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Special Needs of Boys and the Impact of Mixed-Gender Teams

Abstract: Theoretically based on early pedagogical and psychoanalytic research findings, the Austrian W-INN-study aims at confirming research questions as well as finding possible new hypotheses about men's influence on children. The pilot study focuses on different research questions: What similarities and/or differences can be found in interactions with children depending on childcare staff composition (mixed gender vs. female)? What are childrens' (re-)actions in these groups/towards staff? Are there possible 'compensatory effects' of male childcarers for children who don't have much contact with fathers and/or men in general? Our paper will present the main results of the research project and its practical implications.

Keywords: early childhood education – child-teacher-relationship – mixed gender staff – video observation – mixed-method-design.

Introduction & background of W-INN-Study⁶

The slogan "Children need men", often voiced in connection with the lack of men in educational processes, has recently become more popular both in connection with family upbringing as well as public educational

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provision. In spite of the rise in public awareness of the educational influence of men and fathers on boys and girls, there is still a substantial need for empirical research on the gender aspects of child development, especially around the establishment of interactive relationships between staff and children in pre-school institutions. Previous studies have focussed almost exclusively on the behaviour of male and female staff as self-reported through interviews or on questionnaires without observation of the concrete day-to-day reciprocal interaction between staff and children. The research interest of the pilot study on the effect of male pre-school teachers (Impact study "W-INN") was comprised of a collection of the first differentiated and documented evidence of the possible "gender-specific" effect of mixed-gender and all-female teams on the children in pre-school education. At the same time the potential significance of mixed-gender teams on boys and on girls should be taken into particular account. Besides the general difficulty of assertions about the partially subtle "impact" of the gender of an individual or member of staff on children (cf. Brandes 2012), the multi-methodological approach to the project proved to be a particular challenge. By taking up the already complex and difficult question of pre-school gender research, the W-INN-Study touched on new ground not only from a content but also from a methodical perspective, around which few other empirical studies have been conducted to date. Thus, the treatment of the "theme of impact" within the framework of the study can be classified in two ways as a pilot study.

Sample

We were able to include 10 pre-school groups from Tyrol and Salzburg (Austria) in the study. In five of these groups the staff was mixed-gender and the five other groups were all female. Apart from the direct research on pedagogical staff and children (video observation and anonymised questionnaires), questionnaire-based interviews of the parents were also important parts of the study. Our entire sample thus con-

sisted of 22 members of the pedagogical staff, 206 parents and 163 children. The detailed research concentrated on a small sample: thus the pedagogical behaviour of 10 persons (5 men, 5 women) and the contact behaviour of 30 so-called "target children" (15 boys, 15 girls aged between 4 and 6 years) was surveyed in everyday interactions. It was important for us to obtain the most comprehensive view as possible and thus the issues were approached in a multi-methodological way. The following insights into the methodological process should forge a bridge to the account of our research results.

The Methodological Process

One methodological focus of the study is video-based recordings from a normal day in the pre-school (a); additionally the above-mentioned questionnaires were used for the pedagogical staff and parents (b). Data from the video and questionnaire data were endorsed through a projective story completion test (c).

a) Video-based Observations

The video-recordings were structured to capture as many different situations from a typical day in pre-school as possible (e.g. free-play situations or guided group games), whereby the camera focus was on the leading member of staff giving instructions for the group games. During this process we focused especially on dyadic interactions between pedagogical staff and children as well as group dynamic processes. Approximately 65 minutes of video material was produced on average for each pre-school group. A rating instrument was developed for the analysis of the video data to assess the pedagogical staff and a further rating instrument to assess the target children. The categories in the pedagogical staff questionnaire took into account the pedagogic quality of the staff member (through the "caregiver interaction scale" according to Arnett 1989), the group dynamic processes within daily group interactions (self-constructed rating scale) and gender-sensitive interactions (self-constructed

rating scale). The rating scale for the target children also looks at three categories: on the one hand attachment-related behavioural tendencies (through the "Attachment Q-Sort" according to Ahnert et al. 2012), observable activities (self-constructed rating scale) and the play & social behaviour (self-constructed rating scale) of the target child. During a research seminar, pedagogy students were trained for the rating process, but without knowledge of research hypotheses, carried out the analysis of the video-recordings. They were able to use a rating manual providing a description of each category with an anchoring example.

