Gender Development Research in *Sex Roles*: Historical Trends and Future Directions

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Abstract

The late 1960s through the 1970s marked an important turning point in the field of gender research, including theory and research in gender development. The establishment of *Sex Roles* in 1975 as a forum for this research represented an important milestone in the field. In this article, we celebrate the 35th anniversary of *Sex Roles* and, in particular, its contributions to the field of research on children's and adolescents' gender development. We examine the trends in research on gender development published in *Sex Roles* since its inception and use this analysis as a vehicle for exploring how the field has grown and evolved over the past few decades. We begin with a brief review of the history of this field of research since 1975. Then, we present a descriptive assessment of articles published on gender development in *Sex Roles* over time, and link this assessment to general trends that have occurred in the study of gender development over the past 35 years. We conclude with a discussion of future directions for the field of gender development. In particular, we highlight areas in which the journal could play a role in promoting more diversity in topics, methods, and ages employed in gender development research.

Keywords

Gender development; Children; History; Review

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Introduction

Even before a child is born, processes of gender socialization begin as parents prepare for their child's arrival: do the parents allow the ultrasound technologist to tell them the sex of their baby? Does knowing this information make a difference in how parents think about their unborn child? Once a child is born, parents remark, react to, and question the origins of their child's behaviors—are they related to how they treat their child, or might they be related to their genes or personality? Developmental scientists are concerned with how and why behaviors emerge and change over time, and gender developmental scientists narrow their focus to the study of the origins of gendered behavior and gendered thinking. Gender development researchers, similar to other developmental researchers, focus on questions of change over time (Ruble and Martin 1998). How early do children learn to identify themselves and others as males or females, and what are the consequences of learning to discriminate and label gender? At what point in development do girls and boys begin to diverge in their behaviors and interests, and why do these gender differences emerge? When do children develop a sense of male privileged status and when do they form negative attitudes about the other sex? These questions all concern basic processes underlying the origins and transmission of gender-role attitudes and structures, and are important to understanding broader issues related to the role of gender in shaping individuals, relationships, and social institutions.

These questions have also found their way into the journal *Sex Roles.* Since its first issue, the journal *Sex Roles* has published studies focused on children and adolescents. The presence of such articles in a journal more broadly devoted to the study of gender indicates a longstanding recognition of the importance of understanding the emergence and development of gender across development. Without having an understanding of developmental changes and of the patterns of change over time, scholars may only have a limited perspective on human behavior. Gender development researchers strive to fill these gaps in understanding.

In this article, we review both the broader history of research on gender development over the past few decades and more specifically address how this research has been represented in *Sex Roles*. In doing so, we celebrate the 35th anniversary of *Sex Roles* and, in particular, its contributions to the field of research on children's and adolescents' gender development. We believe that the 35th anniversary of *Sex Roles* provides a unique occasion to expand the mission and scope of the journal to more thoroughly incorporate ideas and research about gender development.

We examine the trends in research on gender development published in *Sex Roles* since 1975 and use this as a vehicle for exploring how the field has grown and evolved, and to highlight gaps in knowledge and research. We first provide a brief review of the history of this field of research since the journal's inception. Then, we present a descriptive assessment of articles published on gender development in *Sex Roles* over time, and link this assessment to general trends that have occurred in the study of gender development over the past 35 years. We conclude with a discussion of future directions for the field of gender development and hope to influence what we see in the next 35 years (or more) of research in *Sex Roles*.

Milestones in the Study of Gender Development

The late 1960s through the 1970s marked an important turning point in the field of gender research. For example, in 1978, the current editor of this journal and her co-authors published one of the first textbooks on the psychology of women and gender roles (Frieze et al. 1978). At that time, these areas were just emerging and the textbook represented an early

and important effort to survey and integrate the existing literature. A recurring theme throughout the text was the white male bias that characterized the existing research and its interpretation. Furthermore, it provided a thorough discussion of the complexities surrounding the relative contributions of biological and social factors in understanding the psychology of women. Since that time, the field of gender studies has evolved and research on the development of gender-related behaviors and processes has grown considerably. In this section, we briefly review the developments in this field over the past few decades, with a particular focus on innovations in theory and research on gender development. In this section, we provide some perspective on the broader context of research and theory in the field that coincided with the establishment of *Sex Roles* as a forum for gender research.

A pivotal moment in the field of the psychology of gender occurred with the publication of Maccoby's (1966) edited book, *The Development of Sex Differences*. The book focused on theories of gender development and contained several chapters that remain to this day the foundations of research and theory on children's gender development (chapters by Hamburg and Lunde on hormonal influences on gender differences in behavior, Mischel's chapter on social learning theory of gender development, and Kohlberg's chapter proposing his cognitive developmental theory of gender development). These theoretical contributions gave direction to the study of gender in children.

In 1972, Money and Ehrhardt's book, *Man and Woman, Boy and Girl*, advanced a provocative theory about gender identity and gender differentiation that continues to spark debate. Based on research with intersex patients, this book advanced the idea that social factors were more important than biological factors in gender identity and gender roles and brought nature-nurture issues to the forefront. The authors also promoted the notion of "gender role" as a term referring to the socially defined, outward manifestations of gender, and "gender identity" as one's personal experienced sense of gender.

