22nd EECERA annual conference
Porto, Portugal, 30th August - 1st September 2012

Brandes, Holger, Prof. Dr. [presenter]; Andrae, Markus; Roeseler, Wenke
(University of Applied Sciences for Social Work, Education and Care (EHS), Dresden, Germany)

Does gender make a difference? First results of the German tandem-study about pedagogical activity of female and male ECE workers
Presentation on the 22nd EECERA annual conference, 31.8.2012, Porto/Portugal

Abstract
The ongoing Dresden Tandem Study (2010-2013), supported by the German Ministry of Family Affairs, Senior Citizens, Women and Youth, assesses and compares pedagogic behavior of men and women working as Early Childhood Education professionals (Andrae, 2011; Brandes, 2011).
Gender is a somehow hidden factor in the daily routine that works mostly subtle. For that reason empirical verification of its functioning and effects is not an easy task.
A specific experimental setting was designed for the purpose of the research. 20 male and 20 female teachers took part in a standardized play situation with a child from their group. The play sequences were recorded on video and rated by trained raters with a specifically developed rating method. Comparisons are carried out on several dimensions of pedagogic behavior, e.g. quality of attachment and sensitive challenge, dialogic quality of communication between child and professional, etc.
The videographs of the Tandem Study are a resource for a qualitative analysis in this context as well. They reveal which issues and materials were preferred by women and men. Situations can be identified in which a gender background becomes visible and in which male and female professionals unconsciously act as a role model.
In the presentation, first results of the rating will be discussed in matters of generalization. Beyond that we will show examples taken from the subsequent qualitative analysis. Results highlight the impact of gender on pedagogic behavior and the importance of male early childhood professionals for the development of gender identity of girls and boys.

Bibliography

Keywords
gender, adult-child-relation, attachment theory
Does Gender Make a Difference?

First results from the German tandem-study on pedagogical activity of female and male ECE workers

Holger Brandes, Markus Andrä, Wenke Röseler, Petra Schneider-Andrich
Evangelische Hochschule Dresden (Protestant University of Applied Sciences on Social Work, Education and Nursing)
Zentrum für Forschung, Weiterbildung und Beratung (Centre for Research, Further Education, and Counselling)

22th EECERA Conference Porto 2012

The Tandem Study

The Tandem Study (Nov. 2010 - April 2013) pursues the objective of investigating and comparing the behaviour of male and female ECE workers in kindergartens (children between three and six years of age).

- Do male and female ECE workers, according to professional criteria (empathy, challenge, dialogical communicaton), differ in their behavior toward children?
- Do ECE workers serve different content areas, with girls than with boys?
- How interactive processes in the sense of a ‘doing gender’ take place?
- Does a tandem-effect (gender arrangement between the ECE workers) exist?
The Tandem Study - Design

Ad-hoc sample: 21 man/woman-tandems & 12 woman/woman-tandems
Everyday-like quasi-experimental pedagogical (individual-) situation (with various materials and tools) (videotaped)
Quasi-experimental group situation with both professionals (videotaped)
Qualitative interviews
Personality tests (NeoPIR)

Assessment of the individual situation through a rating(s) process (19 items). Translation in quantitative comparable data
Assessment of the products made in the individual situations and the use of material and tools

Qualitative-interactional analysis of the individual- & group situations;
Objectiv: Identification of key scenes of „doing gender“

Qualitative analysis of the interviews

Conclusion

Individual Situation – Material and Tools

Male or female ECE worker with one child
Two cases with a range of various materials and tools
Time frame of 20 min.

Rating Results - Individual Situations

Results of the ratings of the individual situations
(man/woman tandems: n = 21/21)

Empathy
Challenge
Dialogical communication
Type of cooperation
Content of communication

Team of 6 Raters (Students, 3 male & 3 female)
Interraterreliability: ICC_{unjust, random}; Modell:Two-Way-Random; Typ: Absolut Agreement; the values for all items were clearly within the range above ICC = .70 (except 2.4, ICC = .69), with which, according to Wirtz & Caspar (2002), they are reliable.