b) Questionnaire Survey

As with during the rating process the project team referred partly to standardised categories for the questionnaires for the pedagogical staff and parents (based on questionnaires in similar studies such as ASTAT 2012, Aigner/Rohrmann 2012, BVZ 2006). The pedagogical staff questionnaire consisted, on the one hand, of general questions concerning, for instance, professional qualifications and experience. On the other hand, pedagogical staff were asked to assess behaviour, interactions and relationships of individual children ("Behavioural Assessment of Pre-School Children" according to Döpfner et al., 1993 and "Student Teacher Relationship Scale" according to Pianta 1992). The parents' questionnaire served to gather information about the family situations of the children (e.g. about the socio-economic status or the division of child-care tasks in the family) and to gain information about the behaviour and the relationships of the child within the family.

c) Story completion task

To endorse the video and questionnaire survey, a projective test was carried out with the target children. Through the so-called "Mac Arthur Story Stem Battery" (MSSB) (cf. Bretheron & Oppenheim 2003) the children are told the beginning of a short story with Playmobil figures ('Story stem'), which they then should continue and play through. Each of the seven different story stems implies a specific conflict drama (such as, for example, dealing with hurt, jealousy, a parental ban, conflicts between

loyalties), which the children are invited to take up and to complete the story. In terms of the projective process the spontaneously produced ends to the stories represent depictions of the subconscious relationship models ("Representations") and thus give in-depth insights into the "inner worlds" of the children, especially the internalised family ties to father and mother. The semi-standardised storytelling situations were filmed in order to enable a detailed retrospective analysis. The rating scales were developed for this purpose based on the original instrument. The stories told were, on the one hand, coded according to *content themes*, e.g. the appearance of moral themes, empathetic reactions, dysregulation, avoidance etc. In addition, within the category of *figure representation*, it was ascertained which figures the children use (e.g. whether the mother or the father figure were used more) and whether the child represented these in a rather negative or positive way. The third dimension of the MSSB-Coding was the *performance* of the childlike stories so as to focus on *how* the child told the stories – e.g. coded, how creatively and how coherently.

The most important results

In the following chapter the most important results which are relevant (a) for the professional behaviour of the pedagogical staff and (b) the interactional behaviour of the children will be presented. These quantitative results are complemented through the representation of a qualitative individual case analysis (c).

a) Professional behaviour of pedagogical staff

Professional quality

The "Quality" of the professional behaviour in interactions with the pre-school group was estimated by means of the standardised observation instrument, Arnett's "Caregiver Interaction Scale" (CIS) (1989). The dimensions "positive interaction", "punitiveness", "permissiveness" and

“detachment” were taken into account. The aim was to demonstrate whether and how men and women work in similar or different ways concerning basic forms of interaction. In the direct comparison between the two sexes, no “differences in quality” were found in the overall CIS-data. However, in sub-areas, this was certainly the case: male pre-school teachers interact with the children in their care a little more frequently in a positive way and also less disciplinary. Concerning “detachment” (understood as a type of disinterest in the child), there was no difference. In the area of “permissiveness”, male members of staff show significantly higher levels. This evidence can be preliminary interpreted as showing that the male pre-school teachers in our sample were clearly much more relaxed and less consistent with regard to upholding the rules.

Differences in Group Dynamics

There were no differences observed between the mixed-gender and all-female teams for the appraisal of group structure initiated by the child-care staff (i.e. concerning the vehemence with which children were instructed by members of staff). In the area of “social mobility” (i.e. whether the majority of children were moving actively around the room and whether a lively form of co-operation could be observed) a much more highly developed mobility was observed in mixed-gender groups. It appears that in groups led by mixed-gender teams greater social mobility and mobility dynamics develop than with all-female teams. With regard to transition phases (i.e. whether staff-led group activities move from one activity to another without pronounced “breaks”), there is a tendency towards more gentle transitions between different group activities in mixed-gender teams. Causes for the observed effects have not yet been conclusively clarified and would have to be analysed through the exact observation of the inter-collegial interaction within the professional team. However, at this stage, the hypothesis is that the interaction between male and female members of staff as a tandem in a child-care group evoke other processes or dynamics than in a group led by all-female staff.