Chronologically, another important contribution was Maccoby and Jacklin's (1974) book, *The Psychology of Sex Differences.* This book presented an unparalleled synthesis of research findings on gender differences in development. It was especially innovative because it challenged the idea that there were numerous differences between the genders; instead, it argued for only a few well-established differences. This book was also important for highlighting that within-gender differences are often larger than those between the genders (a point still lost in many of the popularized beliefs held today; for example, see Sax 2006). Maccoby and Jacklin's conclusions stimulated further investigations on gender differences and similarities. Furthermore, the authors challenged the notion that parents are the primary agents of children's gender socialization. Instead, they promoted the idea that children play an important and proactive role in the adoption of gender-stereotyped behaviors, and introduced the term "self-socialization" to describe these child-directed processes. The idea that children's choices of whom to imitate plays a key role in their gender development sparked a new generation of research and debate on social and cognitive processes involved in children's gender socialization. Their ideas also added a new dimension to research in the field by turning attention to group-level peer processes.

The 1970s marked a turning point in terms of how scholars thought about the concepts of sex and gender. Unger's (1979) influential paper, *Toward a Redefinition of Sex and Gender*, asserted that the use of the term *gender* "serves to reduce assumed parallels between biological and psychological sex or at least to make explicit any assumptions of such parallels" (p. 1,086). Her ideas led scholars to become more selective in their use of the terms *sex* and *gender* and to avoid framing research in ways that might hint at biological determinism (Poulin 2007). Terminology issues have continued to be raised in the field:

some researchers proposed other usages because of concern that separating "sex" and "gender" may presuppose knowledge of the origins of behaviors (e.g., Deaux 1993).

Also during the 1970s, scholars started to move away from unidimensional and relatively simplistic models about the origins and meaning of gender differences and began to challenge conceptualizations of masculinity and femininity as representing bi-polar opposites. Most notably, in a conceptual breakthrough with both theoretical and methodological ramifications, Constantinople (1973) and Bem (1974) argued that males and females possess both masculine and feminine qualities. This idea revolutionized the measurement of these characteristics. Bem (1974) also argued that having both masculine and feminine qualities—that is, being psychological androgynous—was optimal for psychological adjustment. Her research laid the groundwork for subsequent research on gender identity and framed much research over the following years (Marecek et al. 2003).

These ideas about multidimensionality were further emphasized in Huston's (1983) chapter in the *Handbook of Child Psychology*. Huston encouraged researchers to conduct empirical investigations of links between domains of gender typing rather than to infer their existence, as researchers had been doing (e.g., make assumptions about a child's gender identity based on toy preferences). To provide a framework for organizing existing theoretical constructs and describing different content areas, Huston presented a matrix of gender typing. This matrix helped focus theoretical debates and organize literature in the field. The matrix also has provided directions for new research.

Another important advancement in gender research has been the development and incorporation of meta-analytic methods. Meta-analysis allows for the systematic quantitative assessment of patterns across the findings of multiple studies and has had considerable impact on the study and understanding of many aspects of the psychology of gender (Hyde and Linn 1986). Although not an experimental method, the application of meta-analysis to the study of gender differences has once again highlighted the limited nature of differences between the genders and has illuminated the conditions under which gender differences are more or less likely to appear (e.g., Else-Quest et al. 2006; Hyde et al. 1990). Meta-analyses are themselves not without limitations; they are non-experimental and thus limited in ability to draw cause-effect conclusions and tend to focus on mean differences rather than distributions (see Knight et al. 1996). Nonetheless, they provide important insights into gender development and gender differences.

Current Theoretical Trends and Debates

The field of gender development has been dominated by a few prevailing theoretical perspectives that have driven progress and debate in the field. Some of these competing perspectives have given rise to concepts (and related terms), methods, and research studies that have shaped the literature, including the research found in the pages of *Sex Roles*. In this section, we describe these contrasting perspectives and debates; however, we refer the reader to other sources for detailed discussions of the individual theories that are beyond the scope of what we can do in this article (e.g., Ruble et al. 2006).

Because developmental researchers are interested in the origins of behaviors, it is not surprising, that issues of nature and nurture are theoretically important and that great attention and fervor surround biological versus socialization approaches to understanding gender development (Ruble et al. 2006). Biological arguments have long been advanced to justify gender inequality (Shields 1975) and are often interpreted as deterministic. As such, there is much at stake when biological theories are proposed and research findings are interpreted. Nonetheless, with advancements in research methods and theories addressing biological mechanisms, this field of inquiry has gained acceptance and visibility (Ruble et

al. 2006). Current biological approaches do not imply determinism and instead emphasize the ways in which biological and social factors interact to produce behavior. Some of the most active research in this area has been on girls with Congenital Adrenal Hyperplasia (CAH), a genetic disease in which the fetus is exposed to elevated levels of androgens. Researchers have found that girls with CAH tend to be masculinized in some aspects of their preferences and behaviors (e.g., Berenbaum and Snyder 1995). Studies of prenatal exposure to normal variations in hormones such as testosterone (Cohen-Bendahan et al. 2005), and cross-species comparisons (Alexander and Hines 2002; Wallen 1996) have also become increasingly sophisticated and common.

