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**Sense of Identity and Meaning Making in Adolescence and  
Emerging Adulthood**

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# Sense of Identity and Meaning Making in Adolescence and Emerging Adulthood

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This study investigated sense of identity and meaning making in adolescence and emerging adulthood. Participants ( $N = 194$ ) wrote autobiographical narratives regarding divergence from norms and answered a questionnaire concerning their sense of identity. The results showed that emerging adults experienced higher identity coherence than adolescents, and that women expressed personal meaning to a higher extent than men in their autobiographical narratives. Also, the study showed that individuals who drew negative meaning from their narrated events experienced higher identity confusion and lower identity coherence than individuals who drew positive meaning. Finally, the study suggests that meaning making is equally salient for individuals who are uncertain about their identity as for individuals who have a more established sense of who they are.

*“In fifth grade I was insulted and bullied /.../ this went on for over almost two years and I kept it all to myself /.../ then I started to tell my mother about everything that had happened /.../. Today I am stronger than I have ever been. Even if it was a hard period of my life I am still grateful, as it has made me the strong person I am today.”*

This quote from an adolescent girl illustrates how individuals may draw meaning from their experiences, even highly negative ones such the one described in the quote. This girl has, from a negative experience, constructed a story of resilience and personal growth that is central to her sense of who she is today. This type of meaning making is considered to be an important part of the process of creating an identity (McLean, Pasupathi & Pals, 2007).

Identity development becomes most current during adolescence and emerging adulthood (Erikson, 1968; Arnett, 2000), which is a time of life when many biological, psychological and social changes take place (Erikson, 1968; Frisé & Hwang, 2006). Adolescence is also the period in life when individuals start to combine their stories of past experiences into an evolving life story (Habermas & Bluck, 2000). The narrative excerpt above is an example of such a story of a past experience. Identity is assumed to take form in the process of putting these stories together (McAdams, 2001).

In order to contribute to the understanding of how individuals create their sense of who they are, their identity, this study has investigated two aspects of identity development: Personal meaning in autobiographical narratives written by adolescents and emerging adults and its relation to their sense of identity. Before going into the design of the study and its results, the introduction of this paper will present an overview of theory and research about identity development and narrative identity.

## Identity Development and a Sense of Identity

Adolescence is the period of life, between childhood and adulthood, when individuals start to struggle with questions about who they are and wish to become (Erikson, 1968). Questions regarding sexuality, values and long-term goals often become current in adolescents' search for a sense of identity (Kroger, 2007). Erikson (1968) defined identity as a sense of sameness and continuity over time and across social roles. In order to create this sense of sameness and to find their own way in life, individuals need to confront previous identifications and integrate them into a coherent whole (Erikson 1968; Frisé & Hwang, 2006). Erikson (1968) illuminated three processes that all play important roles in the formation of identity: biological, psychological and social. He also stressed that even though identity development is most current during adolescence, new identity concerns continue to emerge across the lifespan. Thus, identity development may be considered a lifelong task.

Because of societal changes, a new developmental phase between adolescence and adulthood was proposed by Arnett (2000). He labeled this period *emerging adulthood*. Emerging adulthood involves a prolongation of the search of identity and in finding adult roles. Identity exploration, instability, self-focus, a feeling of being in-between and of many possibilities are all characteristics of this period (Arnett, 2007). Roughly, emerging adulthood applies to the ages of 18-29 (Arnett 2007; Syed & Mitchell 2013). Because emerging adulthood is related to both age and context (Arnett, 2007), in the present study senior high school students (age 16-19) are referred to as adolescents and university students, between the ages 19-29, as emerging adults.

Taken together, identity development is central in both adolescence and emerging adulthood. Erikson's (1968) conceptualization of identity represents the extent of self-awareness, sense of sameness and continuity that the individual experiences over time and situations. One way of studying an individual's sense of identity, based on the theory developed by Erikson, is to investigate the two aspects *identity coherence* and *identity confusion* (Rosenthal, Gurney & Moore, 1981; Schwartz, Zamboanga, Wang & Olthuis, 2009). Identity coherence has been defined as a generalized feeling of unity and self-worth, as well as a sense of purpose and clear direction in life (Schwartz et al., 2009). Identity confusion has been defined as feelings of confusion and instability, as well as a lack of purpose and clear sense of direction in life. Contrary to earlier ideas that identity coherence and identity confusion function as two ends of a continuum (Rosenthal et al., 1981), Schwartz et al. (2009) have demonstrated that they can be considered as two separate constructs. This separation captures how an individual can experience unity and self-worth while also experiencing identity confusion to some extent. It also means that the absence of coherence must not imply confusion, nor that the absence of confusion must imply coherence.

**Sense of Identity in Relation to Age, Gender and Ethnicity.** Since identity is partly created through a social process by which the social context of the individual as well as the expectations from society becomes important for the identity development (Erikson, 1968), it is interesting to explore whether there are differences in sense of identity with regard to age, gender and ethnicity. Hence, research on variations in sense of identity with regard to age, gender and ethnicity will be presented in the following section.

Studies have indicated a positive correlation between age and sense of identity. For example, Rosenthal et al. (1981) found that older students experienced a more

coherent sense of identity than younger students. This is also in line with the developmental perspective of identity (Erikson, 1968, Kroger, 2007), and with long-term longitudinal studies that have confirmed that the identity development continues through emerging adulthood and midlife (Whitbourne & VanManen, 1996; Kroger 2007).

In terms of gender, there are some contradictory findings concerning its relation to sense of identity. In the study of Rosenthal et al. (1981), men were found to experience a more coherent sense of identity compared to women, but several recent studies have not found any evidence in support of this finding (Schwartz et al., 2009; Kling, Wängqvist & Frisé, 2015).

Although the majority of previous research on identity development has been conducted with participants belonging to ethnic majorities (Schwartz et al., 2009), identity research with ethnically diverse samples are rapidly expanding (Kroger, 2007). Findings in previous studies have indicated that there is no difference in sense of identity with regard to ethnicity (Schwartz et al., 2009). However, since the present study was conducted in a different cultural context than previous studies, relations between sense of identity and ethnicity were still considered to be important to explore.

