Studies on the motor development of children often include gender data but usually understand gender as a normative category (Voss & Gramespacher, 2019). With the aim of achieving equal opportunities, we argue that gender perspectives should be integrated more tightly into early childhood movement education and thus expand and deepen our lines of argument (Gramespacher & Voss, 2019). In this contribution, we discuss the need for a stronger integration of gender perspectives in early childhood movement education and show that gender, as an integral part of the personality, is also an indispensable category in movement-related early education.

**Theoretical and empirical relationships between gender and movement in early childhood movement research**

In sports pedagogical analyses, the category gender is usually understood as a social construction, that is, as the result of differentiations (Gildemeister & Robert, 2008). Simultaneously gender is a point of reference for social structuration, e.g., of groups. Data are also collected on the social conditions underlying the development of gender disparities (cf. Becker-Schmidt, 2013, pp. 19). Sports scientific gender research occupies a prominent position in the gender studies canon, as the body is the central medium in sports and secures its existence by means of the physical presence of the actors (cf. Klein, 1997, p. 113). The visibility of the body in sports supports the popular assumption that there are only two genders and the impression that there is a “natural” gender order, thus, reinforcing the relevance of gender differences and legitimating exclusionary processes (Pfister, 2008)—also beyond the realm of sport. But basically, it depends on the scientific question and the theoretical framing, which findings arise in empirical studies.

With regard to qualitative studies in the realm of childhood research, we find some evidence that there are movement settings that produce little effective gender differences. There are a few and rather general indications that movement and gender can also be related respectively that gender processes hardly ever take place. According to a Swedish study, if an outdoor area is designed to be close to nature, it can contribute to the fact that little or no gender processes take place (Änggård, 2011). In Switzerland, Vogt, Nentwich, and Tennhoff (2015) present an ethnographic study on interaction patterns between child carers and young children in nurseries. The study is based on interaction theory and the accountability concept (Hollander, 2013). According to this concept, “persons in situations are held accountable and examined to see whether their behavior meets the expectations of the sex category” (Vogt et al., 2015, p. 231; emphasis in the original). This theoretical approach allows the authors to state that nurseries without gender “stereotypical” play corners and with a variety of dressing material and unstructured toys are conspicuous by comparatively few interaction courses with gender-related topics (cf. Vogt et al., 2015, pp. 236).

A German study on gender-specific movement socialization focuses on the topic parent–child physical education (Gieß-Stüber, Voss, & Petry, 2003) and demonstrates an institutional reproduction of gender differences with respect to the trainers and the participating parents as well as numerous gender (de)construction processes, for instance via interactions, clothing, materials, teaching content, and movement qualities. For the “everyday gender relations” in preschools focusing on physical activity, Voss (2011) shows that the teachers participate in the ongoing circle of gender construction, for instance via gender-differentiating practices in team building. Moreover, the activities offered as well as the available facilities, apparatuses, and materials lead to clear (de) dramatizations of gender. Hunger and Zimmer (2012) provide evidence of a bipolar gender structure in early childhood movement socialization and corresponding gender-specific opportunities for development. Recent research indicates that gender differences in the motor development of young children are (also) results of social action.

Studies on the motor development of young children, by contrast, usually describe gender as a binary-coded difference (e.g., Junaid & Fellowes, 2006; Rose, 2012; Adler, 2015; Eyre, Walter, & Duncan, 2018). These tendencies can also be found in empirical studies and practice-related projects on psychomotor development (Gramespacher, Rayling, & Voss, 2020). But these studies are considered to be limited because they do not include social, environmental and/or cul-
Abstract

This contribution focuses on the connections between movement education, early childhood and gender. We argue that these connections should be investigated in future studies and, for example, be linked to current gender theoretical discourses. This is not only in order to productively introduce the findings for gender studies in sports science and movement education. Rather, the aim could also be to find out how the gender perspective can be productively introduced in the context of diversity-conscious movement education with and for children.