Another debate that has received considerable attention in the field has concerned socialization and cognitive approaches to gender development. Although this debate can be traced back to Kohlberg's and Mischel's chapters in Maccoby's 1966 book, more recent reviews of empirical evidence has re-stimulated this discussion (e.g., Bandura and Bussey 2004; Bussey and Bandura 1999; Martin et al. 2002, 2004). Both approaches emphasize socialization versus biological processes and highlight the shaping of children's behavior to match cultural gender role norms. However, the socialization and cognitive perspectives differ in the degree to which they emphasize the role of the social environment, especially reinforcement and modeling of adults and peers, relative to cognitive developmental processes, such as the emergence of children's gender identity and knowledge of gender stereotypes. Despite the disagreements over relative contributions of socialization and cognitive processes, there are a number of similarities in these approaches, and both groups of theorists have conducted studies of cognitive and socialization factors. For instance, Bussey and Bandura (1999) describe some cognitive information-processing mechanisms, such as selective attention, forming cognitive representations, and forming plans of action, that mediate observational learning. Cognitive theorists describe the ways in which children interpret and respond to messages provided by socialization agents, such as peers (Ruble et al. 2006).

These controversies have been important for driving new research. For example, researchers have increased efforts to understand early origins of gender differences and have done so by focusing research on younger ages, when gendered cognitions and behaviors first emerge (e.g., Zosuls et al. 2009). More research has also turned to focusing on links among various cognitive and socialization processes, thus leading to more complex models and studies of gender development (for example, see Tobin et al. 2010).

Gender Development Research in *Sex Roles*

There is no doubt that the historic changes described above have influenced the research that appears in our scholarly journals. To explore these trends, we turn our attention to the patterns of publication on gender development within *Sex Roles* since 1975. Our aim is to provide a descriptive medium for presenting trends in the field (and this journal, in particular) rather than to present an empirical piece with analyses that are an end in themselves. In taking this approach, we intend to characterize the issues, methods, and age groups that have received attention in the published research, and identify areas that need additional emphasis. Furthermore, we discuss why conducting developmental investigations is enriching to the field of gender studies, both theoretically and methodologically.

Identifying Patterns in *Sex Roles* Articles

To accomplish our goals, we reviewed all articles published in *Sex Roles* since 1975 (through 2009) and identified 660 abstracts of *Sex Roles* articles that specifically focused on children and child development (for further inclusion criteria, see Appendix A). We then categorized these articles based on the age of the participants in the study (see Fig. 1), the

principal type of methodology used in the study (see Fig. 2), and the content. Given the large number of articles we compiled and the descriptive purpose of our categorizations, our classifications were based on text provided in the abstracts. Because articles often investigated more than one content area or topic, categorizations were not mutually exclusive.

Issues of Terminology

One of the most challenging aspects of classifying the articles was deciphering the meaning of some terms. In fact, this exercise served to highlight conceptual developments in the field and we felt a discussion of terminology was in itself a revealing way to illustrate important conceptual issues. As the area of gender development has evolved and expanded, the terminology used has similarly expanded and sometimes the meaning terms have changed over time. For example, although the terms "sex-typing," "gender-typing," or "gender stereotyping," and "gender identity" have been the most frequently used terms in the field, the definitions and operationalizations of these terms have changed over time. To address this definitional issue, we briefly review these terms, how they have been used, and how we decided to code them in our analyses.

A recent model of children's gender self-socialization, the Gender Self-Socialization Model (GSSM; Tobin et al. 2010) provides a useful framework for distinguishing among the various constructs studied by gender researchers. Tobin et al. point out that "sex-typing" and "gender-typing" are used in many different ways. They may refer to (a) the demonstration of knowledge or beliefs about attributes associated with gender categories (i.e., gender stereotyping), (b) thoughts and feelings about oneself in relation to being a girl or boy (i.e., gender identity), and (c) the enactment of gendered behavior. In accordance with Tobin et al. (2010), when classifying articles, we took into account what measures authors used and classified studies as investigating Stereotyping, Gender Identity, or Gender Differences.

Studies investigating masculinity and femininity as proposed by Bem (1981) were classified under Gender Identity because this classification is consistent with the intent of the authors of these studies. However, a problem with Bem's measurement and conceptualization of gender identity is that it is not assessed in terms of subjective thoughts, feelings, and knowledge about oneself as a member of a gender category, but rather is inferred from self-reports of the degree to which one possesses certain gender stereotyped attributes (Tobin et al. 2010). Thus, we attempted to be sensitive to the multiple types of assessment methods used to investigate gender identity, such as those defined by Perry and his colleagues (e.g., Egan and Perry 2001) and adopted by other researchers over the past decade or so (e.g., Smith and Leaper 2006).