## **Narrative Identity and Meaning Making**

From Erikson's original theory of identity, there are several approaches that have evolved in order to better understand the nature of identity development (Kroger, 2007). The narrative approach to identity has been argued to be the best way to address questions about the process of identity development, such as how youth handle and make sense of different concerns in their lives (McLean & Pasupathi, 2010). Identity is considered to be created through the way that individuals reason about themselves and their past experiences, referred to as *autobiographical reasoning* (Habermas & Bluck, 2000). The stories that individuals construct about their past experiences, referred to as *autobiographical narratives*, are not just stories about what happened to the individual, they also include interpretations and emotional processing of events, through which individuals make sense of past experiences and understand new aspects of the self (Baumeister & Newman, 1994; Habermas & Bluck, 2000).

As identity is considered to be developed through the way that individuals reason about themselves, exploring autobiographical reasoning is a way to better understand the process through which identity is created (McLean et al., 2007). There are several ways that are used to study this aspect. One way to explore autobiographical reasoning is to investigate *meaning making*, which is the extent to which individuals reflect on the personal impact of past experiences, like what they have learned about the self or the world (McLean & Pratt, 2006). In narrative research, meaning making has been investigated in autobiographical narratives about specific events. The studied narratives often concern important memories that are likely to be part of an individual's life story, such as turning-points or self-defining memories (McLean & Mansfield, 2010). These types of narratives focuses on how the individual has changed over time and could therefore be particularly suitable for exploring meaning making (McLean & Breen, 2009). However, it is interesting to investigate meaning making in other forms of autobiographical narratives, in order to explore how individuals make sense of experiences that not necessarily constitute a part of the individual's larger life story.

Thus, in the present study meaning making was investigated in narratives describing an event in which the participants had felt that their view of themselves diverged from what was considered to be expected (i.e. *master-narrative*; Alpert, Marsden, Szymanowski & Lilgendahl, 2014). Meaning making in these stories could be particularly interesting to investigate in relation to sense of identity based on Erikson's (1968) emphasis on the importance of the social context of identity development and his assumption that it is through the interaction with others that adolescents get a sense of who they are.

**Type of Meaning.** Recent studies have indicated that meaning making may not always be beneficial for individuals, but can also have costs (Banks & Salmon, 2013; McLean, Breen & Fournier, 2010; Lilgendahl, McLean & Mansfield, 2013). For example, McLean et al. (2010) found a negative relation between meaning making and well-being for adolescent boys. Whether meaning making is beneficial or not have been shown to depend on multiple interacting factors, including type of event, sociocultural context and individual characteristics such as age, gender and personality (Dunlop & Tracy, 2013; Breen & McLean, 2010; Lilgendahl et al., 2013). Whether individuals engage in positive or negative reasoning about themselves has also been shown to be one of these factors, even though there, to my knowledge, only exist a few studies that have investigated this aspect (Banks & Salmon, 2013). Conclusions that individuals draw about themselves or the world when reflecting on past experiences may not necessarily be positive (Banks & Salmon, 2013; Greenhoot & McLean, 2013). Thus, meaning can be both positive ("This event made me stronger"), negative ("This event is one of the main causes for the long term depression that I experience"), or neutral (Banks & Salmon, 2013). In the present study these different types of meaning were referred to as type of meaning (Greenhoot & McLean, 2013).

Yet, there is a paucity of research investigating the implications of positive and negative meaning making. In the study of Banks and Salmon (2013), psychological well-being was investigated in relation to how individuals linked the narrated event to positive and negative aspects of themselves. This aspect of autobiographical reasoning differ some from meaning making, but can still provide indications of potential implications of negative and positive reasoning about the self. In their study they found a negative relation between well-being and linking the narrated event to negative aspects of the self, as well as a positive relation between well-being and linking the event to positive aspects of the self. However, since the study by Banks and Salmon (2013) is one of few that has investigated positive and negative reasoning about the self, there is a need for further research in order to bring more clarity to the matter of its implications for the individual (Greenhoot & McLean, 2013).

**Meaning Making in Relation to Age, Gender and Ethnicity.** Existing research indicates that meaning making vary with regard to individual characteristics (e.g. McLean & Breen, 2009; Fivush, Bohanek, Zaman & Grapin, 2012). Thus, in the following section, research on variations in meaning making with regard to age, gender and ethnicity will be presented.

There are several findings in the field that imply that meaning making increases with age (McLean, 2005; Habermas & Paha, 2001). For example, Chen, McAnally, Wang and Reese (2012) found that early adolescents (ages 12-14) made less meaning in their narratives than mid adolescents (ages 15-17). Age-related increases in meaning making were also found by McLean and Breen (2009) among adolescents aged 14-18

years. Together, these findings suggest a developmental component in the ability of constructing meaningful autobiographical narratives.

With regard to gender differences in autobiographical narratives, existing research has shown some contradictory findings. For example, previous studies have found gender differences with regard to length of narrative (McLean & Pratt, 2006), narrative content, that is the themes of the narratives (Pratt, Norris, Arnold & Filyer, 1999), and telling functions, that is the reason why a story is told (McLean 2005). However, to my knowledge only one previous study (Fivush, et al., 2012) has found gender differences in meaning making. In that study, women were found to report personal meaning to a higher extent than men in their autobiographical narratives. However, several studies have indicated that there is no difference in meaning making between the genders (McLean, 2005; McLean & Breen, 2009; Thorne, McLean & Lawrence, 2004; Chen et al., 2012).

McAdams and Pals (2006) argued that the stories people construct and the way that people make sense of past events are inevitably influenced by the sociocultural context in which they live. Ethnicity could constitute an important part of an individual's sociocultural context, as it refers to social groups who share a cultural background (Syed & Mitchell, 2013). Thus, this brings up the question whether there are any differences in meaning making with regard to ethnicity. However, no studies, to my knowledge, have yet addressed this matter.

