Chapter 2

Recollection of early gender-specific situations: a cultural comparison between the USA and Austria

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Abstract

Cultural differences in autobiographical memories of early gender-related situations were investigated. Sixty female and 60 male university students (half from Brown University in Providence, Rhode Island, USA, and half from the Karl-Franzens-University in Graz, Austria) were asked to recall when they first became aware of their gender. Content analyses of the descriptions suggested several cultural differences. Austrian students mostly remembered positive affective situations, whereas American students mostly remembered negative ones. Austrians mostly recalled anatomic differences, whereas Americans mostly recalled social interactions. Also, Austrian students did not recall having been reinforced as much for gender-stereotyped behavior as American students did. Additional results based on questionnaire data showed the expected cultural difference in openness to sexuality only among females. © 1999 Elsevier Science Ltd. All rights reserved.

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A considerable body of research focuses on the contents and the structure of autobiographical memory (that is, memory for events in one’s own life) (e.g., Conway & Rubin, 1993). Many of the assumptions regarding the structure, function, and development of autobiographical memory are controversial (Brewer, 1986; Brown & Kulik, 1977; Freud, 1914; Nelson, 1993; Nigro & Neisser, 1983; Schachtel, 1947; Schacter & Moscovitch, 1984), and the empirical findings are heterogeneous. Aside from a focus on the events being recalled, the emotional valence of these memories has

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been of interest (e.g., Linton, 1975; Matlin & Stang, 1978; Robinson, 1980; Thompson, 1985; Waldfogel, 1948). One group of memories of affective significance are memories related to sex and gender. Only few studies have investigated sex differences in gender-related childhood memories (e.g., Friedman & Pines, 1991); furthermore, there is a general lack of studies focusing on cultural differences in autobiographical memories of early gender specific situations. The present study addresses these topics.

1. Autobiographical memory

Most researchers agree that autobiographical memory is highly structured (Conway & Rubin, 1991), with the three main structural elements being lifetime period, general events, and event-specific knowledge (Barsalou, 1988; Conway & Bekerian, 1987; Conway & Rubin, 1991; Ross, 1989). The last level is the most detailed one and is the most important for the present study. Early memories are particularly interesting because they are located at the edge of infantile amnesia (Nelson, 1993; Schachtel, 1947; Schacter & Moscovitch, 1984). Long-term memory traces can only be laid down when the necessary brain structures have sufficiently matured (e.g., Pillemer & White, 1989; Wetzler & Sweeney, 1986). Typically, this does not happen before the fourth or fifth year (Dudycha & Dudycha, 1941; Kihlstrom & Harackiewicz, 1982; Pillemer & White, 1989; Waldfogel, 1948). Most early memories are positive (Davis & Schwartz, 1987; Holmes, 1970, 1974). Whether this affective bias reflects a specific neuro-psychological organization or indicates the repression of unpleasant memories (Freud, 1915, 1957) is not known (Davis, 1990; Davis & Schwartz, 1987; Myers, Brewin & Power, 1992). The repression hypothesis is plausible because repressors tend to recall fewer negative memories and they have longer reproduction times than non-repressors. Affectively neutral events are most easily forgotten (Waldfogel, 1948).

Gender-related memories in particular tend to be more negative than memories in general (Friedman & Pines, 1991). Other types of memories yield more heterogeneous results. No stable differences between positive and negative memories were observed in the number of recollections and the reproduction time (e.g., Linton, 1975; Matlin & Stang, 1978; Robinson, 1980; Thompson, 1985; Waldfogel, 1948).

Females recall earlier events than males and they do so with greater precision (Waldfogel, 1948). In addition, there are sex differences in the activity and emotionality of the memories (Friedman & Pines, 1991). Men tend to recall what they did as boys, whereas women tend to recall how they felt.

2. Cultural differences in values, norms, and attitudes about sexuality: comparing the USA and Austria

Teenagers in the USA are more likely to become pregnant than teenagers in other Western industrialized countries (Hayes, 1987; Jones et al., 1986; Warren, 1992). This
is surprising in light of the finding that they become sexually active relatively late. Whereas the average Austrian, for example, becomes sexually active at the age of 15.3 (Grin, 1995), only a third of American adolescents are sexually active at this age (AGI, 1994). Slightly more than one-half of an American student sample reported that they had experienced sexual intercourse at age 17 (Men: 69.6%; women: 59.5%; Feigenbaum, Weinstein & Rosen, 1995).