Keywords
Physical activity · Motor development · Teaching · Motor skills · Inequalities

Gender as a necessary dimension in early childhood movement education

The analysis of didactic concepts, e.g., on psychomotor skills, indicates that gender-specific concepts are still preferred (e.g., Gramespacher et al., 2020). There are no concepts for overcoming gender stereotypes in early childhood physical education (Voss & Gramespacher, 2019). However, the normative treatment of gender differences in studies on motor function may be transferred to a social contextualization and a critical examination of the category of gender. Furthermore, we suggest a diversity-conscious movement education in view of the expanded perspectives on heterogeneity now available. Possible points of departure include the concept of gender competence: Teachers reflect on their own behavior regarding movement and develop observational competencies with regard to the production and to establishing gender relations that can be observed in children’s movement behavior (Clersida, 2011). This also requires reflection on one’s own involvement in the production of girls and boys (Bolling & Kelle, 2006, p. 110) concerning movement and sport. This involves a professionalization process arranged into three areas:

- Knowledge of the modes of gender production and rejection,
- A personal and professional stance on gender, and
- A perspective on movement and sport practices that is oriented toward diversity and heterogeneity (Gramespacher, 2016).

In a diversity-conscious promotion of physical activity, teachers understand physical activities as an educational process that promotes all children in their motor development in many different ways. Directors of early childhood educational institutions integrate diversity into their organizational and quality development activities as a cross-sectional task and make diversity competence in pedagogical professionalization processes into a key competency in relation to movement and sports in childhood pedagogy (Voss, 2019)—without, however, leaving the dimension of gender out of account (Rulofs & Dahmen, 2010). Rather, the category of gender should always be made explicit, even in the context of diversity-related competencies, because according to Rendtorff (2013, 2019), the mere “thinking” of the category of gender in pedagogical contexts inevitably leads even those with an awareness of diversity to leave potential differences out of account and begin to search for similarities. This also requires reflection on one’s own involvement in the (re-)production of gender stereotypes. The category of gender, thus, persistently focuses on difference(s), and this makes
it socially productive because perception opens up in this way. These processes must be made productive in the context of early childhood movement education.

Summary and outlook

Profession-specific research in the context of gender, diversity, and movement education should treat questions concerning the relationship between gender and other heterogeneity dimensions of early childhood individuality and identity, while also considering the issue of inclusion (Tiemann, 2019). To this end, future childhood education research could focus more on (de)construction processes of gender relations in movement-related early childhood learning arrangements and simultaneously on the interdependence of different relations of inequality and difference. Possible frameworks are offered by current gender theory discourses (post-studies, Haraway, 1987 [Cyborg Manifesto]; Dvorský & Hughes, 2006) as well as by general poststructural, postmodern, and post-colonial perspectives (Wright, 2006). One example of a suitable analytical approach is undoing gender (in terms of subversive activity in which practices break structures [Hirschauer, 2016, p. 117]). With regard to movement education, it would also be useful to consider an indiffERENCE relation that uncouples practices and structures so that gender simply does not take place (Hirschauer, 2016, p. 117).

Research on the relations between gender, movement education, and (early) childhood is still in a rudimentary state. Simultaneously, more recent research into motor development points out that these connections are of interest—also and possibly especially for psychomotor development, for which young children are a key target group. But it is not only the indications from motor research that should be made productive for gender research in the realm of movement. Furthermore, the findings of childhood research as well as those of gender-appropriate pedagogy—in regard to theory development and for empirical studies—may be interesting for motor skill research. For this purpose, the theoretical discourses and research on childhood pedagogy should be geared more toward (de)construction processes of gender relations in movement-related (early) childhood learning arrangements and consider the interplay between as well as the interdependency of various relations of inequality and difference.

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Compliance with ethical guidelines

Conflict of interest. E. Gramespacher and A. Voss declare that they have no competing interests.

For this article no studies with human participants or animals were performed by any of the authors. All studies performed were in accordance with the ethical standards indicated in each case.

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