### **Sense of Identity in Relation to Meaning Making**

Several studies have investigated the relation between meaning making and well-being (McLean et al., 2010; Sales, Merrill & Fivush, 2013; Alea & Bluck, 2013). However, to my knowledge there is little research that has investigated the relation between meaning making and sense of identity, even though they are theoretically linked in the way that they both are considered to reflect aspects of identity development (McLean, 2005; McLean & Pratt, 2006; Rosenthal et al., 1981). However, some studies have investigated meaning making in relation to another paradigm of identity development which targets individuals' engagement in identity exploration and commitments (e.g. Kroger & Marcia, 2011). For example, McLean and Pratt (2006) found a negative correlation between meaning making and individuals with a less clear sense of who they are, but no correlation to individuals with stronger identity commitment. In line with these findings the authors suggested that meaning making may be more characteristic in its absence for individuals that are still exploring their identity rather than in its presence for those with a clear sense of who they are. Applying the same principals in relation to sense of identity, this may imply that there is no connection between meaning making and identity coherence, but a negative correlation between meaning making and identity confusion.

Furthermore, to my knowledge, no previous study has explored type of meaning in relation to sense of identity. As implied earlier, there is a need for further studies to examine the importance that type of meaning might have on psychological aspects of the self, not least the implications it might have for an individual's sense of identity.

## Study purpose and Research Questions

The purpose of this study was to investigate sense of identity and meaning making in adolescence and emerging adulthood. The following research questions and hypothesis were addressed in the study:

**1. How does sense of identity relate to age, gender and ethnicity?** In line with indications of age-effects in previous studies (Rosenthal et al., 1981), it was expected that emerging adults would experience higher identity coherence and lower identity confusion than adolescents. As previous studies have not given clear indications of what to expect (Rosenthal et al., 1981; Schwartz et al., 2009; Kling et al., 2015), the investigations of sense of identity in relation to gender and ethnicity were exploratory.

**2. How does meaning making relate to age, gender and ethnicity?** Since earlier research have indicated an age-related effect in meaning making (McLean, 2005; Chen et al., 2012), it was expected that emerging adults would express meaning to a higher extent than adolescents. In line with the majority of existing research, it was not expected to find any difference in meaning making with regard to gender (McLean 2005; McLean & Breen, 2009; Thorne et al., 2004; Chen et al., 2012). However, since the existing research has shown some contradictory findings and also that the present study was conducted in a different cultural context than the previous studies, the analysis of gender differences was still conducted. The investigations of differences in meaning making with regard to ethnic belonging were exploratory as no previous research could offer any hypothesis.

**3. How does meaning making relate to sense of identity?** Since there to my knowledge, are no previous studies that have investigated the association between meaning making and sense of identity, these analyses were exploratory, even though research (McLean & Pratt, 2006) using other models of identity development offer some indications of a relation between meaning making and identity confusion. Also the analyses of the relation between type of meaning and sense of identity were exploratory, as no previous research has offered any indications of what to expect.

## Method

### Procedure

The present study was part of the Gothenburg Research on Ethnicity-related Experiences and identity Narratives (GREEN) which is a collaboration between the University of Gothenburg and the University of Minnesota. One of the main purposes of the project was to explore the cultural context of immigration and the relation between ethnic belonging and identity development among adolescents and emerging adults.

The study consisted of a survey that was distributed to senior high school and university students. A group of researchers within the GREEN-project made the decisions of what measurements to include in the survey. The scales and questions that were only available in English were translated to Swedish and then translated back by a group of researchers, including myself, to ensure that the main contents in the scales and questions remained in the translations. A minor pilot study was conducted with a group of people selected by the researchers to investigate how long the survey would take to fill out and to ensure that the questions were comprehensible.

The survey was administered both on paper and as a survey online. The survey contained background questions that measured variables such as age, gender, ethnicity, family and school adjustment. It also contained open-ended narrative-questions (a master narrative question, a turning point memory and an ethnicity memory) and questionnaires that measured different aspects of identity and psychological well-being (everyday discrimination, life satisfaction, identity distress, self-esteem, psychological functioning and sense of identity). The measures for psychological functioning and sense of identity were each randomized into half of the surveys, the master narrative question was included in all surveys whereas the turning point and the ethnicity memory narrative were randomized into half of the surveys. The survey took about 25-40 minutes to fill out. The master narrative question, which was used in the present study, was presented in the first part of the survey while the identity subscale from the Erikson Psychosocial Inventory Scale (EPSI), which was also used in this study, was presented at the end.

Teachers at senior high schools and university departments in Gothenburg, Malmö and Borås were contacted and informed about the project by email or telephone. The researchers, including myself, visited the school classes that were interested in participating in the study. In the senior high schools the students were given class hours to fill out the survey and the students were thus also able to ask questions to the researchers while filling out the survey. In the university departments the researchers were given 10-15 minutes of the class hours to inform the students about the project and distribute the link to the online survey.

## Participants

The participants were students at the senior high schools and university levels. A total of 720 participants answered some part of the GREEN survey. The inclusion criteria for the present study were that the participants both had responded to the master narrative question and had responded to the EPSI-scale. The university students also had to be within the ages of 19-29 years old. Age was based on an open question where the participants were asked to report their age. Out of the total 720 participants in the project there were 194 participants who met the inclusion criteria for this study ( $M_{age} = 19.4$ ,  $SD = 3.7$ ). Out of the 720 participants, 424 participants were excluded due to randomization or that they did not respond to the EPSI-scale, 84 participants were excluded because they did not respond to the master narrative and 12 participants because they were older than 29. Finally, six participants were excluded from the study due to uncodable master narratives. Examples of uncodable narratives are described below.

Out of the total 194 participants included in the present study, 141 were women and 49 were men. Gender was based on self-definition. One participant defined as "hen" and three participants did not report their genders. Because the groups were so small, participants defining themselves as other than man or woman was assigned a missing value in the analysis. The distribution between men and women in the present study were similar to that of the total 720 students participating in the project (511 women, 197 men, nine unknowns and three hen).

