## ADOLESCENT IDENTITY FORMATION: A SWEDISH STUDY OF IDENTITY STATUS USING THE EOM-EIS-II

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### ABSTRACT

The aim of this study was to examine ego identity status among Swedish adolescents using the EOM-EIS-II. Identity status scores and distributions were examined for 222 (108 female, 114 male) Swedish high school students. Identity status differences were found between genders. There was a greater likelihood of female adolescents being categorized as moratoriums than were males, and there was a greater likelihood of males being categorized as diffusions than were females. Statistically significant differences were found between genders on the following subscales: moratorium, foreclosure, and diffusion. No statistically significant differences were found between females and males on the identity achievement subscale. To achieve a preliminary construct validation of the results from the EOM-EIS-II, four of the 222 participants were also assessed using Marcia's identity status interview. A fairly good accordance between the interview assessment of identity status and the EOM-EIS-II assessment were found. Interview results showed differences between the interviewers on each subscale (IA, M, F, and D). The same differences were detected on three of four subscales when assessing these individuals' identity statuses using the EOM-EIS-II.

The concept of identity has been approached in many different ways. Several theorists have offered developmental models of identity, e.g., Erik H. Erikson, Jane Loevinger, and Peter Blos (Kroger, 1996). The present study of adolescent identity is based on the Marcia ego identity status paradigm (Marcia, 1996, 1993a). Since the concept of identity status was introduced in 1966, Marcia's ideas have generated a great number of studies (Kroger, 2000). Researchers from different countries have studied identity status in populations, ranging from early adolescence to late adulthood (Marcia, 1993a). Various methods and instruments have been used in identity status research, but the instrument used in the present study is the most developed and validated question-

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ADOLESCENCE, Vol. 40, No. 158, Summer 2005 Libra Publishers, Inc., 3089C Clairemont Dr., PMB 383, San Diego, CA 92117 naire for measuring identity status: the Extended Objective Measure of Ego Identity Status II (EOM-EIS-II) (Adams, Bennion, & Huh, 1989; Marcia, 1993a).

Marcia's ideas spring from Erikson's theory of psychosocial development. Erikson (1959) described eight psychosocial stages of development, each stage consisting of both physical and psychological development set in a social context. Each stage represents different developomental tasks that we all face during a lifetime, with identity as the primary different developmental tasks that we all face during a lifetime, with identity as the primary psychosocial task of adolescence (Erikson, 1959, 1969). Erikson viewed identity as built upon childhood identifications but as being more than the sum of these. He describes the process of identity formation as being built upon the childhood processes of introjection and identification-that during childhood we incorporate the image of our parents (or other significant relations) and their roles, values, and beliefs. According to Erikson our future identity formation requires such introjects and identifications. However, it is not until the individual is able to choose some of those childhood identifications, and discard others, based on her or his interests and values, that identify formation can begin. Erikson stresses that all the necessary ingredients for an identity are not present until adolescence. At that point in life, great physioslogical and cognitive changes coincide with growing social expectations. Identity, for Erikson, is the individual's personal organization of experiences of biological and psychological development in relation to the recognitions and regulations the individual receives in the social context.

Marcia developed the identity status paradigm in an effort to operationally define and empirically investigate Erikson's construct of identity. In interview studies, Marcia found that the participants had different ways of arriving at an identity, and that they displayed diverse outcomes of identity formation (Marcia, 1993a, 1994). The differences found could be explained with reference to two important processes involved in the formation of an identity, namely exploration and commitment. Based upon the criteria of these processes, Marcia formulated four different identity statuses that describe different ways of forming an identity: Identity Achievement, Moratorium, Foreclosure, and Identity Diffusion. Over the years much information about significant behavioral, cognitive, affective, and attitudinal traits associated with the different identity statuses have been gathered. The following brief description of each status is based on findings reported in Ego Identity-A Handbook of Psychosocial Research (Marcia, 1993c). Identity-achieved individuals have gone through a period of exploration and have made identity-defining commitments. They are assumed to have successfully resolved the psychosocial task of adolescence. In in-