Empathy

<table>
<thead>
<tr>
<th>Item (1 = does not apply at all, 5 = applies completely)</th>
<th>women</th>
<th>men</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE worker reacts to expressions &amp; impulses of the child appropriately &amp; promptly</td>
<td>3,73</td>
<td>3,63</td>
</tr>
<tr>
<td>ECE worker supports the child appropriately (without unrequested interference &amp; rules/regulations) (1.3)</td>
<td>3,28</td>
<td>3,31</td>
</tr>
<tr>
<td>ECE worker gives appropriate positive &amp; appreciative feedback (1.4)</td>
<td>3,23</td>
<td>3,14</td>
</tr>
</tbody>
</table>

The comparison of the mean values for the men and women, for these items, results in only minimal differences. Based on this, no gender effect is revealed in our sample, and also the possible assumption, that women engaged in activity with children are more empathic, was not confirmed.
Dimensions Empathy, Challenge and Dialogical Interaction

• The comparison of the mean values for the men and women, for all items in the dimensions empathy, challenge, and dialogical communication results in only minimal and not significant differences.
• Based on these items, no gender effect is revealed in our sample, and also the possible assumptions, that women are more empathic, or that men are more challenging were not confirmed.
• With regard to professional qualities of the manner of interaction with the children (empathy, challenge, or dialogical communication) no influence of the gender of the ECE workers can be recognized.

Type of Cooperation

<table>
<thead>
<tr>
<th>Dimension (1 = does not apply at all, 5 = applies completely)</th>
<th>women</th>
<th>men</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE worker observes the child &amp; involves him/herself only verbally (3.1)</td>
<td>2,13</td>
<td>2,34</td>
</tr>
<tr>
<td>ECE worker acts him/herself &amp; lets the child watch (3.2)</td>
<td>2,16</td>
<td>1,95</td>
</tr>
<tr>
<td>ECE worker &amp; child pursue different sub-projects in parallel activity, &amp; only partial cooperation (3.3)</td>
<td>1,98</td>
<td>1,72</td>
</tr>
<tr>
<td>Both work together on an object with continual coordination (3.4)</td>
<td>3,46</td>
<td>3,57</td>
</tr>
</tbody>
</table>

In our sample a tendency appears that male ECE workers put themselves more in the position of observer than do female ECE workers, and women are more active than men, and let the child watch. This is consistent with male ECE workers more often organizing a common project, and female ECE workers more often a situation of parallel working on different sub-projects.
Type of Cooperation – Gender of the Children

• When one considers the gender of the children in the evaluation, significant differences appear. This is remarkable because such effects do not occur in the first three dimensions.
• Work with girls is clearly done more in parallel sub-projects, with only partial coordination, than work with boys. The significant effect appears in the direct comparison with the tandem partner, as well as in the general comparison of all ECE worker.
• Especially the male ECE workers appear to treat boys and girls differently. They work less with boys in the parallel form, whereas, with respect to this aspect, female ECE workers treat boys and girls in a more similar way.

Content of communication

<table>
<thead>
<tr>
<th>Dimension (1 = does not apply at all, 5 = applies completely)</th>
<th>women</th>
<th>men</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE worker thematizes the relationship or the personal (attributes, experiences, feelings) or takes these up when this comes from the child (2.7)</td>
<td>2.32</td>
<td>1.98</td>
</tr>
<tr>
<td>ECE worker expresses him/herself primarily objectively-concretely &amp; functionally about the activity, or takes this up when this comes from the child (2.5)</td>
<td>3.48</td>
<td>3.69</td>
</tr>
<tr>
<td>ECE worker accompanies the activity with associative fantasies &amp; narrations, or takes these up when this comes from the child (2.6)</td>
<td>2.38</td>
<td>2.23</td>
</tr>
</tbody>
</table>

The expectation that men and women have different styles of communication was confirmed tendentially in our sample. Male ECE workers more often take up objective-functional content in communication, whereas female ECE workers engage in more narrative and associative communication, and go into personal aspects or the relationship. The differences do not achieve a significant level.
Content of Communication – Gender of the Children

- When one considers the gender of the child in the evaluation, there are significant results – but not with respect to the gender of the ECE workers!
- Male and female ECE workers speak with boys about activities in an objective-functional manner more than with girls.
- The relationship or the personal (attributes, experiences, feelings) is thematized sooner with girls than with boys.
- Also, in working with girls, the activity is to a greater degree accompanied by associative phantasies or narrations than with boys, though this effect is not significant.
Gender and Products made

The products made in the individual situations can be distinguished with respect to whether they symbolise ‘subjects’, in the sense of living creatures, such as humans or animals (operationalized as ‘having eyes’), or ‘objects’ such as cars, buildings or aeroplanes (‘not having eyes’).

When one sets these two basic types of products in relation to the gender of the ECE workers and the children, an influence of the gender factor appears:

• Products made in relation to the gender of the professional and of the child

• While it is more likely that ECE workers of both genders products subjects with girls, in the situation with boys it is more likely to be objects. This effect is significant.