These differences in sexual behavior are related to differences in cultural values, morals, and attitudes concerning sexuality. In the USA, the media, the educational system, and families tend to avoid the topic of sexuality (Furstenberg, Herceg-Baron, Shea & Webb, 1984; Hayes, 1987; Reiss, 1990). Only about 10% of adolescents regularly discuss sexuality with their parents. American adolescents receive information about sexuality most frequently from their peers (46.1%), followed by schools (20.5%) and parents (12.4%). Some (13.6%) say they never receive information about sexuality during adolescence (Feigenbaum et al., 1995; see also Ansuini, Fiddler-Woite & Woite, 1996). About 75% report having problems talking about sexuality with their parents. In contrast, Austrian mothers are particularly likely to open discussions about sexuality and to provide relevant information (Fox, 1981; Furstenberg, 1971; Grin, 1995). Fifty percent of Austrian adolescents report having no problem talking with their parents about sexuality (Wangerin, 1985).

One study examined the relationship between parental discipline and control, on the one hand, and adolescent sexual attitudes and behavior, on the other (Miller, McCoy, Olson, & Wallace, 1986). The relationship was curvilinear. That is, sexual permissiveness and experience with intercourse was highest among adolescents who perceived their parents as not being strict at all, followed by adolescents who viewed their parents to be very strict and controlling. Adolescents who perceived their parents as moderately strict showed lowest sexual permissiveness. Results concerning the effects of sexual education programs in schools have not been conclusive (Eisen, Zellmann, & McAllister, 1990).

Clearly, the family is as an important transmitter of cultural values (Weinstock, 1967; Moore, Peterson & Furstenberg, 1986). Thus, communication within the family shapes gender roles in the young and the formation of gender identity. Most parents encourage gender-appropriate behavior as construed by the local culture (Denmark, Nielson & Scholl, 1993; Maccoby & Jacklin, 1974; Williams & Best, 1990). Psychoanalytic theories (e.g., Chodorow, 1978; Erikson, 1965; Freud, 1957), social learning theories (e.g., Bandura, 1969; Mischel, 1966; Sears, Maccoby and Levin, 1957), cognitive theories (e.g., Kohlberg, 1966), and gender-schema theory (Bem, 1981, 1983) share this assumption, although they hold different processes accountable for the development of gender-appropriate behavior. These theories also share the view that early childhood experiences have long-term effects on gender development during adolescence and adulthood.

Because boys and girls experience different events relevant to their gender during childhood (e.g., Block, 1984; Chodorow, 1978), their memories are likely to differ (see Friedman & Pines, 1991). In addition, it can be expected that cultural differences in morals and attitudes concerning sexuality influence the formation of gender identity. Because sexuality is less openly discussed in the USA than in Europe, cultural
differences in early gender-specific memories are expected to be related to respondents’ openness about sexuality.

3. Aims and hypotheses

Based on the findings presented above, the study focused on cultural and sex differences in gender-specific memories in two cultures. The hypotheses were as follows:

1. The content of memory will differ between men and women, with a majority of memories involving stereotyped behavior.
2. Most memories will be negative in affective tone, followed by positive and neutral memories.
3. American participants will be more likely to recall their social environment (especially parents) as having reinforced stereotyped gender-specific behavior.
4. American students will have less access to autobiographical memory relevant to their own gender. Their memories will date back to an older age than those of the Austrian students. Moreover, women’s memories will date back to an earlier age than men’s memories.
5. Participants growing up in American society will show less openness about sexuality than Austrian participants. Differences in openness about sexuality would be related to differences in autobiographical memories.

4. Method

Sixty students from Brown University in Providence, Rhode Island, USA, and 60 from the Karl-Franzens-University in Graz, Austria, participated in the study. Data collection was stratified by sex, which means half of the participants from each university were males and half females. The age of the participants ranged from 18 to 30 yr. The median age for the American sample was 20 yr; for the Austrian sample it was 21 yr. To be able to study the effect of US socialization, first-generation Americans were excluded from the sample, as their upbringing in a mixed cultural setting might bias results (Dion & Dion, 1993). The majority of the participants in both countries studied psychology or art history.