Ethnic belonging was based on self-definition following the instruction; "What ethnicity do you identify with? (Report the ethnicities that you feel are important to



you.)". Participants were classified into three groups: ethnic majority ( $n = 117$ ), ethnic minority ( $n = 15$ ) and mixed ( $n = 54$ ). The mixed group contained participants identifying themselves as being both Swedish and being part of an ethnic minority.

The participants from the senior high schools ( $n = 124$ ,  $M_{age} = 17.1$ ,  $SD = 0.8$ , range 16-19) were enrolled in programs oriented towards social science, economics, behavioral science and psychology. 89 of the senior high school students were women and 32 were men. 70 participants of the senior high school students belonged to the ethnic majority, 13 to ethnic minorities and 37 had a mixed belonging. Four of the senior high school students did not report ethnic belonging.

The students at the universities ( $n = 70$ ,  $M_{age} = 23.5$ ,  $SD = 3.1$ , range 19-29) were studying at departments of social science, pedagogy, medicine and dental medicine. 52 of the university students were women and 17 were men. 47 belonged to the ethnic majority, two to ethnic minorities and 17 had a mixed belonging. Three of the university students did not report ethnic belonging.

## Measures

**Sense of Identity.** The participants completed the identity subscale from the Erikson Psychosocial Inventory Scale (EPSI), which has demonstrated adequate reliability and validity in previous studies (Rosenthal et al., 1981; Schwartz et al., 2009). The 12-item identity subscale contains a *coherence* six-item subscale and a six-item *confusion* subscale (Schwartz et al., 2009). The identity coherence subscale contains items that reflect a sense of self-worth, authenticity, purpose and direction in life, for example "I like myself and I am proud of what I stand for.". Since earlier studies by Schwartz et al. (2009) have indicated that the item "I have a strong sense of what it means to be male/female" may need to be revised or deleted in future versions of the EPSI, the decision was made to rephrase the item for the survey to "I have a strong sense of the meaning of my gender". The identity confusion subscale contains items that reflect feelings of confusion and a lack of clear direction and purpose in life, for example "I have difficulties deciding what to do with my life". The items were measured on a 5-point Likert scale ranging from 1 (*Not accurate at all*) to 5 (*Entirely accurate*).

Little's MCAR test that was conducted in order to examine whether the missing values for both subscales were missing at random, revealed that the missing values for the coherence subscale were not missing at random due to the item "I have a strong sense of the meaning of my gender belonging" ( $p < .01$ ). The decision was therefore made to delete the item from the subscale. The re-test that was conducted with the remaining 5 items, indicated that the missing values were missing at random ( $p = .55$ ). Also, the test for the confusion subscale indicated that the missing values were missing at random ( $p = .13$ ). As no participant showed a missing percentage higher than 20 % for either of the subscales, the decision was made not to exclude any participant due to missing values, instead each participant's mean across available items were used to represent the construct (Newman, 2014). Cronbach's alpha for the five-item coherence subscale was good with a value of .72 (Nunnally, 1978). Also the six-item confusion subscale achieved a good Cronbach's alpha of .72. The subscales were in the analyses used as approximated interval scales.

**Narrative Measures.** The master narrative question from Alpert, Marsden, Szymanowski and Lilgendahl (2014), was used in the study. Some minor adjustments were made in the question in order to adapt it to the Swedish context, such as adding an introductory sentence. In the GREEN survey the question was phrased in the following way:

“A person’s life can be seen as a story. We all have our own personal life story made up of our experiences and interpretations of those experiences. Sometimes stories from our lives don’t completely match the storyline that others (society, culture, family, friends, etc.) expect us to have, or what is considered as appropriate, normal or accepted.

Have you ever felt that your view of yourself (your story) have diverged from what is considered to be normal, expected or accepted? Please describe it in the space provided below, including how it made you feel and its significance to you (if any).

Your story can be about something that was a discrete event, something more general about yourself or your life, or anything in between. Please describe the event as detailed as you can.”

The participants were also asked three follow-up questions: “What did you do to handle, resolve or otherwise make sense of the event?”, “How did you feel when this event occurred?” and “Did this event affect what you think about, or how you deal with difficult problems?”

**Meaning Making.** Meaning making was measured following the principles of McLean and Pratt (2004), which investigate the degree to which individuals learn something about themselves or the world from reflecting on past experiences. The narratives were scored between 0-3. The examples that describe the scores are all taken from the present study. *No meaning* = 0, was assigned to narratives that lacked any reflection of the personal meaning that the event had to the narrator. Responses not containing enough information to be considered as narratives and therefore not enough to be coded as *No meaning*, was classified as *Uncodable*. Examples of these responses were “No comment” and “I can’t think of any event”. *Lesson learning* = 1, was assigned to narratives where the narrator conveyed a concrete lesson learned from the event, often concerning specific behaviors. An example was a woman who learnt never to be the “whistle-blower”, after experiencing a situation where her colleagues didn’t back her up in front of her boss while she was addressing a collective problem. *Vague meaning* = 2, was assigned to narratives in which the narrator expressed personal meaning, but without specifying it. For example saying “The event made me stronger as a person”, without telling how or in what way it made the narrator stronger. In these narratives conclusions are made and it is clear that the narrator has been engaged in serious reflection, but it is not specific enough to be considered an insight. *Insight* = 3, was assigned to narratives where the reflection of the personal meaning of the event was clear and the narrator expressed gaining insight from the event, and these insights applied to greater areas of the narrators life than lessons. An example was a woman who described an event where she started dating a man of whom her friends did not approve. In the narrative she expressed how this event had made her start questioning herself and

her beliefs. Through this process she experienced a personal growth along with the insight that she should always do what feels best to her, and not only do things for the sake of others. In her narrative it was evident that she had gained insight that applied to larger areas of her life, as the meaning made did not just apply to situations similar to the one in the described event.