We also found that the term "gender stereotyping" was used without indication of whether gender stereotypes were assessed in terms of personal stereotype beliefs, knowledge of cultural stereotypes, stereotyped judgments, or the enactment of stereotype-consistent behaviors. Such distinctions are important. For example, a child's personal beliefs related to gender stereotypes (e.g., believing that girls are good at math) might not always be consistent with her knowledge of cultural gender stereotypes (e.g., knowing the cultural stereotype that girls are not good at math; Signorella et al. 1993). Judgments, perceptions, and attributions might be closely linked with stereotype knowledge and beliefs, but are nonetheless distinct from them. Behaviors, such as engaging in stereotyped activities or demonstrating stereotyped interactions styles, might also be linked with more cognitive variables, such as stereotype knowledge, but are also distinct from them. As such, applying the general term "gender stereotyping" without explicit indication of whether gender stereotyped beliefs, knowledge, or behaviors are being measured can cause confusion and more importantly, conflate conceptually distinct constructs. In our classification, we

included knowledge and beliefs in the category of stereotyping but included behaviors under Gender Differences.

Content of Gender Development Research in *Sex Roles*

In this section, we examine the content of articles in *Sex Roles* and how it relates to the field more broadly. We focus on the content both in terms of the methods used and the topics covered in the articles.

How Much Attention Has *Sex Roles* Paid to Gender Development Issues?

Since its inception, *Sex Roles* has published a substantial number of articles focused on child and adolescent participants, although such articles made up on average only about 20% of the journal's total publications. The child-focused articles were least represented in the 2000s, comprising only 15% of the publications in *Sex Roles*, compared to between 20% and 23% in other decades. The changes over time are somewhat surprising when compared to the field (see Ruble and Martin 1998). This decline seen in *Sex Roles* might possibly be due to an increase in the number of developmental journals since the 1990s and greater receptiveness of other journals to articles focusing on gender development.

The publications in *Sex Roles* represented a wide range of developmental stages from infancy to adolescence. On average, Adolescence was clearly the most studied age group, followed by Middle Childhood (43% and 31% on average, respectively), and the least frequently studied stage was Infants/Toddlers, especially in the 2000s (see Fig. 1). The paucity of research in Infants/Toddlers in *Sex Roles* likely does not reflect a general trend in the field as sophisticated infant paradigm procedures have been recently developed, allowing researchers to gain better sense of infants' and toddlers' understanding of gender (e.g., Serbin et al. 2001, 2002). In contrast to Infant/Toddler studies, there was a steady increase across decades in articles focusing on Adolescence (see Fig. 1). This change may be due to increased interest in adolescents' gender development in general but it may also be that some of the specific topics, such as body image, have garnered more attention in recent years because of societal focus on health and problems with obesity.

What Have Been the Dominant Methods to Study Gender Development in *Sex Roles*?

Although the studies in *Sex Roles* have used a wide range of methods, across all years the most frequently used method of study represented in *Sex Roles* was Survey methodology (66% on average). A number of articles also used Experimental (14% on average) and Observational (14% on average) methods; however, over time these methods were less represented (see Fig. 2). In addition, few articles used longitudinal or cross-sectional designs to make age comparisons and test developmental hypotheses. On average, 24% of studies involved cross-sectional or longitudinal designs, and these appeared to decrease across decades, with the 1970s and 1980s having the largest percentage and the 1990s and 2000s having a lower proportion of studies using such designs. Overall, the heavy reliance on non-experimental survey and interview methods and the lack of studies using longitudinal and cross-sectional designs may be problematic in that this tendency limits the goals and questions that can be the focus of study. For instance, debates surrounding the relative influence of biological, socialization, and cognitive factors in the emergence of gender stereotyped preferences and behaviors need to be addressed using methods that can test causal directions, including experimental methods and longitudinal designs. Furthermore, many topics that are important to theoretical development require the use of methods that may be time consuming, expensive, and complex, such as observation methods. The gender development field will need to focus more on these complicated methodologies to make further progress in answering these types of questions. Certainly, *Sex Roles* can be a leader

in emphasizing these methods and in creating calls for special issues that focus on these methods.

Which Particular Issues of Gender Development Have Been Focused on in *Sex Roles*?

In the following section, we use the latest version of the multidimensional matrix from the *Handbook of Child Psychology* (Ruble et al. 2006) to organize the publication topics represented by gender development researchers in *Sex Roles.* We also use this endeavor to illustrate areas that have not been explored in any depth. This matrix addresses normative aspects of gender development and is organized around four gender-related constructs (e.g., concepts or beliefs) and six content areas (e.g., activities and interests) to create cells (identified with unique number and letter combinations) that contains specific research topics (e.g., gender constancy). Because this matrix has served as a precedent for organizing the literature and has also been modified and discussed over time in successive *Handbook* chapters (Huston 1983; Ruble and Martin 1998; Ruble et al. 2006), it serves as a heuristic for describing trends. In Table 1, we present a breakdown of the content areas and constructs, showing how many articles (and what percentage of the total number) fell into each cell of the matrix.