b) Child Interaction Behaviour

Behavioural Disorders and Competences

An additional questionnaire based on two standardised instruments ("Behaviour Assessment Questionnaire for Pre-School Children [VBV 3-6; Döpfner et al. 1993] and the "Student Teacher Relationship Scale" [STRS; Pianta 1992]) were completed by the childcare-workers for 30 children (15 girls and 15 boys). The aim was to understand more about behavioural disorders (especially in age-typical forms) as well as about the areas of competence in child behaviour of children aged between 3 and 6 on the basis of assessment by childcare-workers. The "STRS" should allow the assessment of the relationship of a child towards a member of staff on the basis of the behaviour of a child as observed by the childcare-worker as well as the supposed feelings of the child in question. Overall it was shown that girls have slightly higher values in the area of socio-emotional competence whereas boys differ from girls through a tendentially higher degree of oppositional-aggressive behaviour. On the other hand, girls differ from boys through a significant higher degree of persistence and concentration in play behaviour and appear to be significantly less hyperactive ($p < .01$). Overall girls have a distinctly better relationship with staff members. There were no noteworthy differences between the gender groups in the area of emotional conspicuity. These results are partially congruent with the frequent reports of practitioners about rather restless and less socially adjusted boys and the quiet, socially "adjusted" girls with high levels of concentration.

Attachment Tendencies

In tandem with the information gleaned from staff members, the behaviour of the 30 selected children was observed and assessed. The first point of interest was the form of contact (or avoidance) of boys and girls to male and female members of staff. In this way, the behaviour of each individual child was assessed relying on observation categories derived from the Attachment-Q-Sort-method (cf. Ahnert et al. 2012). *Without* aiming for an attachment-style diagnosis, following observation categories

were used: seeking for security and proximity; exploration assistance; enjoyment of physical contact; use of negative communication strategies; interest in communication and affective exchange; as well as the striving for exclusive attention. It is a matter of dyadic focus, in which behavioural (re-)actions towards a specific member of staff initiated by the child are at the centre of attention. When we analysed the 15 girls and 15 boys in our sample with regard to the above-mentioned behavioural dimensions dependent on the sex of the members of staff, significant effects were noted: whilst girls distribute contact behaviour between male and female staff more or less equally (with the exception of exploration assistance and interest in communication and affective exchange, which is expressed slightly more frequently towards male staff members), the behaviour of boys towards male and female members of staff shows obvious differences: in all (!) the above-named behavioural dimensions the boys showed more frequent contact with male members of staff. In the areas of interest in communication and affective exchange, enjoyment of physical contact as well the striving for exclusive attention, the detected differences are even statistically significant ($p < .05$). The use of negative communication towards members of staff was hardly registered during observations, i.e. neither in the observation of boys nor of girls.

Play and Social Behaviour

In addition to the selected staff-child dyad, the general play and social behaviour of individual children in the child-care groups were assessed (through four self-constructed, bipolar rating scales including the dimensions of "concentration/ focussing" versus "fluctuation", "social-spatial mobility" versus "immobility", "social integration" versus "isolation" as well as "introversion" versus "extraversion"), with the aim of ascertaining possible differences or similarities in the behavioural tendencies of children in mixed-gender versus all-female staffed professional teams. Through direct comparison between the sexes it is immediately apparent in our video-recordings that girls are obviously more "focussed" (i.e. more concentrated, spending longer on one activity, calm, etc.), whereas boys show more "fluctuation", changing from one activity to another. This sta-

tistically significant difference is in accordance with the assessments from the questionnaires as reported above. In terms of the analysis of the comparative values of boys and girls in mixed-gender versus all-female teams, further interesting "effects" are apparent: boys show a higher level of extroversion in groups led by mixed-gender teams, whereas their behaviour is significantly more introverted in all-female led teams ($p < .05$). Over and above this, boys are tendentially more mobile in groups led by mixed-gender teams (i.e. using more space, moving more & being less inactive), whilst they are more static (i.e. spending more time in one place) and conform more in all-female led groups. On the other hand, no such "effects" can be verified for girls in relation to the constellation of staff.

c) Qualitative Individual Case Analysis

The quantitative steps towards analysis were complemented through qualitative case analyses. In the so-called case-studies, the data obtained were brought together onto an individual level and to this end comprehensive data sheets bringing together the different research tools which were constructed for the 21 target children (10 girls/ 11 boys) with the aim of facilitating an individual-case perspective. On the level of individual cases, two boys with very little real fathering experience in the family and little outside contact with male attachment figures were of particular interest. The fathers of these children were either strongly involved in their own work processes and hardly integrated into family processes while the contact with the children being concentrated in a few hours per week. On the other hand, the time-intensive mother-child relationships were very strong, with a strong dyadic bonding, but accordingly more conflicts and difficulties. The mothers "left alone" in these situations were solely responsible for more or less all the duties of upbringing, absorbing a lot of energy and causing excessive demand. We were very eager to find out how these children would react towards male members of staff in the day-care centre. Extracts from the raters' descriptions of those boys showed an obvious wish for contact with male members of staff: "He enjoys sitting with the male members of staff", "Constantly near to the male member of