Data were collected during class sessions. Participants were presented with a questionnaire including the following instructions: “Describe the situation in your life when you first became conscious of your own gender — when you felt like a girl or boy for the first time.” Based on the results of previous research on gender specific autobiographical memories (Plohovits & Spiel, 1998; Spiel, 1997), participants were asked to make sure that their descriptions answered the following five questions:

- WHAT happened?
- HOW did you feel about it?
WHO was present?
WHERE did it happen?
WHEN did it happen (approximate age)?

Furthermore, participants’ descriptions concerning the reinforcement of stereotyped behavior from the environment via rules and orders were scored.

Participants also answered four questions on openness about sexuality. The questions were formulated based on studies conducted by the Alan Guttmacher Institute (Jones et al., 1986). Answers ranged from 1 (strongly disagree) to 5 (strongly agree) (see Appendix).

Content analysis comprises a mechanical and an interpretative component (see Bos & Tarnai, 1989,1996; Holsti, 1969; Merten, 1995, for detailed descriptions of this method). The classification of the data into distinct content categories is mechanical, whereas the identification of relevant categories and the assessment of their social and personal meaning is interpretative (Krippendorf, 1980). Both components are linked in an iterative analytical process (Bos & Tarnai, 1989; Millward, 1995).

The nine-step method proposed by Mayring (1995; see also Plohovits & Spiel, 1998; Spiel & von Korff, 1998) was used. The steps are:

1. Definition of the material: Participants’ answers to the five questions.
2. Situation of data collection: Data collection was done during lectures.
3. Formal characteristics of the material: The material consisted of written descriptions of early gender-specific situations.
4. Aims of analysis: see above.
5. Theoretical basis of analysis: The analysis was based on theories on autobiographical memory and theories about the development of gender identity.
6. Procedure of analysis: Guided by theories of autobiographical memory and developmental theories of gender identity, a coding system was developed for each of the five questions (see Table 1; for details see Löschnig, 1997). Two independent raters scored the descriptions with a reliability of 98%. To illustrate the coding two examples are presented in Table 2.
7. Definition of the unit of analysis: The entire memory description was considered the unit of analysis.

Table 1
Questions and categories of content analysis

<table>
<thead>
<tr>
<th>WHAT happened?</th>
<th>HOW did you feel about it?</th>
<th>WHO was present?</th>
<th>WHERE did it happen?</th>
<th>WHEN did it happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender specific behavior</td>
<td>Positive</td>
<td>Family</td>
<td>At home</td>
<td>Age of recollection</td>
</tr>
<tr>
<td>Anatomic differences</td>
<td>Negative</td>
<td>Peers</td>
<td>Outside</td>
<td></td>
</tr>
<tr>
<td>Physical changes</td>
<td>Neutral</td>
<td>Alone</td>
<td>Kindergarten</td>
<td></td>
</tr>
<tr>
<td>Social interaction</td>
<td>No information</td>
<td>Adults (not family)</td>
<td>School</td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Examples of analytic procedure

Example 1 (Female, USA): “I remember when I was about three years old, I was taking a shower with my dad and I realized that I was different than he was. I remember being a little frightened, but mostly confused.”
The following categories were used to score subjects description: WHAT: Anatomic differences, HOW: Negative, WHO: Family, WHERE: At home. WHEN: 3 yr.

Example 2 (Male, USA): “It was when I was playing house with my sister (who’s older than me) and her friend. I guess I was about 4 yr old. It was a situation where my sister and her friend were treating me differently somehow because I was a boy and boys weren’t supposed to play house. I was indoors at home. I don’t remember feeling any particular way about it.”
For Example 2 the following categories were used: WHAT: Gender specific behavior, HOW: No information, WHO: Family, WHERE: At home, WHEN: 4 yr.

(8) Analysis of the material: Mayring (1995) proposed to use combination, explanation, and structuration. For application of the coding system the data had to be structured.
(9) Interpretation: Results of analysis were discussed in relation to theoretical assumptions and findings of previous research.

5. Results

To examine cultural and gender differences in autobiographical memory of early gender-specific situations, between-country and within-country $\chi^2$ analyses were performed on the frequency data obtained from content-analytical categorization (see Table 1). The first research question concerned the content of gender-specific memories. Analysis of the responses to the probe “What happened?” showed both differences between and within countries (see Fig. 1). Among American participants, the most frequent recollection category was social interactions, whereas among Austrians, the most frequent category was anatomic differences ($\chi^2 = 9.24$, df = 3, $p = 0.026$). Physical changes were recalled least frequently in both samples, and both within-group differences were statistically significant (Americans: $\chi^2 = 20.48$, df = 3, $p < 0.001$; Austrians: $\chi^2 = 22.80$, df = 3, $p < 0.001$). There were no reliable gender differences.