terviews identity-achieved adolescents seem thoughtful and introspective, and able to articulate how they have made their choices and why. From experimental studies we know that identity-achieved individuals perform well under stress, reason at high levels of moral development, and score high on measures of autonomy. No significant differences in intelligence have been determined between the identity statuses, but identity-achieved individuals are shown to be more creative and rational than other statuses. Moratoriums are currently in the process of exploration and commitments are either vague or absent. These individuals actively struggle to arrive at commitments. However, moratoriums' struggle to achieve identity is an ambivalent one. They alternate between rebellion and conformity. Empirical studies have shown that moratoriums are more anxious than the achieved or foreclosed individuals. Foreclosures are, on the other hand, the least anxious of the statuses. In interviews they strike one as goal-directed and well behaved, although inflexible and defensive. They are strongly committed, but their commitments are not the result of exploration. Foreclosed persons have adopted goals, values, and beliefs from parents or other authority figures without much critical thought. It has been experimentally determined that foreclosures are authoritarian, approvalseeking, and somewhat rigid in their thought processes. The fourth identity status is diffusion. Marcia (1994) explains that there are subtypes of all identity statuses. However, the diffusions have proven to be the most heterogeneous group. Identity-diffused individuals may have undergone some explorations, but they seem to be meandering more than actively exploring. Lack of commitment is characteristic of these individuals. Some diffusions have a "playboy/playgirl" attitude to life; they seem to drift aimlessly and carefree. Others may show severe psychopathology exemplified by social isolation and unhappiness. Interviews with diffusions tend to be short. Unlike the other statuses they do not have much to say about the subjects in an identity status interview. On experimental measures, identity-diffused individuals have the most difficulty thinking when under stress and use less complex cognitive styles than do moratoriums and achievements. Research on identity status has repeatedly shown that persons who have undergone the exploration-commitment process are more relationally competent and mature than those who have not (Marcia, 1993b). The identity statuses are generally regarded as representing different levels of sophistication. Diffusion is considered the least advanced of the statuses, followed by foreclosure, moratorium, and identity achievement (Adams et al., 1989). Furthermore, the developmental assumptions are that the amount of identity achieved by individuals increases with age, and that relatively few late adolescents should be diffused (Adams et al., 1989; Waterman, 1993a).

In an effort to operationalize Marcia's identity statuses, Adams et al. (1989) developed the Objective Measure of Ego Identity Status (OMEIS), which consists of 24 items covering three content areas (occupation, religion, and politics). The OMEIS is a self-report measure wherein the respondent is asked to assess the extent to which she/he agrees or disagrees with the 24 statements. Adams and Grotevant later extended this instrument by adding four interpersonal content areas (friendship, sex roles, recreation, and dating) and one additional ideological content area (philosophical lifestyle) creating the Extended Objective Measure of Ego Identity Status (EOM-EIS) (Adams et al., 1989).The extended instrument contains 64 items. Another version was made by Bennion and Adams as they rewrote various items of the instrument to clarify certain ambiguities (Adams et al., 1989). The resulting measure was called the EOM-EIS-II. This measure was chosen for the present study.

The influence of culture and society on the development of identity has been emphasized in identity theory from the beginning. As described briefly above, Erikson (1969) regarded identity formation as a process of mutual regulation between the individual and society. Yet. only a few studies have attempted to investigate the impact of social context on the process of identity formation (Danielsen, Lorem, & Kroger, 2000). Consequently, we know very little of how various contexts function to support or impede identity formation (Kroger, 2000). For example, the relationship between identity status and type of education has received only modest attention (Adams et al., 1989). On the other hand, many cross-cultural studies on identity have been conducted (Marcia, 1993c). Jensen, Kristiansen, Sandbekk, and Kroger (1998) and Stegarud, Solheim, Karlsen, and Kroger (1999) examined differences in identity development between Norwegian and United States late adolescents, while Waterman (1999) compared identity development in the Netherlands with results gathered from different United States samples.

Erikson's analysis of the relationship between identity and gender has received considerable criticism (Kroger, 1996). Erikson pointed out differences in psychological functioning between the sexes (Erikson, 1969); however, whether he therefore hypothesized that there are gender differences in identity formation seems to be debatable (Waterman, 1993a). Nevertheless, his view of female identity has been both theoretically and empirically challenged over the years. (For a brief description of such critiques see (Kroger, 1996). In the early years of empirical identity research, female identity development was neglected. For example, when Marcia conducted the original identity status interviews, he had only male participants and the content areas chosen for the interviews were thought to be particularly important to men (Marcia, 1966). Since then, new content domains have been developed to enable identity status assessments of both female and male subjects (Waterman, 1993a). Identity differences between genders has been examined using both interview and questionnaire methods. In sum, research on gender differences in identity development has produced conflicting and varied results (Adams et al., 1989; Matteson, 1993a).

The purpose of this study is to examine ego identity status among Swedish adolescents using the EOM-EIS-II.

### METHOD

### **Participants**

Questionnaire study. The EOM-EIS-II was completed by 222 Swedish students (108 females, 114 males, M age = 18.1 years) from five different high schools in Gothenburg, Sweden. Theoretical high school programs, mainly focused on preparing students for further education, as well as vocational high school programs that usually lead to employment after graduation, were represented. All the high school students that were approached agreed to participate in this study and filled out a questionnaire. However, one of the participants was not able to respond to more than half of the items in the time provided due to reading difficulties. This student's results were not included in the data analysis and were omitted from further consideration in this study.