• In connection to the gender of the ECE workers, it appears that women are more often involved in the construction of subjects, men in that of objects.
### Use of Materials

<table>
<thead>
<tr>
<th>Material</th>
<th>ECE worker (m)</th>
<th>ECE worker (f)</th>
<th>boys</th>
<th>girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>felt wool</td>
<td>36.4%</td>
<td>57.1%</td>
<td>29.4%</td>
<td>12.3%</td>
</tr>
<tr>
<td>pipe cleaners</td>
<td>45.5%*</td>
<td>76.2%*</td>
<td>52.9%**</td>
<td>81.8%**</td>
</tr>
<tr>
<td>beads/pearls</td>
<td>4.5%**</td>
<td>52.4%**</td>
<td>26.5%</td>
<td>30.3%</td>
</tr>
<tr>
<td>craft eyes</td>
<td>4.5%**</td>
<td>33.3%**</td>
<td>17.6%</td>
<td>27.3%</td>
</tr>
<tr>
<td>wooden panels</td>
<td>59.1%</td>
<td>42.9%</td>
<td>61.8%</td>
<td>39.4%</td>
</tr>
<tr>
<td>nails</td>
<td>45.5%</td>
<td>28.6%</td>
<td>41.2%*</td>
<td>18.2%*</td>
</tr>
<tr>
<td>wine bottle corks</td>
<td>54.5%</td>
<td>42.9%</td>
<td>50.0%</td>
<td>30.3%</td>
</tr>
<tr>
<td>cardboard rolls</td>
<td>36.4%</td>
<td>28.6%</td>
<td>50.0%**</td>
<td>21.2%**</td>
</tr>
<tr>
<td>coloured paper</td>
<td>22.7%</td>
<td>47.6%</td>
<td>14.7%**</td>
<td>54.5%**</td>
</tr>
<tr>
<td>washers</td>
<td>18.2%*</td>
<td>0.0%*</td>
<td>35.3%**</td>
<td>9.1%**</td>
</tr>
</tbody>
</table>

* = significant χ² value (p-value two-sided ≤ 0.05)  ** = significant χ² value (p-value two-sided ≤ 0.01)

### SUMMARY: Rating Results, Analysis of Products made und Materials used

- **In summary, one can say that in our sample the gender of the ECE workers has no influence on how they behave towards children.**
- **An influence of gender only became apparent when the issue is what the professionals do with the children, to which themes and materials they incline, and which interests and inclinations of girls and boys they take up.**
- **In our sample, the gender of the children appears to have greater effect than that of the ECE workers, whereby, however, the men more clearly tend to orientate their behaviour to the gender of the child.**
Qualitative Approach: „doing gender“

- We presume that the fact, that it is a man or a woman who acts, lends the particular occurrence an additional level of meaning (cf. West & Zimmermann 1987, Kotthoff 2002)
- There is some indication that this level of meaning mostly does not become independently and explicit apparent, rather ‘accompanies’ the occurrence like an implicit subtext, and the actors (adults the same as children) are also often not conscious of it.

Key Scenes for „doing gender“

- We found that key scenes can be identified in which the gender aspect steps into the foreground, and is then also directly or indirectly thematized by the actors.
- In the individual situations such key scenes can be observed more often in gender-homogeneous than in gender-heterogeneous constellations.
- They stand in connection to specific materials or activities (wood, nails, hammer for boys/male ECE workers, beads or felt wool for girls/female ECE workers) or phantasies/associations (guns, knight’s castle for boys; hair, dresses for girls), which exhibit a matching gender connotation.
Key Scenes in Group Situations

More often we find such key scenes in group situations.

In the beginning of the group process the gender theme is not noticeably present. In a play situation with a clearly competitive character, as a boy loses against a girl, because he falls over, the male ECE worker says to him, loudly across the playing surface: 'That's not important – men are not as agile as girls. That's nothing to worry about.' In response, standing in front of him, a girl protests: ‘Girls are more tender – but you are a boy!’. To this he responds: ‘But you are more agile, my treasure’.

We don’t know how the girl interpreted the first statement of the male ECE worker, nor exactly what caused her protest. Fact is, that from now on the gender theme is clearly in the room as tension, and the key word ‘agile’ can be heard from the children repeatedly. As the male ECE worker finally challenges his colleague to play against him, and he loses, then the girls are jubilant and the boys are silent. After a number of children have played the game, the two professionals repeat their competition, and this time the male ECE worker wins, because this time he is clearly more engaged. Again the girls are jubilant, but they are lectured by a boy: ‘But Rosi [female ECE worker] didn’t even win’.

Gender and Professionality

- It is notable that in scenes with a manifest gender connotation the male or female ECE workers often give the impression of acting in an especially authentic manner, tending to be rather more intuitive and less reflective.
- It seems that references to gender often emerge obliquely to professional standards of behaviour, or even contrary to them. They are connected rather with authentic than with professional behaviour.
These are preliminary results.
Thank you for your attention.