The articles in *Sex Roles* covered a wide range of broad content categories and constructs, although certain topics and constructs were consistently more dominant (see Table 1). Starting with content areas (the rows), by far more articles were written on two of the six content areas of the matrix—Activities and Interests (toys, occupations, etc.) and Personal-Social Attributes (roles, abilities, etc.)—than the other areas. Compared to the general patterns reported in the state-of-the-science review chapters on gender typing in the *Handbook of Child Psychology*, these two areas also received much attention from gender developmental scientists. However, there were notable differences between some of the less frequently appearing categories and trends in the broader field: *Sex Roles* published fewer studies on Gender-Based Social Relationships and on Biological/Categorical Sex when compared to the field in general. Given the strong socialization perspective of many readers of *Sex Roles*, it may not be that surprising that *Sex Roles* published few articles on Biological/Categorical Sex, but this topic has been very popular in the gender development literature because of its theoretical implications. Both Kohlberg's cognitive developmental theory and gender schema approaches are based on ideas that understanding of basic gender knowledge facilitates and motivates learning about other aspects of gender (e.g., stereotypes) and engaging in gender-typed behaviors. Thus, three gender category topics that would fall under Biological/Categorical Sex (cell 1A) have received heavy research attention in developmental journals: understanding of gender identity, gender constancy (children's understanding that gender is constant across time and situations), and infants' abilities to discriminate gender (ability to distinguish males from females). On the other hand, research on Values Regarding Gender (attitudes, bias, discrimination, etc.) associated with gender has not been the focus of research attention by gender developmentalists, and this lack of attention has also been evident in *Sex Roles*. Given the feminist perspective on the importance of considering power and status, it may be somewhat surprising that so few child-focused articles appearing in *Sex Roles* have explored issues of gendered values.

An examination of constructs from the matrix (columns) shows that two of the four constructs—Identity/Self-Perception and Behavioral Enactment—were represented more often than others but the differences were relatively small. Concepts and Beliefs were well represented, but Preferences showed the lowest frequency of publication. These patterns are consistent with the amount of space devoted to these constructs in the *Handbook of Child Psychology* chapters, suggesting that the constructs of interest to gender developmental scientists have been mirrored in *Sex Roles*.

Also of interest are cells that were empty (e.g., concepts/belief about values; Cell 6A) or showed very low numbers of publications (concepts/beliefs about relationships; Cell 4A). When comparisons were made between the patterns of publication of gender development topics in *Handbook of Child Psychology*, the articles appearing in *Sex Roles* appeared to mirror the trends shown in the field more broadly with one major exception. Specifically, *Sex Roles* differed in the lack of publication of articles on topics related to identity/self perception associated with gender categories (Cell 1B). As described above, researchers have attended to this cell because of the implications for gender development more broadly, but this trend has not been demonstrated in *Sex Roles*.

Which Gender Development Topics Have Received Consistent Research Interest and Which Have Changed over Time?

In this section, we describe the findings using a more general classification strategy. That is, we classified articles based on major topic areas addressed in the literature on gender development. We identified topic areas using a bottom-up analysis of the articles in *Sex Roles.* Our topic areas are also consistent with the way in which topic areas are frequently grouped at conferences that cover gender development research, and thus reflects general research activity in the field. This approach allowed us to explore more fully and descriptively the interests of authors and editors of *Sex Roles*, which may diverge from the focus on topics represented in the developmental handbooks. We developed nine broad topic categories (see Table 2). The categories are discussed in terms of whether they have maintained consistent interest over time or have shown a change in research interest over time. We follow this review of the more prominent categories with a discussion of topics that have been relatively neglected across time and more specific content areas that deserve greater attention.

Topics that have Maintained Consistent Interest Over Time—A number of topic areas received consistent research attention across time. Here we describe them in order of their prominence.

Gender Differences—The most frequent category appearing across all years was Gender Differences (an article was coded into the Gender Differences category when the abstract mentioned a comparison between girls and boys in a specific area). On average, slightly over half of the articles published in *Sex Roles* examined differences between the genders, and this trend mirrored research in the field more broadly. It is noteworthy that there was a decrease in the number of these studies in *Sex Roles* from the 1990s to the 2000s (see Table 2), potentially showing a declining interest in this area of research. It is possible that Maccoby and Jacklin's 1974 book on the psychology of gender differences initially spurred increased interest in this area that peaked in the 1990s, but that increasing criticisms pertaining to the methodology and conclusions drawn from gender differences research resulted in a decrease in studies focusing on such differences by the 2000s. Most notably, Hyde (2005) proposed the *gender similarities hypothesis* to counter the differences model that has been popular in science and the popular media. The gender similarities hypothesis proposes that males and females are similar on most psychological variables and that most differences are in the close to zero range when examining effect sizes. Further, Hyde (2007) has argued that more theoretical and research attention needs to focus on gender as a stimulus variable that influences how other people behave toward a person rather than as an individual difference variable. Thus, in recent years, researchers have been challenged to formulate more complex research goals and studies that directly address popular assumptions about the existence, origins, and stability (or malleability) of gender differences. It will be interesting to see if such challenges are addressed in future articles in *Sex Roles*.