Interviews. Four of the respondents to the EOM-EIS-II (2 females, 2 males) were also interviewed. They were chosen from a list of volunteers, and the interviewers had different identity status profiles on the paper-and-pencil test. All four identity statuses (identity achievement, moratorium, foreclosure, and diffusion) were represented.

### Instrument

The EOM-EIS-II. The high school students' ego identity statuses were assessed by means of the Extended Objective Measure of Ego Identity Status-II (EOM-EIS-II), a paper-and-pencil test developed by Adams, Bennion, and Huh (1989). In this study, two content domains of the EOM-EIS-II were excluded (dating and religion) to make the test more suitable for a Swedish population. There is reason to believe that those content areas are not right for identity studies in Sweden (at least not in their current form). Therefore, 16 items in the original EOM-EIS-II were excluded from the test used in this study. The presence or absence of exploration and commitment were assessed within the following areas: occupation, politics, life style, recreational choices, friendship, and gender roles. Each of the four identity statuses—diffusion (D), foreclosure (F), moratorium (M) and identity achievement (IA)—were represented by 12 items to which participants responded on a 6-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (6). The identity status subscale score is the average score from the ideological and the interpersonal subscale scores. Thus, the score on each identity status subscale (IA, M, F, and D) in the present study could range from 6 to 36.

*Marcia's identity status interview.* Four of the participants (2 females, 2 males) were also assessed using Marcia's semi-structured identity status interview (Marcia, 1966; Matteson, 1993b; Waterman, 1993b). A translated interview form based on the questions formulated by Archer and Waterman (1993) and Archer and Marcia (1993) was used in this study (see appendix B) and the interviews were audio taped. The questions were concentrated in the following areas: occupation, politics, gender roles, and the role of parent. The interviews were scored following the scoring criteria described by Waterman (1993b), and continuum scoring was used, i.e., interviewers were given a score for each status (identity achievement, moratorium, foreclosure, and diffusion) in each area (occupation, politics, gender roles, and role as parent), as recommended by Marcia (2003).

### Procedure

The EOM-EIS-II was translated into Swedish, and the final instrument was administered in a classroom setting during regular class periods. The instructions were read to the participants and they were given an opportunity to ask questions. After that, the participants were given approximately 20 minutes to fill out the questionnaires. Participants were also asked if they would consider being interviewed. The students who volunteered to be interviewed (n = 83) wrote on the last page of the questionnaire how they wanted to be contacted. Among these volunteers, four participants with different identity status profiles on the EOM-EIS-II were chosen for the identity status interviews.

These interviews took place in consulting rooms at the department of psychology, Göteborg University. All interviews were conducted within 6 weeks after completion of the EOM-EIS-II. The first author of this paper conducted all the interviews. To ensure that the interviewer had a proper understanding of the identity statuses, a practice interview with an 18-year-old female was first performed in English. The practice interview was audio taped and sent to Professor James Marcia for comments and guidance regarding the scoring of the interview.

To achieve a preliminary validation of the EOM-EIS-II, the ratings from the identity interviews were compared to the interviewees' results on the questionnaire.

#### RESULTS

### Translation of the EOM-EIS-II into Swedish

The 48 items regarding occupation, politics, life style, recreational choices, friendship, and gender roles were translated into Swedish. In the process of translation, an effort was made to stay as close as possible to Marcia's original theory on ego identity status (Marcia, 1996, 1993a, 1993c), rather than produce a translation that corresponded to the exact wording in the EOM-EIS-II. Therefore, the expressions used in the Swedish test sometimes differ from the language used in the English test.

### Assessing Ego Identity Status Using the EOM-EIS-II

The EOM-EIS-II was administered to 222 high school students. The test is designed to measure ego identity formation within both the ideological and the interpersonal domain. Adams et al. (1989) has recommended that two identity status classifications be made, one for ideological identity and one for interpersonal identity. However, in this study an overall identity status is assessed. To achieve classification of the students' ego identity statuses, cutoff points for each of the four identity status subscales (IA, M, F, and D) were established, as described in Adams et al. (1989). The raw subscale scores of the sample were calculated, and means and standard deviations were generated for each of the subscales. Following the recommendation by Jones, Akers, and White (1994) a standard deviation of 0.5 was used in this study to create the cutoff points. (This proposal has been endorsed as an acceptable modification by Adams (Adams, 1994.) By adding a standard deviation of 0.5 to the mean, one arrives at the cutoff point for each subscale. Mean, standard deviation, and cutoff point for each subscale is presented in Table 1. For example, the identity achievement subscale mean is 22.64 and the standard deviation for the same subscale is 4.54. Thus the cutoff point for the identity achievement subscale is 22.64 + (4.54/2) = 24.91.