To ensure reliability of the coding of meaning making, a second researcher rated a subsample of 20 narratives. The reliability was tested with exact agreement in percent and a linear weighted kappa (Cohen, 1968). The exact agreement between the first and second rater was 75 % with a good linear weighted kappa of .70 (Fleiss, Levin, & Paik, 2003). In the analyses meaning making was used as an approximated interval scale, which is in line with how this variable has been used in previous studies (McLean & Pratt, 2006; McLean & Breen, 2009; McLean et al., 2010).

**Type of Meaning.** In the present study type of meaning; positive, negative or neutral; was coded using an adapted version of the coding scheme applied by Banks and Salmon (2013). Type of meaning was coded for narratives containing vague meaning and insight ( $n = 57$ ). Lesson learning was not coded for type of meaning due to that lesson learning often focuses on specific behavior. Common for both vague meaning and insight, on the other hand, is the indication that the narrator has been engaged in serious reflection on issues that applies to greater areas of the narrator's life (McLean & Pratt, 2004). The categories that were used in the coding are described with examples from the present study. *Negative meaning* = 1, was assigned to narratives that only contained negative meaning, such as "This event affected me in a way that made me more unwilling to trust others.". *Positive meaning* = 2, was assigned to narratives that only contained positive meaning, for example "I became stronger and I started to listen to my own opinions.". *Neutral meaning* = 3, was assigned to narratives that contained neutral meaning, like "I have realized that there are things that one just can't know as a child.". *Mixed meaning* = 4, was assigned to narratives that contained both positive and negative meanings, such as "After this event I have trouble trusting people, I cry more easily and find negative things in my life. But I have also become stronger as a person and can handle things in a more mature way". Narratives that contained meanings in which it was unclear whether to code for positive, negative, neutral or mixed meanings, were assigned missing values. In order to ensure reliability, a second researcher rated a subsample of 15 narratives. The exact agreement between the first and second rater was 73 %, with a Cohen's kappa within the span of fair to good of .63 (Fleiss et al., 2003). The inter-reliability test in the present study showed slightly lower results compared to previous studies (Banks & Salmon, 2013).

## Data Analysis

In order to investigate variations with regard to age, gender and ethnicity, means of meaning making, identity coherence and identity confusion were all compared using independent sample *t*-tests. Equal variances across the groups could be assumed, except in the analysis of variations in meaning making regard to gender. The *t* value and degrees of freedom were therefore adjusted in this analysis. Pearson product-moment correlation coefficients were conducted in order to assess the relationship between sense of identity (identity coherence and identity confusion) and meaning making. Finally, means of identity coherence and identity confusion were compared between participants

with regard to type of meaning using one-way ANOVA. Equal variances across the groups could be assumed. The alpha level in all analyses was set to  $p < .05$ .

## Results

### Sense of Identity in Relation to Age, Gender and Ethnicity

Descriptive statistics (means and standard deviations) for identity coherence and identity confusion with regard to age, gender and ethnicity are reported in Table 1. Independent-samples  $t$ -tests were conducted in order to test the hypothesis that emerging adults would experience higher identity coherence and lower confusion in comparison with adolescents. Consistent with the first part of the hypothesis, the test revealed that emerging adults experienced a significantly higher level of identity coherence than adolescents  $t(192) = -2.68, p < .01, \eta^2 = 0.04$ . The effect was small indicating that 4 % of the variance in identity coherence could be explained by age-group. However, no significant difference in identity confusion was found between the two groups.

No significant difference in identity coherence and identity confusion was found with regard to either gender or ethnic belonging.

Table 1

*Means and standard deviations for identity coherence and identity confusion with regard to age, gender and ethnicity.*

Sample categories	Identity coherence <i>M (SD)</i>	Identity confusion <i>M (SD)</i>
<b>Age</b>		
Adolescents ( $n = 124$ )	3.6 (0.7) <sup>a</sup>	2.6 (0.8)
Emerging adults ( $n = 70$ )	3.9 (0.7) <sup>b</sup>	2.4 (0.7)
Total ( $n = 194$ )	3.7 (0.7)	2.5 (0.8)
<b>Gender</b>		
Women ( $n = 141$ )	3.7 (0.7)	2.6 (0.7)
Men ( $n = 49$ )	3.9 (0.7)	2.4 (0.8)
Total ( $n = 190$ )	3.7 (0.7)	2.5 (0.8)
<b>Ethnicity</b>		
Ethnic majority ( $n = 118$ )	3.7 (0.8)	2.4 (0.7)
Ethnic minority ( $n = 15$ )	3.7 (0.6)	2.7 (0.7)
Mixed belonging ( $n = 54$ )	3.8 (0.7)	2.6 (0.8)
Total ( $n = 187$ )	3.7 (0.7)	2.5 (0.8)

*Note.* Values and ratings ranged from 1-5. Higher means indicate higher identity coherence and higher identity confusion. Means with different subscripts differed sig. of  $p < .01$ .

## Meaning Making in Relation to Age, Gender and Ethnicity

Descriptive statistics (means and standard deviations) for meaning making with regard to age, gender and ethnicity are reported in Table 2. In order to test the hypothesis that emerging adults would express meaning to a higher extent than adolescents, an independent-samples *t*-test was conducted. Contrary to the hypothesis, the test showed no significant difference between the two age groups.

An independent-samples *t*-test was also conducted to measure the difference in meaning making between women and men. Again, the hypothesis of the present study was contradicted by the test results. The test revealed that women expressed a significantly higher degree of meaning making compared to men,  $t(112.29) = 3.38$ ,  $p = .001$ ,  $\eta^2 = 0.06$  (*t* values and degrees of freedom were adjusted since Levene's test showed that equal variances could not be assumed). The effect was moderate indicating that 6 % of the variance in meaning making could be explained by gender.

No significant difference in meaning making was found with regard to ethnic belonging.