Socialization—Over time, an average of about one-third of the articles in *Sex Roles* were focused on gender socialization (see Table 2), and almost half of these articles focused on socialization by parents. Socialization continues to be a popular topic of study in gender development (Ruble et al. 2006). A range of parent factors were represented in these *Sex Roles* publications, from parents' attitudes, expectations, and perceptions, to parents' behaviors with their children, and how parental characteristics (e.g., maternal employment, gay/lesbian parents) affected children's gender development. A fair number of studies also investigated adults more generally (e.g., adult networks in children's lives, adults' perceptions of children) and teachers as socialization agents, although these categories were more prevalent in the 1970s and 1980s. The emphasis on gender socialization by parents and other adults is consistent with the popularity of socialization theories that emerged in the late 1960s (Mischel 1966, 1970) and revised in the 1970s and 1980s (Bandura 1977, 1986; Mischel 1979).

Studies focused on peer socialization were also prevalent in the journal, representing on average almost 20% of the socialization articles across the decades. Somewhat more articles on peer socialization were published in the 1970s and the 2000s, perhaps a result of Maccoby's work in the 1970s on peer socialization and later, from renewed focus and theorizing about the role of peers, such as Judith Harris' (1995) group socialization theory, and Maccoby's later work on the consequences of gender segregation (1998). The peer socialization category also included studies that related to peer bullying and aggression, and there appeared to be more articles on this topic in the 2000s in *Sex Roles* and in the field more broadly, coinciding with the popularity of new theories concerning gender differences in styles of aggression (e.g., relational aggression vs. physical aggression, Crick and Grotpeter 1995).

Two other socialization topics were relatively frequent in the 2000s. First, several articles examined the role of social contexts, such as the family or school environment or specific factors in the broader sociocultural context. This apparent trend toward emphasizing context is consistent with the growth of contextual theories and cultural perspectives over time (for example, see Bronfenbrenner and Morris 2006; Magnusson and Stattin 2006). Second, some studies investigated the ways in which properties of objects could lead children to develop distinct styles of play (e.g., Karpoe and Olney 1983; Serbin et al. 1990). This type of research reveals how adults' choices of children's toys and children's own choices can indirectly affect girls' and boys' development of different interaction styles and skills and more research identifying these features and their affects could and should be published in *Sex Roles.*

Stereotyping—The next largest category represented in *Sex Roles* was Stereotyping, with approximately 25% of the studies across decades addressing some aspect of children's stereotyping (see Table 2). It should be noted that studies that only concerned adult stereotyping (e.g., parents' stereotyped beliefs) were classified under Socialization rather than Stereotyping. As a result, this category was restricted to children's stereotype-related cognitions and behaviors. Not surprisingly, most of these studies concerned the domains of activities/interests and personal-social attributes, similar to our findings reported above for gender differences. Studies commonly investigated the links between stereotype knowledge/ beliefs and children's interests/behaviors. Such studies are necessary for resolving theoretical controversies regarding the importance of cognitions in the development of early gendered behaviors, and these types of studies have been popular in the broader field of gender development as well as being represented in *Sex Roles*. For example, Bradbard and Endsley (1983) found that when novel objects were labeled as being for the other gender (i. e., stereotype knowledge), preschoolers explored the objects less frequently, asked fewer questions, and were more likely to forget object names than when the objects were labeled

for their own gender or both genders. Although there were a number of experimental gender-labeling studies like this conducted in the 1970s and 1980s, there have been no recent studies published in this area in *Sex Roles*. Such studies continue to be published in other child development journals (Martin et al. 1995). This decline in *Sex Roles* is unfortunate as there are still a number of unanswered questions regarding mediating mechanisms, age trends, and individual differences that are essential for theoretical development and intervention efforts (Miller et al. 2006).

Children's attitudes regarding egalitarian gender roles were also included within the Stereotyping category, and a considerable number of studies were published in this area, which were coded within the matrix cell for gender attitudes. These studies represent the longstanding interest and established measures concerning attitudes about egalitarian gender roles both within *Sex Roles* and the broader field of gender development. Moreover, these attitudes were often studied in relation to parent socialization (i.e., how parents' gender role attitudes relate to children's gender role attitudes) and as factors influencing gender differences (i.e., how children's gender role attitudes relate to their behaviors and interests).

This category also encompassed a number of articles that focused on how children process and respond to gendered information in the environment. Many of these studies were designed to investigate the effects of stereotypes on children's perceptions, including their memory/recall of stereotype consistent and inconsistent information, social judgments, and expectancies. These studies were therefore focused on exploring the cognitive processes underlying gender development.