By comparing an individual's raw subscale scores to the cutoff point for each subscale, that individual can be classified into a single identity status. Classification of identity status in this study was further conducted in the manner described in the reference manual for the EOM-EIS-II (Adams et al., 1989). Participants scoring above the cutoff point on a single subscale were categorized into a *pure identity status* (i.e., Identity achieved, Moratorium, Foreclosure, or Diffusion). Individuals scoring above the cutoff points on two subscales were considered *transitional* and were placed into the less sophisticated status, as recommended by Adams et al. (1989). Thus, an individual scoring above the cutoff points on both the moratorium and the foreclosure subscales would be placed into the identity status category of foreclosure. Furthermore, participants scoring above the cutoff points on three or four subscales were considered *multi-dropped*. Since they appear not to be discriminating in marking items they were eliminated from further analyses. Finally, individuals scoring below all the cutoff points were considered as *low profile moratoriums*.

The data revealed that results from 212 of the participants could be compared against cutoff points and tested for classification. Ten individuals had not answered all the items and their results were therefore dropped from classification analyses. The classification of the sample into identity status categories based on the responses to the EOM-EIS-II is presented in Table 2. Thirty-one percent (n = 66) could not be classified into one of the four pure identity statuses. Of these individuals, 43 scored below the cutoff points in all four identity status categories and were called *low profile moratoriums*: 23 individuals scored above the cutoff points in more than two categories and were considered *multi-dropped*. The scores of the remaining 69% (n = 146) of the sample resulted in classification into one of the four pure identity status categories. The distribution of pure identity status categories is presented in Table 3. Of the participants who could be classified, 17% (n = 25) were categorized as identity-achieved (which means that they have undergone a period of exploration prior to making their commitments), 25% (n = 37) as moratoriums (meaning that they are in the exploration process), 24% (n = 35) as foreclosures (meaning that they have adopted firm commitments without prior exploration), and 34% (n = 49) as diffusions (which means that they may, or may not, have experienced a period of exploration, but they are unable to adopt commitments).

### Preliminary Validation of the EOM-EIS-II

Identity status interviews were conducted with four of the high school students who had filled out the EOM-EIS-II. The resulting identity status ratings were compared to the interviewers' results on the EOM-EIS-II to achieve a preliminary concurrent validation of the translated Swedish version. In the interview ratings, a 9-point scale was used. Thus, the subscale ratings (IA, M, F, and D) on the identity interview could range from 1 to 9. As noted earlier, the score on each identity status subscale on the EOM-EIS-II could range from 6 to 36. The scores and ratings were therefore transformed to a scale ranging from 0 to 1 to enable comparison. Table 4 shows the interviewees' transformed scores on both the interview and the EOM-EIS-II.

The EOM-EIS-II assessment corresponded with the interview assessment to a certain extent. The interviewer assessed interviewee #1

# Table 1

Mean, Standard Deviation, and Calculated Cutoff Point for Each Identity Status Subscale of the EOM-EIS-II

Subscale	М	SD	Cutoff Point
Identity Achievement	22.64	4.54	24.91
Moratorium	18.87	4.20	20.97
Foreclosure	12.06	3.62	13.87
Diffusion	16.16	4.00	18.16

# Table 2

Classification of the Sample into Identity Status Categories

Category	n	%	
Multi-Dropped	23	11	
Low Profile Moratoriums	43	20	
Pure Identity Statuses*	146	69	
	43	20	

\*Transitionals are included (collapsed into the less sophisticated status).

# Table 3

Distribution of the Sample on the Four Identity Status Categories (Transitionals Included)

Identity Status Classification	n	%	
Identity Achievement	25	17	
Moratorium	37	25	
Foreclosure	35	24	
Diffusion	49	34	

## Table 4

The Interviewees' Transformed Interview Ratings
and EOM-EIS-II Scores on Each Identity Status Subscale

Interviewee	Identity Status	Interview	EOM-EIS-II
	Subscale	Ratings	Scores
#1	IA	0.00	0.30
	M	0.13	0.45
	F	0.19	0.08
	D	0.75	0.52
#2	IA	0.09	0.53
	M	0.50	0.65
	F	0.25	0.13
	D	0.34	0.22
#3	IA	0.00	0.42
	M	0.03	0.30
	F	0.84	0.40
	D	0.53	0.27
#4	IA	0.59	0.92
	M	0.28	0.48
	F	0.38	0.23
	D	0.03	0.38

as diffused and this individual was likewise categorized as a diffused adolescent on the EOM-EIS-II. The ratings from the interview with interviewee #2 resulted in an assessment of this individual as having a moratorium/diffusion (M/D) profile, with the diffusion being primarily developmental. Interviewee #2 was categorized as a moratorium on the EOM-EIS-II. The interviewer concluded that interviewee #3 had a foreclosure/diffusion (F/D) profile. The scores on EOM-EIS-II placed interviewee #3 in the identity status category of foreclosure. Interviewee #4 was considered to be an identity-achieved/foreclosed (IA/F) individual based on the ratings from the interview. This individual was categorized as identity-achieved on the EOM-EIS-II.