Table 2

*Means and standard deviations for meaning making with regard to age, gender and ethnicity.*

Sample categories	Meaning making <i>M (SD)</i>
<b>Age</b>	
Adolescents ( $n = 124$ )	0.9 (1.0)
Emerging adults ( $n = 70$ )	0.9 (1.0)
Total ( $n = 194$ )	0.9 (1.0)
<b>Gender</b>	
Women ( $n = 141$ )	1.0 (1.1) <sup>a</sup>
Men ( $n = 49$ )	0.5 (0.8) <sup>b</sup>
Total ( $n = 190$ )	0.9 (1.0)
<b>Ethnicity</b>	
Ethnic majority ( $n = 118$ )	0.9 (1.0)
Ethnic minority ( $n = 15$ )	0.7 (0.9)
Mixed belonging ( $n = 54$ )	0.8 (1.1)
Total ( $n = 187$ )	0.9 (1.0)

*Note.* Values and ratings: 0 = No meaning, 1 = Lesson learning, 2 = Vague meaning, 3 = Insight. Means with different subscripts differed sig. of  $p < .001$ .

## Sense of Identity in Relation to Meaning Making

In order to test the relation between meaning making (0-3) and sense of identity, Pearson product-moment correlation coefficients were computed. No significant correlation was found between meaning making and either identity coherence or identity confusion. These correlations were also conducted separately for adolescents and emerging adults, and for men and women, as there had been significant difference

in sense of identity with regard to age and in meaning making with regard to gender. However, no correlation between sense of identity and meaning making was found in neither of these analyses.

**Type of meaning.** The descriptive statistics (means and standard deviations) for identity coherence and identity confusion with regard to type of meaning are reported in Table 3. The relation between type of meaning and sense of identity was tested with one-way ANOVA. The test showed a significant difference in identity coherence between the different types of meanings  $F(3,54) = 4.08, p = .01, \eta^2 = .19$ . The effect was large indicating that 19 % of the variance in identity coherence could be explained by type of meaning. Scheffe's post hoc test that was conducted in order to confirm and locate the differences, showed that participants with positive meaning experienced significantly higher levels of identity coherence compared to participants with negative meaning ( $p = .02$ ). No difference was found in identity coherence between participants with mixed meanings and positive meaning. Nor were any difference in identity coherence found between neutral meaning and either positive or negative meaning.

In terms of identity confusion, significant differences were also revealed with regard to type of meaning  $F(3, 54) = 6.08, p < .01, \eta^2 = .25$ . The effect was large indicating that 25 % of the variance in identity confusion could be explained by type of meaning. Scheffe's test showed that both the participants with negative meaning ( $p = .02$ ) and mixed meanings ( $p = .02$ ) experienced significantly higher levels of identity confusion than participants with positive meaning. No difference was found in identity confusion between neutral meaning and either positive or negative meaning.

Table 3

*Means and standard deviations for identity coherence and identity confusion with regard to type of meaning.*

Sample categories	Identity coherence <i>M (SD)</i>	Identity confusion <i>M (SD)</i>
Type of meaning		
Negative ( $n = 9$ )	3.1 (0.5) <sup>b</sup>	3.2 (0.5) <sup>b</sup>
Positive ( $n = 33$ )	3.8 (0.6) <sup>a</sup>	2.4 (0.6) <sup>a</sup>
Neutral ( $n = 9$ )	3.7 (0.5)	2.8 (0.5)
Mixed ( $n = 7$ )	3.3 (0.8)	3.3 (0.9) <sup>b</sup>
Total ( $n = 58$ )	3.6 (0.7)	2.7 (0.7)

*Note.* Values and ratings ranged from 1-5. Higher means indicate higher identity coherence and higher identity confusion. Means with different subscripts differed sig. of  $p < .05$ .

## Discussion

The purpose of this study was to investigate meaning making in adolescence and emerging adulthood and its relation to sense of identity. Overall the findings in the present study indicate that emerging adults experience higher identity coherence than adolescents, and that women express personal meaning to a higher extent than men in their autobiographical narratives. The results showed no relation between sense of

identity and meaning making, but indicate that individuals who draw negative meaning from past events experience higher identity confusion and lower identity coherence than individuals who draw positive meaning. Below, the implications of the results from each research question will be discussed in relation to previous research.

### **Sense of Identity in Relation to Age, Gender and Ethnicity**

The first research question addressed the relation between sense of identity and age, gender and ethnicity. While no hypothesis was set for either the relation to gender or ethnicity, it was expected that emerging adults would experience higher identity coherence and lower identity confusion than adolescents. The study showed that identity coherence was more present in the lives of emerging adults, while both adolescents and emerging adults experienced the same extent of identity confusion. These results suggest that the feelings of self-worth and purpose in life that signify identity coherence, increases in emerging adulthood. The findings are also in line with the developmental perspective of identity and the assumption that identity growth increases with age (Erikson, 1968; Kroger, 2007). The results also suggest that the feelings of confusion and loss of direction in life that signify identity confusion, are likely to be equal across adolescence and emerging adulthood. That adolescents and emerging adults experienced the same extent of identity confusion could possibly be related to the delay in the search of identity that has been permitted in the period of emerging adulthood. It would support the claim made by Arnett (2007) that emerging adulthood is a period of identity exploration, instability, self-focus and feelings of being in-between. Thus, in the search of identity, the feelings of being confused may remain through emerging adulthood. At the same time, the feelings of self-worth and purpose in life that identity coherence involves, may also increase. This suggestion would support the claim made by Schwartz et al. (2009) that identity coherence and identity confusion can be considered as two separate constructs. It could be that emerging adults have come further in their search of identity and therefore experience more feelings of unity and purpose in life than adolescents, even though they still experience identity confusion to the same extent.

In terms of gender differences, the results showed that both identity coherence and identity confusion, were equal across genders. These findings are contradictory to the results by Rosenthal et al. (1981) that found men to experience a more coherent sense of identity compared to women in adolescence. However, the findings in the present study are supported by more recent studies (Schwartz et al., 2009; Kling et al., 2015). Thus, it may be that the identity development for women and men have changed over time and evolved into a more similar course across genders.