The second research question concerned answers on the probe “How did you feel about it?” (see Table 1). As shown in Fig. 2, there was no support for the hypothesis that overall there would be more negative than positive memories. As expected, however, neutral memories were especially rare. The interaction between culture and the affective tone of the memories was surprisingly strong. Americans reported fewer positive and more negative memories than did Austrians ($\chi^2 = 15.19$, df = 3, $p = 0.02$). Within-sample analyses showed that Americans reported more negative than positive feelings, ($\chi^2 = 21.20$, df = 3, $p < 0.001$), whereas the reverse was
true for the Austrians ($\chi^2 = 21.20$, df = 3, $p < 0.001$). Again, there were no gender effects.

The third question concerned the influence of the social environment on gender-specific behavior. Here, the relevant probes were “Who was present?” and “Where did it happen?” and the recalled reinforcement of stereotyped behavior via orders and rules. Contrary to expectation, there were no cultural differences either regarding the persons who were present or regarding the physical locations of the early gender-specific situations. However, there were within-country differences in both memory categories. When describing the situation in which they first became aware of their own gender, participants were most likely to recall the presence of peers, followed by parents (see Fig. 3; USA: $\chi^2 = 35.60$, df = 3, $p < 0.001$; Austria: $\chi^2 = 47.60$, df = 3, $p < 0.001$). As a location of these first memories, the home was reported more frequently than the outside (see Fig. 4; USA: $\chi^2 = 36.25$, df = 3, $p < 0.001$; Austria: $\chi^2 = 23.88$, df = 3, $p < 0.001$).
As expected, there were cultural differences in the degree to which participants remembered the reinforcement of sex-stereotyped behavior. Americans (n = 24) were three times as likely than Austrians (n = 8) to report that gender-stereotypic behavior was encouraged by orders or rules ($\chi^2 = 10.91$, df = 1, $p < 0.001$). Again, there were no sex differences.

The fourth question concerned the age at which the recalled gender-specific situations occurred. A 2(gender) × 2(country) analysis of variance (ANOVA) was performed on the recalled age, but no significant deviations from the grand mean ($M = 5.66$ yr) were found.

The fifth question concerned cultural and gender differences in openness about sexuality. A reliability analysis revealed that one of the four items ("Condom advertisements in the media offend me.") was poorly correlated with the scale score. Therefore only Questions 1–3 were used to create a composite index ($\alpha = 0.55$). Females scored lower in openness about sexuality than males, $F(1, 116) = 14.22$, $p < 0.01$ ($\eta^2 = 0.09$) and American participants showed lower values than Austrians, $F(1, 116) = 20.55$, $p < 0.01$ ($\eta^2 = 0.14$; see Fig. 5). In addition, a statistical significant interaction was observed ($F(1, 116) = 5.04$, $p = 0.027$; $\eta^2 = 0.03$).
Bonferroni tests suggested that American women scored lower on openness than the other groups.

To examine whether differences in autobiographical memories were related to differences in openness about sexuality, separate one-way ANOVAs (one for each of the five memory probes), were performed with the response categories as independent variables and openness about sexuality as the dependent variable. The only significant effect involved the question “What happened?”, $F(3, 114) = 3.09, p < 0.05 (\eta^2 = 0.25)$. Results of alpha-protected Bonferroni tests showed that participants recollecting gender-specific behavior were less open than those recollecting anatomic differences or physical changes (see Fig. 6). This finding is consistent with the presumed role of repression in memory for events related to sexuality or sexual identity.
6. Discussion

This study examined differences in autobiographical memories of early gender-specific situations between the sexes and between two cultures. Five hypotheses, some of which were more exploratory in character, were derived from the relevant literature. Aside from our general interest in the content of the memories, the analyses focused especially on differences in the affective tone of the memories, the age to which they were attributed, and the recalled influence of the socio-familial environment on the formation of gender identity. Finally, the moderating role of an attitudinal variable was examined. This variable, openness to sexuality, was particularly relevant in that it could shed light on the potential effect of repression of gender-specific memories.

Memories of when participants first became aware of their gender were elicited as free-format narratives. The structure of the narratives was bound by several probes (e.g., WHO was present?), to ensure that responses could be easily classified (see Plohovits & Spiel, 1998). For each of the five probes, a scoring system was developed to prepare the data for content analysis.