The interviews showed certain differences between the four individuals on each subscale, i.e., IA, M, F, and D. The same differences were detected on three of four subscales when assessing these individuals' identity statuses using EOM-EIS-II. In Figure 1 the four interviewees are placed according to ranking on a scale ranging from low to high identity achievement, moratorium, foreclosure, and diffusion, respectively.

On the identity achievement scale, the moratorium scale, and the foreclosure scale the ranking order is similar between the two measures. However, as shown in Figure 1, interviewee #4 was ranked differently on the two measures on the diffusion scale.

Clear differences between the two assessments were also found; on the identity achievement and moratorium subscales, the participants consistently scored higher than they did on the interview (see Table 4). On the foreclosure subscale, the pattern was reversed. All interviewees' scores on EOM-EIS-II were lower than their ratings from the interviews. Their EOM-EIS-II results on the diffusion subscale were lower than the corresponding ratings in three cases out of four.

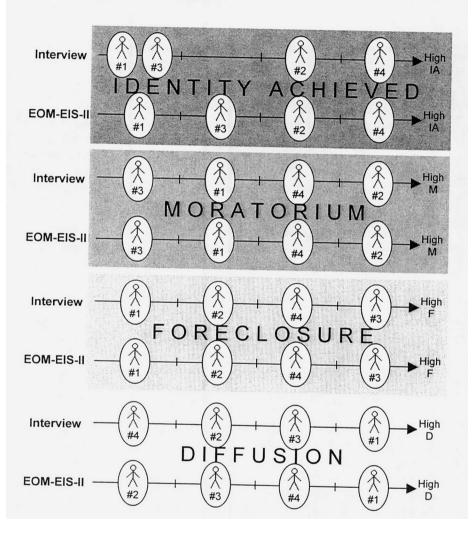
### Identity Status and Gender

In order to examine whether ego identity status (assessed by EOM-EIS-II) was related to gender, a  $\chi^2$ -test was carried out. The result revealed that identity status was significantly related to gender  $\chi^2$  (df= 5, n = 212) = 17.91, p < .005. Visual inspection of the data (see Figure 2) showed that there was a greater likelihood of female adolescents being categorized as moratoriums than were males, and that there was a greater likelihood of males being categorized as diffusions than were females. Among the 37 individuals categorized as moratoriums, 28 were females (76% of total moratoriums) and 9 were males. Standardized residuals also revealed that the moratorium category (R = 2.3) was a major influence on the significant  $\chi^2$ -test statistic. Furthermore, data showed that 30 male participants (61% of total diffusions) were categorized as identity diffused, compared to 19 females.

The gender differences detected regarding identity status classification were likewise found when comparing gender means on the identity status subscales. (This should of course be the case, since the calculation of status classification is based on the subscale scores.) The nonparametric Mann-Whitney test of mean differences was conducted. Results revealed statistically significant differences between genders on the following subscales: moratorium (U = 4176.0, p < .000), foreclosure (U = 3968.0, p < .000), and diffusion (U = 4125.0, p < .000). The male proportion of the sample had a slightly larger mean on the foreclosure (M = 13.0) and the diffusion (M = 17.1) subscales than their female counterparts (M foreclosure = 11.0, M diffusion = 15.1).

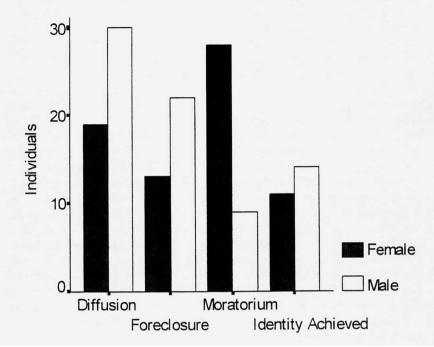
Figure 1

Ranking of the Four Interviewees on Each Subscale, Using Both the Interview Assessment and the EOM-EIS-II Assessment



# Figure 2

Distribution of Females and Males on the Four Identity Status Categories



in turn, the female group scored higher on average on the moratorium subscale (M = 20.0) than did males (M = 17.8). No statistically significant differences were found between females and males on the identity achievement subscale.