Gender Identity—Gender Identity was also a consistently appearing topic category across the decades. The largest number of articles on this topic concerned self-perceptions of traits and abilities. Those studies typically involved children's self-ratings of masculinity/femininity using scales such as Bem's *Sex Role Inventory* (Bem 1974) and Spence's *Personal Attributes Questionnaire* (Spence et al. 1975). As mentioned previously, however, the studies using these measures did not specifically assess children's own thoughts, feelings, and knowledge regarding their membership in a gender category (Tobin et al. 2010). Rather, children were asked to indicate the extent to which they believe that certain gender-typed attributes characterize them and the researcher uses this information to classify children along masculine/feminine dimensions. Historically, this has been the methodology used in the adult literature and, until recently, researchers interested in children have also used this approach. Currently, however, child researchers have tended to assess gender identity by directly asking children about their personal feelings regarding being male or female such as asking children the degree to which they feel that they are typical members of their gender group and the extent to which they are content with being a member of their gender group (e.g., Egan and Perry 2001). However, there may be developmental constraints in collecting such data as younger children may not be able to reflect upon their personal feelings regarding being male or female.

Another central focus of research and debate on gender identity development has been Kohlberg's concept of gender constancy and gender schema views on the importance of basic gender understanding (Martin and Halverson 1981; Martin et al. 2002). Indeed, the second largest number of articles on Gender Identity concerned gender awareness, labeling, and constancy. These aspects of early gender identity have received less research attention in *Sex Roles* than in the field more broadly (as described above). Only a small handful of studies addressed children's affective sense of themselves as male or female or the wish to be male or female. Articles published in the 2000s were more likely than earlier studies to investigate multiple dimensions of identity (e.g., Carver et al. 2003), thus representing current thinking about gender identity as a complex, multifaceted construct.

Aside from studies growing out of classic theories of gender identity development, another somewhat frequent sub-category concerned body image. This topic became especially noticeable in the publications in the 1990s and 2000s, likely coinciding with increased attention to and alarm in the popular media surrounding the issue of eating disorders and obesity. Indeed, during the same two decades, eating disorder symptomology also appeared as a topic in *Sex Roles*.

Topics that Showed Changes Over Time—Although we did not observe any dramatic changes in coverage of the various topics across decades, some did evidence an increase in research attention over time. Here we discuss them in order of their general prominence in the journal.

Increased Cross-cultural Research—One of the more noticeable changes across decades was an increase in publications in *Sex Roles* categorized as Cross-Cultural in the 2000s (see Table 2). This pattern is not surprising given that the recent editorial policy of *Sex Roles* emphasizes internationalization and the importance of understanding cultural context (Frieze and Dittrich 2008). This increase in cultural articles is also consistent with the increasing attention to cultural differences and representation in the psychological and developmental literatures more generally. Theories about cultural differences have been adapted to provide a framework for describing gender differences (Cross and Madson 1997) and researchers have increasingly called for the need to extend the study of gender differences and gender development. Prior to 2000, most of the studies categorized as cross-cultural concerned racial/ethnic group differences or differences across countries. More recently, however, the bulk of studies in this category have focused on gender in one specific (typically non-white) cultural group. This change is consistent with trends in child development more broadly in investigating within-culture variability. Some studies also investigated differences related to socioeconomic status (SES) and demographic differences related to geography (typically urban versus rural populations).

We also noted that across time, abstracts were more likely to include information on the demographic characteristics of their samples, thus implicitly acknowledging potential limits to the generalizability of their findings and highlighting studies that were not conducted on the predominant US and/or white, middle-class samples. These studies that simply mentioned the demographic characteristics of their sample in the abstract (e.g., African American sample, middle- class sample) were not coded as cross-cultural unless they specifically focused on cultural issues such as similarities or differences between cultures. Thus our figures might somewhat underestimate the presence of culture as a theme in *Sex Roles* articles.

Increased Attention to Media—Articles in the Media category involved a number of types of media (i.e., books, TV programs/cartoons, commercials, films/video, computer/ internet, music, etc.). Published articles concerning media or books were consistently present in the journal and appeared to increase in number in the 1990s and 2000s (see Table 2). The form of media most frequently represented involved books, and these most often dealt with the portrayals of females and males. However, in the last two decades, articles appeared that explored new media including the content of computer applications, the internet, and video games. A few other articles examined diverse content, including consumer product packaging (e.g., cereal boxes) and personalities in the media (e.g., celebrities).

On the whole, research in this category confirmed the idea that the books and media that children are exposed to present highly stereotyped portrayals of men and women, and women are often under-represented in stereotypically male roles (e.g., Purcell and Stewart

1990). Most studies in this category were content analyses and did not directly test implications, such as effects on various aspects of children's gender identity (although body image was examined in a few studies) and stereotyping.