Finally, the results also showed that sense of identity was equal across ethnicities. These results could be viewed as a contribution to an evolving research field that addresses ethnicity in relation to identity development (Schwartz et al., 2009; Syed & Mitchell, 2013). The findings imply that individuals belonging to ethnic minorities, as well as individuals belonging to both an ethnic minority and the ethnic majority, experience the same extent of identity coherence and identity confusion as individuals belonging to the ethnic majority. This is also in line with existing research (Schwartz et al., 2009). However, a limitation in the present study was that there were few

participants who belonged to ethnic minorities, which may have caused a less representative outcome in the study.

### **Meaning Making in Relation to Age, Gender and Ethnicity**

The second research question addressed in the study concerned the relation between meaning making and age, gender and ethnicity. While no hypothesis was set with regard to ethnicity and no differences were expected to be found between genders, it was expected that emerging adults' autobiographical narratives about events regarding divergence from norms would include higher degree of meaning making than adolescents'. Contrary to the hypothesis of an age-related effect, the study showed that adolescents and emerging adults reflected on personal meaning to the same extent in their autobiographical narratives. Opposite to the indications from previous research, this finding implies that there is no age-related increase in meaning making between adolescence and emerging adulthood. However, a major part of the existing research that have found age-related increases in meaning making, have been conducted with participants in early and mid-adolescence (i.e., ages 11-16; Berk, 2007). For example, in the study of Chen et al. (2012) meaning making increased only between early adolescence (ages 12-14) and mid adolescence (ages 15-17), whereas there were no significant difference in meaning making between mid and late adolescence (ages 18-21). This might be an explanation to why there were no differences between adolescents (ages 15-19) and emerging adults (ages 19-29) in this study. Together, the findings in the present study along with those of previous studies, may suggest that the most important developmental change in meaning making takes place during early and mid-adolescence.

Contrary to the hypothesis of no gender differences, female adolescents and emerging adults reported personal meaning to a higher extent than males in their autobiographical narratives. This finding suggests that women, compared to men, may have a higher tendency to reflect on personal meaning and draw more general conclusions about themselves or the world when reflecting on past experiences. This suggestion is in line with the study by Fivush et al. (2012), but is not supported by the majority of the existing research on gender and meaning making. Two possible explanations for the gender differences found in the study will be discussed.

First, the difference between genders could possibly be due to that women in general engage more in their schoolwork than men (Jakobsson, 2000). At least for the senior high school students that filled out the survey during class hours, school motivation might have also affected the effort that they put into writing the autobiographical narratives. The narratives written by females might therefore have had the tendency of being more elaborated and more thought through than males'.

Second, the gender difference may be explained by the way that women and men are socialized into reflect on past experiences. It has been argued that, as a result of gender-differentiated interactions in childhood, women and men differ in their ways to integrate and make sense of emotional experiences (Fivush & Buckner, 2000). For example, in the study of Fivush and Buckner (2000) parents differed in their way of talking about emotional experiences with daughters and sons, talking more about sadness with daughters and anger with sons. Furthermore, girls have been showed to talk more about emotional aspects of past experiences than boys (Fivush, Brotman,



Buckner & Goodman, 2000; Fivush & Buckner, 2000). Thus, girls might develop a more elaborate way of processing emotional experiences than boys. This claim is supported by findings in the mentioned study by Fivush et al. (2012). They found that female adolescents told more coherent and elaborative narratives than did males. The present study together with the findings of Fivush et al. (2012), imply that the gender difference also is illustrated in the way that adolescents and emerging adults reflect on personal meaning of past events, suggesting that women may be more self-reflective about their past experiences than males. Still, as previous research have been inconsistent regarding gender differences in meaning making, there is a need for further research in order to understanding the association between meaning making and gender.

Finally, no difference in meaning making was found with regard to ethnic belonging. This result indicates that ethnic belonging does not have an implication for the individual's tendency to reflect on personal meaning of past experiences. However, due to the fallible representation of ethnic minorities as previously discussed, further research need to confirm this finding in order to make general conclusions.

### **Sense of Identity in Relation to Meaning Making**

The third and last research question investigated the relation between sense of identity and meaning making. No hypothesis was formulated either for the relation between sense of identity and meaning making or between sense of identity and type of meaning, as no previous research could offer any hypothesis. The results showed that there was no relation between identity coherence and meaning making, nor any relation between identity confusion and meaning making. These findings suggest that the degree to which adolescents and emerging adults reflect on personal meaning in their autobiographical narratives do not reflect their sense of identity. Since both sense of identity and meaning making could be considered to reflect aspects of an individual's identity development (McLean, 2005; McLean & Pratt, 2006; Rosenthal et al., 1981), it is surprising that they were not related.

The results in the present study thus indicate that degree of meaning making is not a good indication of an individual's sense of identity. It could be that, as meaning making constitutes a part of the process by which identity is created (McLean et al., 2007), its relation to identity development might be independent of where in that process the individual is. That is, meaning making might be equally salient for individuals trying to figure out who they are as it is for individuals who have established this sense of identity. This idea might also provide another explanation to why no age-related differences in meaning making were found in the study. Under the assumption that the relation between meaning making and identity development is independent of where in the process the individual is, an adolescent and an emerging adult could report personal meaning to the same degree, even if they are in separate stages of identity development.

Based on the idea of meaning making as a process relevant to all stages of identity development, the lack of connection between meaning making and sense of identity may be more comprehensible. The results suggest that meaning making may be equally present and relevant independently of individuals' sense of identity. Thus, an individual who experience a lot of identity confusion may be equally engaged in making meaning of past experiences as an individual who has a more coherent sense of identity.