### DISCUSSION

In this study we excluded two of the original content domains of the EOM-EIS-II, namely dating and religion. Marcia (1993a) has stressed the importance of flexibility when choosing content areas in identity status research. As described earlier the identity statuses are defined in terms of process, not content, variables. As long as the process variables of exploration and commitment can be assessed, there is great freedom of choice when it comes to content domains. It is, however, important that the area chosen is of personal relevance for the group being studied, and that the content areas can elicit a variability of

response (Marcia, 1993a). In Sweden, there is no dating culture as such. Swedish dating is usually very informal and there are no particular "rules" or traditions regarding dating procedures. Surely, romantic relationships are important to Swedish adolescents when forming an identity; however, to find a way to measure identity status within that area would first require for example, an investigation of how Swedish adolescents form romantic relationships, and what the process of getting to know someone to whom you are attracted looks like. Furthermore, religion is, most likely, not an important identity-defining area for the majority of Swedish adolescents. According to the Swedish Institute, the state public agency, Sweden stands out as one of the most secularized countries in the world (www.sweden.se, retrieved in January 2004, and only a very small part of the Swedish population attend religious services regularly. Thus, Adamson (2003) found the items regarding dating and religion in the EOM-EIS-II to be problematic in a Swedish context [unpublished study]. Jensen, Kristiansen, Sandbekk, and Kroger (1998) also speculated as to whether the areas of dating and religion could be of less relevance to a Norwegian population than to a United States population. It seems that dating and religion are of particular importance in the U.S., and there is reason to believe that those content areas are not appropriate for identity studies in Sweden (at least not in their current form). Therefore, 16 items in the original EOM-EIS-II were excluded from the test used in the present study. We believe that this revision made the test more suitable for a Swedish population. However, the revision may affect the making of comparisons to other studies using the EOM-EIS-II. For future studies of identity in Sweden using the EOM-EIS-II, it may be valuable to find a Swedish equivalent to the content area of dating, and to find a content area witin the ideological domain that can serve as a substitute for religion. Further investigation of what areas are important to Swedish adolescents when forming an identity is warranted.

## The Identity Status Distribution of the Sample

The proportion of the sample that was possible to classify into any of the four identity status categories (transitionals included) was distributed in the following way: 17% identity achieved; 25% moratoriums; 24% foreclosures; and 34% diffusions (see Table 3). Considering that the mean age of the participants in the present study was 18.1 years, the distribution is somewhat surprising, especially the relatively low proportion of identity-achieved individuals and the large proportion of diffusions. Theoretically, the developmental assumptions are that the number of identity-achieved individuals increases with age, and that relatively few late adolescents should be diffused (Adams et

al., 1989; Waterman, 1993a). In a more recent review of identity status research (Kroger (2000) states that longitudinal studies have supported the theoretical assumptions, showing that identity achievement and moratorium statuses increase and the foreclosure and diffusion statuses decrease in frequency over time. According to the United States norms (developed in the late 1980s) one could expect the following approximate proportion of adolescents in each identity status for 12th grade students (approx. 17-18 yrs): 41.6% identity achieved, 21.4% moratoriums, 19.3% foreclosures, and 17.7% diffusions (Adams et al., 1989). Whether the discrepancy between the Swedish distribution and the United States distribution reflects a difference between the two nations' populations is unclear. Further investigation is needed.

### Gender Differences

Results of the present study revealed a statistically significant difference between males and females regarding identity status. The data showed a greater probability of females being classified as moratoriums than were men. Moreover, there was a greater likelihood of males being categorized as diffusions compared to females. This could indicate that the female proportion of the sample is currently exploring identity-defining areas to a greater extent than their male counterparts. It has been proposed that females, due to their earlier onset of puberty, experience changes in role expectations (associated with their physical development) that may propel females toward exploration of more "mature" roles (Adams et al., 1989). On the other hand, Adams et al. (1989) declare that the study of gender differences in identity development has produced conflicting and varied results. Many of the earlier studies that Adams et al. refer to report no significant gender differences between identity statuses. Nonetheless, Fregeau and Barker (cited in Adams et al., 1989) found that females score consistently higher on the moratorium and diffusion subscales-thus both supporting and contradicting the findings of the present study. In the 1970s and early 1980s findings led researchers to conclude that progression of identity was not as important to females as to males (Matteson, 1993a). However, more recent findings indicate that exploration of identity is as important to both genders (Matteson, 1993a)-a conclusion that is supported by the results of this study.

### EQM-EIS-II in a Swedish Context

Results from 212 of the participants could be compared against cutoff points and tested for classification. However, only 69% (n = 146) of the sample could be classified into one of the four identity statuses (see Table 2). Even so, this is not particularly low compared to other

studies using the EOM-EIS-II. Allison and Schultz (2001) used the same type of classification method as in the present study and were able to place 55% (n = 196) of their sample into the four identity status categories. However, Allison and Schultz were using only the interpersonal items of the EOM-EIS-II, and their sample consisted of early adolescents (ages 10-14), complicating further comparisons to this study. Jones et al. (1994) used stricter criteria for placing participants in one of the four identity status categories. Unlike the Allison and Schultz study, or the present study, Jones et al. did not collapse transitionals into the less sophisticated statuses. Instead, only individuals with scores that exceed only one cutoff point were categorized into one of the four identity statuses. Using this stricter criterion, they were able to place 41% of their participants in the pure identity status categories, 34% were classified as transitionals, and 25% fell into the category of low profile moratoriums. If the participants classified as transitionals in this study are not placed into the status categories of moratorium, foreclosure, and diffusion, then the resulting percentages of the present sample are: 41% pure identity status, 39% transitionals, and 20% low profile moratoriums—a very similar result to that of the Jones et al. study. Thus, the use of the EOM-EIS-II for identity status classification in Sweden seems satisfactory. However, the low classification percentages do raise questions about the usefulness of the EOM-EIS-II. As pointed out earlier (e.g., see Jones et al. (1994), development of the classification procedure for EOM-EIS-II to increase the percentage of pure status classifications is desirable.