staff (on lap etc.), "Need for physical contact (with male member of staff)", "Target child very orientated to member of staff and needing a noticeable amount of attention and care", "Searching contact with male member of staff, apparently enjoying proximity (sitting between legs of staff member)", "Very clingy. Constantly with member of staff. Motorically active (running, jumping...)", "Target child clinging to member of staff. Fighting for attention of member of staff, upon whom he has focussed entire attention, whereby he also goes as far as forcing other children back (pushing etc.) to have the member of staff to 'himself' ". The estimations of the raters were verified by the analysis of the video-recordings. The attachment behaviour towards the male members of staff was remarkable in these individual cases. The behaviour showed a strong need for physical contact, for presence and warmth, for support with tasks and play as communication and affective exchange in the relationship to male members of staff. The estimation of the male members of staff confirmed the observed attachment and dependence of the boys. On the other hand, we were only able to partially assess the relationship to the female members of staff. In the case of one boy, the assessment showed particular confrontational and noticeable behaviour for which reason the female member of staff classified the boy as "oppositionally aggressive" on the behaviour assessment instrument and writing the following description of the boy: "leader role, seeking attention, complains and grumbles, tells fantasy stories, outbursts of anger, easily distracted, lies or cheats, insecure, constantly on the move, transcends limits, defensive, sulky, sucks thumb, nervous movements". However, we were able to ascertain that the attitude of the male member of staff and his interactions with this boy were of a completely different nature. There were striking differences between the search for physical proximity and communication with the male member of staff and the confrontational, difficult relationship towards the female member of staff. A similar tendency can be perceived within the family process where the relationship to the mother is described as tendentially confrontational and difficult whilst the – albeit broadly absent – father does not report confrontation and difficulties. The behaviour of the members of staff may be rooted in their different

personalities; however, we do believe that a relevant gender-typical factor can be observed when the family-based transfer tendencies of the children provoke different styles of interaction and estimations of behaviour to male and female members of staff. Regarding the inner representation of the boys as shown in the projective storytelling process, dyadic, harmonious forms of interaction, few confrontational themes (such as competition or rivalry) as well as a tendency towards avoidance are dominant. This structure of processing as the significance of the father figure in the stories are remarkable, at the very least, since the need for conflict-free harmonious and dyadic relationships to responsive and especially male adults can be observed in everyday day-care situations. We believe that a strong longing for a paternal relationship can be perceived in individual cases, where the relationship to a male member of staff is obvious or noticeable in the stories told. The above-mentioned characteristics such as lack of ability to deal with conflicts, lack of triangulation and the strong need for dyadic, responsive relationships with a male adult show up developmental difficulties, which are caused, among other things, by a real lack of a paternal figure in the family. When family structures, observed data, estimations of behaviour and the analysis of the process of story telling are brought together, we have a picture of the behavioural and experiential tendencies of these boys, which we would thus connect with a real father deficit and a resulting "hunger for a father figure" (Herzog 1982), showing the interactions with male members of staff as being transfer induced.

Conclusion and Discussion

The results of the study thus show clear gender specific effects between staff and children. A clear "Man-Boy-Effect" can be seen both in the video analysis as well as in several questionnaire answers. Thus, we were able to observe that it is the children themselves who make a "distinction" between the members of staff. Impressively it can be observed across the criteria applied that boys more frequently look for and hang

onto the contact with male members of staff, which points to a basic need for same-sex exchange and identification. Admittedly, it cannot be excluded that girls do not have the same need, i.e. for exchange and identification with same-sex (adult) persons. However, our data show that beyond the level of various levels of data collection, girls respond less strongly to the gender of the member of staff or the composition of professional teams, whereas it is the boys who are drawn towards a male team member. Through this and with regard to the female dominance in the constellation of the child-caring professions, various possibilities for contact, identification and projection for girls and boys emerge. According to our first results the possibilities are narrower for boys than for girls. In part, we have found clear indications for the fact that the presence of male pedagogues can counteract this tendency, which is unfavourable for boys. It is apparent that boys can be "picked up" and led into a more inviting and less confrontational situation more easily by male members of staff. The claim that this would contribute automatically to the stabilisation or re-establishment of the conventional male gender role cliché appears to us to come from a gender-ideological bias, for which there is no evidence. If male members of staff receive gender-sensitive initial carer training and education, this "Man-Boy-Effect" that we have described can be in fact used to take corrective and modifying pedagogical steps, which would be extremely valuable with regard to the individual cases described above.