Somewhat surprisingly, there were no reliable sex differences in any response category. One possible reason for this lack of differences is that parental behavior is most sensitive to the sex of the child during infancy. Fagot and Hagan (1991) observed more gender stereotyping in parental behavior at the children’s age of 12 and 18 months but found no differences at the age of five years (see also Pillemer & White, 1989). In other words, the similarity in the memories recorded by female and male respondents may reflect actual similarities in their experiences. More pronounced differences in their experiences may have lain in an earlier, pre-memorial, period.

Aside from cultural differences, which will be reviewed in a moment, there were also striking similarities. There were no differences in the recalled age and the social environment prevailing at the time. Respondents from both cultures reported that mostly peers were present at the time they became aware of their sex, followed by their parents. The most common setting of these memories was the home, followed by the outside. It may seem that the average age of first gender awareness was quite high (5.66 yr) compared with that reported elsewhere (e.g., Pillemer & White, 1989). Note, however, that the present study elicited a specific kind of memory rather than the oldest memory available regardless of content. These instructions allowed respondents to report memories related to events that occurred in adolescence (e.g., the menarche).

The observed cultural differences in recollection were consistent with our reading of cultural differences in values, norm, and attitudes concerning sexuality. More than their Austrian counterparts, American students recalled social interactions, described reinforcements of stereotyped behavior via orders and rules, and events involving negative affect. They recalled anatomic differences less often than their Austrian counterparts. We speculate that one reason for these differences lies in the relative avoidance of topics such as sexuality or nudity in the USA (Reiss, 1990).

The predicted preponderance of negative memories emerged among the American students (Friedman & Pines, 1991; see also Howes et al., 1993; Taylor, 1991). In contrast, the Austrian students mostly described positive feelings. Judging from
theoretical and empirical work on the relation between repression and the positive tone of memories (e.g., Davis & Schwartz, 1987), it seems that the Austrian students repressed the memory of negative events more than the American students did. This conclusion would be perplexing given the finding that it was the American female respondents who showed the least openness (i.e., most repression) in regard to sexuality.

An alternative explanation arises from work by Myers and Brewin (1994) who argued that positive feelings are indicators for a happy childhood in which awareness of one’s gender is not associated with anxiety or other negative feelings. Cultural differences in norms and attitudes toward sexuality are consistent with this view. Austrian families discuss sexuality more openly than American families do (Fox, 1981; Furstenberg et al., 1984; Grin, 1995). Our data reflected this difference. Viewed from this perspective, the comparatively lower openness to sexuality among Americans is no longer perplexing.

Nevertheless, the results obtained with the openness measure should be interpreted with caution because the psychometric properties of the three-item scale were not fully satisfactory. Female American students were the least open about sexuality. Females also seem to be more influenced by parents’ encouragement of gender-stereotyped and culture-specific behavior (Denmark et al., 1993; Maccoby & Jacklin, 1974; Williams & Best, 1990).

Openness about sexuality is only one aspect related to autobiographical memories. Participants recollecting on gender-specific behavior showed lower openness about sexuality than participants recollecting on anatomic differences and physical changes. This observation is consistent with findings reported by Denmark et al. (1993) (see also Maccoby & Jacklin, 1974; Williams & Best, 1990). Parents encourage gender-stereotyped behavior but tend to avoid the topic of sexuality (Furstenberg et al., 1984; Reiss, 1990).

In sum, results supported the assumptions that culture has an impact on gender development. Cultural differences in values, norms, and attitudes concerning sexuality are reflected in cultural differences in autobiographical memories of early gender specific situations. However, results only reflected a comparison between university students from two countries. Therefore, further research investigating other countries and subjects with other professions is needed.

Appendix A. Openness about sexuality (modified version after Warren, 1992)

<table>
<thead>
<tr>
<th>Items</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am comfortable seeing nudity on a public beach (assuming that is legal)</td>
<td>0.45</td>
</tr>
<tr>
<td>2. Nudity in commercials irritates me</td>
<td>0.36</td>
</tr>
<tr>
<td>3. I do not mind sexually explicit literature on sale</td>
<td>0.40</td>
</tr>
<tr>
<td>4. Condom advertisements in the media offend me</td>
<td>0.55</td>
</tr>
</tbody>
</table>
References


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