Four identity status interviews were conducted to achieve a preliminary content validation of the EOM-EIS-II. According to Adams (1989). earlier studies have found moderate to strong agreement between the EOM-EIS and the identity status interview. On the other hand, Marcia (1993a) has stressed that the correspondence between the two instruments is not as high as one would wish. Nevertheless, there was fairly good accordance between the interview assessment of identity status and the EOM-EIS-II assessment in the present study. However, the interviewer was not completely blind. She did not know the interviewers individual results on the EOM-EIS-II, but she did know that the interviewees represented four different statuses. Therefore, it is hard to judge the value of those results. In any larger study it is, of course, advisable to use more than one rater of the interviews and to keep the interviewers blind. However, the most interesting result from the comparison between the EOM-EIS-II scores and the interview ratings in the present study, is that both instruments detected the same type of differences betwereen four participants. Figure 1 shows that, on three out of four scales, the rankings between the interviewees are practically identical for the two instruments. The interviewees were

chosen from a list of participants who were classified into one of the four statuses. However, the interviewer did not have any knowledge of how the interviewees' scores were distributed on the four identity status subscales. When it comes to the interviewees' relative positions on the status scales, the interviewer was, in fact, blind.

Clear differences between the questionnaire assessment and the interview assessment were also found (see Table 4). On the identity achievement and moratorium subscales, the participants consistently scored higher on the EOM-EIS-II than they did on the interview. On the foreclosure subscale, the pattern was reversed. All interviewees' scores on EOM-EIS-II were then lower than their ratings from the interviews. Moreover, the EOM-EIS-II were then lower than their ratings from the interviews. Moreover, the EOM-EIS-II results on the diffusion subscale were lower than the corresponding ratings in three cases out of four. We suspect that these differences between the two assessments are due to social desirability. It is possible that the statements implying higher levels of exploration and commitment seem "better" to the respondents. The foreclosure and diffusion traits that may be revealed in the interview are perhaps not the kind of traits to which the participant would wish to call attention. Surely, people wish to present themselves in a positive light when being interviewed, as well as when answering questionnaires. However, we believe that the social desirability phenomena may be greater when using questionnaire methods. It might be easier to lie on the piece of paper, than to delude an interviewer.

### Disadvantages and Limitations of the EOM-EIS-II

We believe that the large proportion of low profile moratoriums (i.e., individuals scoring below all cutoff points), found in the present study, as well as in other studies using the EOM-EIS-II (see e.g., Allison & Schultz, 2001; Jones et al., 1994), is a disadvantage of the measure. Adams et al. (1989) have pointed out that in their research they have repeatedly found that the pure moratoriums and the low-profile moratoriums appear to be very similar in their attitudes, values, and behaviors. Nevertheless, Adams et al. (1989) admit that to be able to treat the pure moratoriums and the low-profile moratoriums, of any sample, as similar moratorium types, you would have to perform tests of equivalence between these two groups. It is our opinion that the uncertainties concerning the low-profile moratoriums are a disadvantage of the measure. As described earlier, individuals who are categorized as lowprofile moratoriums have not passed the cutoff point on any of the identity status subscales. This means that these individuals' responses on a majority of items have been at the lower end of the Likert scale; i.e., they have repeatedly stated that they (to some extent) "disagree"

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with the statements. A possible explanation for these continuous disagreements could be that they simply were not able to identify with the statements. If that is the case, what is the reason for such a reaction to the items? Is it possible that the content areas chosen, or the language used, are not optimal for the age group being tested (i.e., adolescents), or is this lack of identification with the text a limitation that is inherent in questionnaire methods? Perhaps studying identity also requires an extra sensitivity in formulating questionnaire items. One could argue that the subject of identity is more significant to most people than, for example, attitudes toward recycling. If so, is it not especially important that the questions, or statements, posed in identity instruments are perceived as relevant (and to the point) by the respondents?

Another weakness of the EOM-EIS-II is that every item is constructed to measure two variables. All the statements in the EOM-EIS-II are double-barrelled, aiming at measuring both exploration and commitment. The problem with this construction manifested itself in the present study. Several participants showed frustration when having to decide whether they agreed or disagreed with a statement that contained one part that they agreed with and another that they disagreed with. Sometimes, respondents even chose one of the central points on the scale (e.g., 3) and wrote a comment in the margin saying that this score should be viewed as a mean of her/his response to the first part of the item (1) and her/his response given to the second part (5). This way of reasoning could explain why so many participants receive low scores on several subscales. Thus, the high percentages of low-profile moratoriums usually associated with studies using the EOM-EIS-II could also be related to the double-barrelled nature of the test items.

