts of the world (Arnett, 2000, 2004; Arnett & Galambos, 2003).

Developmental Progression in Identity and Intimacy

Our findings suggest that the sample of German youth that was followed over a decade, from age 15 to age 25, was characterized by strong developmental progression in both identity and intimacy. In our sample, there was a substantial increase in ego development from ages 15 to 24. TPR scores in the WUSCT were clearly higher at age 24 compared to age 15, with typical ego stages developing from conformistic and self-aware at age 15 to self-aware, conscientious, and individualistic at age 24. No relationships with partnership status, family status, or SES were found, neither at age 15 nor at age 24. Thus, our findings are in accordance with findings indicating that ego development consistently advances with age (Novy, 1993), typically moving from the conformist stage in adolescence (marked by the ascendance of identification with the group, adherence to group, and acceptance to authority; see Bursik & Martin, 2006) to stabilization in young adulthood at the self-aware and conscientious stages, when alternatives are considered and explored and thoughtful decisions are made (Cohn, 1998).

Furthermore, in our sample, close to the end of emerging adulthood (age 24), there was no indication of a serious postponement of identity development (Côté, 1997), as suggested by Arnett (2004) and Montgomery (2005). Nearly every second emerging adult (44%) was assigned to the achieved status of identity based on Marcia's (1993) classification, characterized by a period of active exploration leading to a firm identity commitment. Thus, in accordance with the tenet of a developmental progression from adolescence to adulthood

(see, for example, Fitch & Adams, 1983), identity achievement in our emerging adult sample was higher, compared to studies on adolescent samples (Crocetti, Rubini, Luyckx, & Meeus, 2008). Having an achieved status was, in our sample, not related to emerging adults' gender, partnerships, family status, or SES.

This overall picture of a positive development is further corroborated by the findings on the intimacy status in partnerships at age 25. In accordance with Orlofsky et al. (1973), most of our sample, 48%, were categorized as having an intimate quality of partnerships (characterized by intimate, well-balanced, and enduring relationship). The remaining emerging adults were in a pseudointimate/stereotype status (characterized by long-term relationships but of superficial nature) or a merger status (trying to compensate anxiousness in the relationships by merger) or were categorized as isolated, for instance, due to the absence of enduring partnerships. Intimacy in emerging adulthood is clearly related to gender and partnership, with females and those having a partner at age 25 displaying significantly higher levels of intimacy. We may speculate whether these overall positive findings in intimacy and identity development are related to the fact that the participants in our sample represent a broad range of occupations and studies, whereas most of the research so far has been conducted on high school and college samples with the consequence of a longer period of exploration in identity and partnerships.

Evidence for Developmental Ordering of Identity and Intimacy

At age 25, intimacy with a partner was strongly predicted by ego development during adolescence, speaking for a clear developmental ordering as suggested by Erikson (1968). This is an important finding, given the enormous changes in developmental context during the last four decades (Arnett, 2004; Arnett & Galambos, 2003; Schulenberg et al., 2004). To the best of our knowledge, none of the existing studies on ego development using Loewinger's (1987, 1998) model and measure revealed such far reaching consequences. Moreover, our findings add to a number of studies showing the adaptive outcomes of ego development (e.g., Hauser, 1991; Lindfors, Elovainio, Sinkkonen, Aalberg, & Vuorinen, 2005) and its impact on partnership quality (Bakken & Huber, 2005; Kerpelman, Pittman, & Adler-Baeder, 2008). Thus, also in this new millennium, ego development in adolescence strongly predicts intimacy in emerging adulthood.

Erikson (1968, 1982) suggested that the idea of developmental ordering holds more for men, whereas identity and intimacy are more concurrently associated for women. As detailed above, research could not consistently

demonstrate that developing a strong sense of identity may be a more complex process for women (Sorell & Montgomery, 2001). Our small sample did not allow us to test truly for gender differences, but initial exploratory analyses suggested that the pathway of ego development in adolescence to intimacy in emerging adulthood holds for both males and females (Kroger, 1997). Maybe again the broad socioeconomic diversity in our sample is responsible for this unexpected finding.

Erikson's hypothesis about sequencing of identity and intimacy were further confirmed by other findings in our cross-lagged model. Concerns of closeness and self-definition coexist throughout adolescence but seem not to overlap or to develop concurrently, as the negative association between ego development and intimacy at age 15 and the zero correlation between ego development and intimacy at age 24/25 in our sample show. Despite the relative stability of intimacy, which underscores the equivalence of both intimacy measures used in this study, these findings are strong evidence for conceptualizations of romantic development in adolescence (Brown, 1999; Connolly & Goldberg, 1999), which state that the early phases of romantic involvement are important steps but that the romantic partner is not yet in the focus and thus true intimacy (as the balance between autonomy and connectedness) has not yet developed. Apparently, earlier stages of romantic involvement lack the capacity of integration, which seems to progress as romantic relations mature to a more enduring, intimate, or affection phase (Brown, 1999).