Another aspect that may be related to this reasoning is the assumption that some insights may be more established than others (Pasupathi, 2013). Pasupathi (2013) has illuminated that the degree of meaning making does not reveal the stability of the insights or lessons gained by the narrator. She claimed that autobiographical narratives only capture a snapshot of a more extended meaning making process. This would imply that an individual who is in the process of trying out different ways of making sense of past experiences could report the same degree of meaning as an individual in which a certain meaning is well-established. It could, however, be possible that individuals who are in the beginning of this process experience higher identity confusion compared to individuals in whom the personal meanings are more established. Likewise, identity coherence might be more present in the lives of individuals in which insights are more stable. This potential relation between sense of identity and stability of insights could, however, not be determined from the present study. In order to investigate these hypotheses, the stability of the insights reported in the narratives would have to be estimated in some way. One possible way of doing that could be by letting the participants specify the timing of the event (Pasupathi, 2013). Even though that would not necessarily give a clear idea of the stability of the insights, it could indicate whether the insights are likely to be established or not. Thus, questions regarding the stability of insights, as well as its relation to sense of identity, may be some directions for future research.

Both the idea of meaning making as a process relevant in all stages of identity development, as well as the assumption that insights can vary in stability, complicate the use of meaning making as a methodological measurement. Additionally, the fact that there can be different types of meanings, which in earlier studies have been shown to have different implications for well-being and psychological functioning (Banks & Salmon, 2013), makes it more complicated to use degree of meaning making as a measurement without also taking this into account.

The results of the present study, actually, indicate that type of meaning also have implications for an individual's sense of identity. The findings showed that individuals who drew negative meaning from past events experienced higher identity confusion and lower identity coherence, than individuals who drew positive meaning. One way of understanding this could be that negative insights about the self or the world may influence a person's sense of unity and direction in life in a negative manner, thus generating feelings of confusion and loss of purpose in life. Another way of interpreting the findings could be that individuals with high identity confusion may think about themselves in more negative terms and therefore be more inclined to draw negative conclusions about the self or the world when reflecting on past experiences.

The present study has provided some pieces of evidence that imply that negative meaning in autobiographical narratives is associated with negative conditions in form of identity confusion and that positive meaning is associated with more positive conditions in form of identity coherence. However, researchers have argued that there is a more complex association than just the assumption that negative meaning is associated with negative outcomes and positive meaning always is associated with positive outcomes (Pasupathi, 2013). Studies in which positive meaning have been associated with negative outcomes support this claim (McLean et al., 2010; Greenhoot, Sun, Bunnell & Lindboe, 2013). Together, existing research and the findings from this study shine light on a complexity regarding positive and negative reasoning about the self, thus there is

still a need for further research in order to bring more clarity to its consequences for the individual.

## **Limitations and Future Directions**

The result from the present study should be interpreted with an awareness of its limitations. Parts of the limitations are related to this study being part of a pilot study, for example the lack of equal distribution among ethnic belongings in the sample. As earlier noted, there were few participants in the study who belonged to ethnic minorities. Future research should aim at a more equal distribution over ethnic belonging in order to further explore the variations in sense of identity and meaning making with regard to ethnicity. Also, it may be of value to provide the possibility for participants to write their narratives in their native language, since writing in a second or third language might affect the quality and possibly also the degree of meaning making in their autobiographical narratives. Another limitation regarding the sample, was that the study only targeted senior high schools and universities, which meant that all emerging adults were university students. Since the lives of individuals within the university context may differ from those outside this social context (Blustein et al., 2002), it may be of value for future research to also include individuals outside the university context in order to further investigate sense of identity and meaning making in emerging adulthood.

Apart from the representativity of the participants, limitations were also associated with the use of meaning making as a methodological measurement. First, in the present study meaning making was used as an approximated interval scale for the sake of comparing the results to previous studies. However, given that meaning making rather has the character of an ordinal scale, it could be argued that the usage of nonparametric tests would have been a more appropriate methodological choice. Second, as has been illuminated by Pasupathi (2013), meaning making captured in individuals' autobiographical narratives in studies such as this one, is assumed to indicate the participants' meaning making tendency overall. It could be questioned if that really is the case. It might be misleading to handle the observed meaning making as the participants general tendency to reflect on personal meaning of past experiences. Rather, it could be that these studies capture event specific meaning. Some types of events, like mortality events and relationship events, have been showed to encourage to more meaning making than other events (Thorne et al., 2004). A limitation in the present study was that it did not take this aspect into account. Type of event may not least have been of value to include in the analysis of sense of identity in relation to type of meaning. The inclusion of further variables, such as type of event, might bring some more clarity to the complex relation between positive and negative reasoning about the self and its' implications for the individual's psychological aspects of the self.

Finally: a commentary about the coding manual and the use of the master narrative question. Previously the coding manual have mainly been used when coding turning point narratives (McLean & Pratt, 2004), which differ some from the deviations stories that were used in the present study. The deviations stories may be more complicated to code for meaning since the participants are asked to describe an event where they felt they deviated from others, which may result in stories that are more focused on the description of that event and their relation to others rather than how the

event relates to the self. Thus, the connections to the self and the meaning drawn from the event might be less explicit in master narratives than in narratives focused on turning points. This could also explain why the inter-rater reliability test for type of meaning showed lower results compared to previous studies (Banks & Salmon, 2013). Still, the present study showed that the coding manual is applicable to master narratives and that meaning within these narratives also may be of value to investigate. The results of this study imply that positive conclusions about the self or the world attained from reflecting on events where individuals have diverged from normality is associated with higher identity coherence and that negative conclusions is associated with higher identity confusion.

## Conclusion

The results from this study of sense of identity and meaning making in adolescence and emerging adulthood, indicate that emerging adults experience higher identity coherence than adolescents, and that women have a higher tendency to reflect on personal meaning than men in their autobiographical narratives. The findings suggest that meaning making may be equally salient to individuals trying to figure out who they are, as it is for individuals who have a more coherent sense of identity. Thus, the degree of meaning making does not seem to influence an individual's sense of identity, but whether the meaning made by the narrator is positive or negative does however seem to matter. Individuals who drew negative meaning from past events experienced higher identity confusion and lower identity coherence than individuals who drew positive meaning. Taken together, the results from this study contribute to a broader understanding of meaning making and how meaning making and type of meaning relate to adolescents' and emerging adults' sense of identity.

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