#### CONCLUSION

We believe that the revision of the content areas of the EOM-EIS-II conducted in this study made the instrument more useful in a Swedish context. Further investigation of which content areas are important to Swedish adolescents is, however, needed. Using the EOM-EIS-II we were able to classify a proportion of the sample comparable to that of earlier studies using the EOM-EIS-II. There was also fairly good accordance between the interview assessment and the questionnaire assessment of identity status. It is therefore concluded that the EOM-EIS-II is suitable for identity status classifications in Sweden. However, we believe that there are certain disadvantages and limitations associated with the EOM-EIS instruments. For future studies of identity status in Sweden we believe it advisable to use more than one

method of assessment. Results of the present study revealed that there was a statistically significant difference between males and females regarding identity status. The data showed a greater probability of females being classified as moratoriums than were males. Moreover, there was a greater likelihood of males being categorized as diffusions compared to females. It would be interesting to see if the identity status differences between genders, found in the present study, are replicable using the interview method for status classification.

#### REFERENCES

- Adams, G. R., Bennion, L., & Huh, K. (1989). Objective measure of ego identity status: A reference manual. Unpublished manuscript, University of Guelph, Canada.
- Adamson, L. (2003). Personal communication.
- Allison, B. N., & Schultz, J. B. (2001). Interpersonal identity formation during early adolescence. Adolescence, 36(143), 509-523.
- Archer, S. L., & Waterman, A. S. (1993). Identity status interview: Early and middle adolescent form. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 285-302). New York: Springer-Verlag.
- Danielsen, L. M., Lorem, A. E., & Kroger, J. (2000). The impact of social context on the identity-formation process of Norwegian late adolescents. Youth and Society, 31(3), 332-362.
- Erikson, E. H. (1959). Identity and the life cycle. New York: Norton.
- Erikson, E. H. (1969). Ungdomens identitetskriser [Identity, youth and crisis] (P. Wiking, Trans.). Stockholm: Natur och kultur.
- Jensen, M., Kristiansen, I., Sandbekk, M., & Kroger, J. (1998). Ego identity status in cross-cultural context: A comparison of Norwegian and United States university students. *Psychological Reports*, 83(2), 455–460.
- Jones, R. M., Akers, J. F., & White, J. M. (1994). Revised classification criteria for the Extended Objective Measure of Ego Identity Status (EOMEIS). *Journal of Adolescence*, 17(6), 533-549.
- Kroger, J. (1996). Identity in adolescence: The balance between self and other. London: Routledge.
- Kroger, J. (2000). Ego identity status research in the new millennium. International Journal of Behavioral Development, 24(2), 145–148.
- Marcia, J. E. (1966). Development and validation of ego-identity status. Journal of Personality and Social Psychology, 3(5), 551–558.
- Marcia, J. E. (1993a). The ego identity status approach to ego identity. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 3–21). New York: Springer-Verlag.
- Marcia, J. E. (1993b). The relational roots of identity. In J. Kroger (Ed.), Discussions on ego identity (pp. 101-120). Hillsdale, NJ: Erlbaum.
- Marcia, J. E. (1993c). The status of the statuses: Research review. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 22-41). New York: Springer-Verlag.

- Marcia, J. E. (1994). The empirical study of ego identity. In H. A. Bosma, T. L.Graafsma, H. D. Grotevant, & D. J. Delevita (Eds.), *Identity and development: An interdisciplinary approach* (pp. 67-80). Thousand Oaks: Sage Publications.
- Marcia, J. E. (2003). Personal communication.
- Matteson, D. R. (1993a). Differences within and between genders: A challenge to the theory. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 69-110). New York: Springer-Verlag.
- Matteson, D. R. (1993b). Interviewers and interviewing. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 137-155). New York: Springer-Verlag.
- Stegarud, L., Solheim, B., Karlsen, M., & Kroger, J. (1999). Ego identity status in cross-cultural context: A replication study. *Psychological Reports*, 85(2), 457-461.
- Waterman, A. S. (1999). Issues of identity formation revisited: United States and The Netherlands 1. Developmental Review, 19(4), 462-479.
- Waterman, A. S. (1993a). Developmental perspectives on identity formation: From adolescence to adulthood. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 42-68). New York: Springer-Verlag.
- Waterman, A. S. (1993b). Overview of the identity status scoring criteria. In D. R. Matteson, J. L. Orlofsky, A. S. Waterman, S. L. Archer, & J. E. Marcia (Eds.), Ego identity: A handbook of psychosocial research (pp. 156-176). New York: Springer-Verlag.