Relational Identity Achievement as the Integrative Aspect of Identity

In Erikson's theory, the integrative capacity of the self is an important aspect of identity, which allows the individual to progress through the different developmental stages (Erikson, 1982). Support for this integrative capacity as a necessary precursor of intimacy in emerging adult's partnerships comes from the mediation findings of our study. These illustrated that it was not global identity achievement but the integration of identity aspects with relationship aspects (i.e., relational identity) at age 24 that predicted intimacy. Thus, although a strong ego development can be seen as laying the base for the capacity to form mutual, reciprocal relationships, the successful integration of aspects of self and others (Blatt & Blass, 1996) or self in relation (Gilligan, 1982)—that is, relational identity achievement—carries over the effect of ego development in adolescence to intimacy in emerging adulthood. This finding highlights the fact that identity develops in a web of relational contexts and that these experiences need to be integrated in order to establish a mature identity achievement, which may then serve as a precursor of mature

intimacy with a partner. Moreover, these results provide evidence for the idea that different identity measures provide proxies for the same underlying developmental process and show that it is useful and interesting to combine allied identity conceptualizations and measurement strategies. Thus, emerging adults need to learn the skills to navigate through multiple intimate relationships and to integrate identity and relationship relevant information. This is not an easy process, as shown in observations on young men's conversations on romantic relationships (Korobov & Thorne, 2006), in which a quick shifting between intimacy and distancing positions was noticeable.

Finally, it needs to be stressed that, according to Erikson's (1968, 1982) theory, identity development is a process including both a period of exploration and a period of achieving commitments. Marcia (1966) further developed Erikson's theorizing by providing a classification of individuals based on differences in commitment and exploration. Noteworthy, both identity achievement and intimacy are characterized by strong commitments in our emerging adult sample: For most participants, after exploring identity alternatives and despite negotiations and compromises, there seemed to be a conscious decision about who they are and what they valued in their intimate relationship.

Conceptual and Measurement Refinement and Impact on Theories of Emerging Adulthood

The results of our study are remarkably consistent with theory and add to previous cross-sectional work that has found support for Erikson's' theoretical contention. That intimacy development follows rather than precedes identity development was found in our study across different measures, including qualitative and quantitative approaches, and across different time points 10 years apart. Whereas earlier investigations captured a limited range of both constructs and assessed them at one age, we combined qualitative methods, highlighting the viewpoint of the subject (Flick, 2002), with quantitative indicators based on questionnaire data. Using multiple methods to assess the same construct allows capturing more of the complex Eriksonian perspective on identity and intimacy.

Noteworthy, our methods for collecting data on identity and intimacy also show important conceptual linkages and thus allow for a rigorous test of Erikson's tenets. For example, the Orlofsky Interview assessing intimacy is based on the concept that mature intimacy is characterized by a balance between autonomy for the self and connectedness as a couple (Orlofsky, 1993). Similarly, the ego-development scores include self-definitions shaped by the social context (Loevinger, 1998), and the inclusion of domains, for example the

relationship domain in the identity status approach, (Marcia, 2001), further support the idea that significant others influence the process of identity formations and that intimate partnerships are characterized by a dual focus on the self and the relationships.

Our study can inform both theory on identity and intimacy development and add to our understanding of diversity in the transition to adulthood. Furthermore, these findings have important implications for the theory of emerging adulthood (Arnett, 2004) and suggest that commitment to a chosen identity and to partnership do occur after a period of exploration, although the time frame is nowadays longer as it was a decade ago. There are some findings on achievers (Helson & Srivastava, 2001) and individuals with strong commitments (Kunnen, Sappa, van Geert, & Bonica, 2008) in other European and North American samples that support this speculation. However, before we can generalize our findings, won on a monocultural investigation on emerging adults in different developmental contexts across the world, there is an urgent need for multicultural replication (Bornstein, 2002).

Limitations and Implications for Further Research

First, our sample is small and replication is needed in other larger studies, which would allow to test models with latent variables. Despite this, the findings were very much in line with findings of other studies on ego development, identity status, and intimacy status, both with respect to overall level and with respect to gender differences. Second, different measures were used to assess intimacy at ages 15 and 25, which is less than ideal when conducting cross-lagged analyses. Nevertheless, their substantial correlation (i.e., stability of intimacy) underscores their equivalence and use in this study. Strengths of this study, the long-term longitudinal design, the multimethod approach chosen, and adequate analyses that do not rely on assumptions that are usually violated in relatively small samples (e.g., normality), all add to the validity of our findings.

Given these findings, the measurement of ego development provides a useful method for identifying adolescents at risk for the failure to establish or maintain intimate relationships. Intervention studies have shown some success in fostering ego development for those below the self-aware level (see Cohn, 1998, for a review). Individual and group therapy may be a useful vehicle for facilitating the development of those functioning at lower ego levels (Bursik & Martin, 2006). Also, considering the lower levels for boys, workshops aimed at developing perspective-taking skills and fostering tolerance for individual differences might be helpful. Furthermore, the pivotal role of

integrative processes of self and others in a relational identity calls for intervention for those who have difficulties with this task. Finally, even when setting up interventions to improve emerging adults' conceptions of intimate relationship, it is important to consider identity formation because identity might act as an important moderator in the outcomes of such an intervention (Kerpelman et al., 2008).

Studies conducted over the past two decades increasingly note that ethnicity plays an important role in foregoing psychosocial development (Bakken & Huber, 2005). This study has been conducted on a sample of German participants. Although, as mentioned, the findings on ego development, identity status, and intimacy development are very much in line with North American findings, future studies should include ethnic diverse samples, as there is some support for the notion of cultural differences in intimacy (Marshall, 2008), ego development (Bakken & Huber, 2005), and identity development (Côté, 1997). Furthermore, during recent years, progress has been made in conceptualizing the commitment and exploration components of identity more thoroughly, identifying, for example, different types of adaptive and less adaptive moratorium states (Crocetti et al., 2008). Therefore, in future research, we aim to test the same structural model but to rely on newer methods and measurement models, both for intimacy (e.g., Sharabany, 1994) and identity (e.g., Crocetti et al., 2008; Luyckx et al., 2006, 2008).

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