Increased Attention to Individual Differences and Adjustment—This broad and diverse category captured a somewhat surprisingly large percentage of articles, especially in the 2000s (See Table 2). The size of this category was partly due to the number of studies investigating topics related to psychological adjustment, including general measures of adjustment, such as self-esteem, as well as symptoms of psychopathology. These topics are of obvious relevance to gender development, but have been less frequently studied than core aspects of gender identity and gender-related beliefs, perceptions, and behaviors. Nonetheless, implications related to adjustment have been a driving force of research in gender development and have been important to theories of gender development. Indeed, a central concern of researchers dating back to Kagan (1964) and Bem (1974, 1981) has been the implications of gender-typing and cross-gender-typing on adjustment. More recently, researchers have investigated adjustment outcomes in relation to multiple dimensions of gender identity (for a review, see Lurye et al. 2008). For instance, research by Perry and his colleagues has found that felt pressure to adhere to gender norms is associated with lower self-worth (Egan and Perry 2001). Thus, current research on adjustment appears to be a focus on aspects of gender that lead to good or poor adjustment outcomes. This is an especially fruitful and important direction for future research, as it directly addresses the implications of various aspects of gender for children's more general functioning.

Several other topics included in this category because of their relevance to adjustment were Gender Identity Disorder and eating disorders and body issues. The number of articles addressing Gender Identity Disorder was extremely small and only appeared in the 2000s. Given the controversies about the causes and consequences of extreme gender non-normative behavior (e.g., Hegarty 2009; Zucker et al. 2009), and its obvious relevance to theories of gender identity development, more research on this topic is certainly warranted. The studies in this category also reflect topics related to eating disorders, body satisfaction, and body size or Body Mass Index (BMI). These topics have received much attention in the public media and are of clear relevance to gender development.

Publications that focused on various dimensions of personality and individual differences were also coded into this category. One of the individual difference constructs that stood out was the measurement of "fear of success" in the 1970s and 1980s. This was perhaps the most dated concept we came across and its disappearance after the 1980s is indicative of social changes. Although there is little, if any, recent research on girls' motivations to avoid success as an individual difference, girls might nonetheless avoid participation in certain male-dominated fields due to real and perceived obstacles to success in those fields. For example, the concept of stereotype threat has been frequently used to discuss barriers to girls' success in fields such as math (e.g., Spencer et al. 1999). Thus, in a general sense, the "fear of success" topic is still with us, but its framing has changed to reflect the role of context and the more nuanced nature of barriers to girls' participation and success in male stereotyped fields.

A number of articles included in this category also addressed topics more closely related to sexuality, sexual maturation, and male-female relationships, including sexual behaviors, dating, menarche, sexual orientation, and sexual harassment. These topics have not been very well integrated into the gender development literature and sexual identity in particular tends to be very specialized and focused on sexual minorities (Diamond 2003). Furthermore, although sexual identity is later developing and obviously related to older age groups, awareness of sexual attraction and relationships emerge earlier, and is clearly relevant to

children's conceptions of gender roles. Thus, greater consideration of issues of sexual identity and sexual and romantic relationships would provide a more complete understanding of gender development.

Neglected Topics and Gaps in the Literature—Thus far, we have primarily focused on the topics and theories that have dominated the literature and been most visible in this journal. However, gaps in the literature were found and are important to consider as they help identify future directions for researchers.

There were gaps in the ages of children studied. Few studies in our content analysis of articles published in *Sex Roles* involved research on infants and toddlers. The lack of infant and toddler research may be due to in part to challenges associated with testing very young children. However, researchers now have access to a variety of methods available to them for observing and analyzing behavioral data, thus freeing researchers from having to rely on self-report and parent reported data on children, and expanding options for studying children who are too young to follow complex procedures or report on their own thoughts and behaviors. Given that children demonstrate a range of gender-typed behaviors, preferences, and knowledge by 2–3 years of age, if not earlier, it behooves investigators to expand efforts to better understand the earliest stages of gender development.

Gaps were also noted in the types of methods utilized in studies. Self-report measures were the most frequently used method of data collection. This reliance on self-report measures is likely because many of the issues and questions addressed in the articles could be assessed most easily and directly via these methods (and may explain the relative lack of focus on young children and infants/toddlers). These qualities are certainly strengths of direct self-reports. However, weaknesses and limitations also exist (as is the case with any method) and differences in methods may contribute to lack of coherence in findings. For example, Eisenberg and colleagues (Eisenberg and Lennon 1983; Fabes and Eisenberg 1996) found that gender differences in empathy and sympathy varied with the method used to assess empathy-related responding. Specifically, their meta-analyses found large differences favoring girls for self-report measures of empathy/sympathy, especially questionnaire indices. No gender differences were found when the measure of empathy was either physiological or unobtrusive observations of nonverbal behavior. Eisenberg and Lennon (1983) suggested that the general pattern of results was due to differences among measures in the degree to which the intent of the measure was obvious and people could control their responses. Gender differences were greatest when demand characteristics were high (i.e., it was clear what was being assessed) and individuals had conscious control over their responses (i.e., self-report indices were used). In contrast, gender differences were virtually nonexistent when demand characteristics were subtle *and* study participants were unlikely to exercise much conscious control over their responding (i.e., physiological indices). Thus, when gender-related stereotypes are activated and people can easily control their responses, they may try to project a socially desirable image to others or to themselves. Such findings call for the greater use of multiple methods in research published in *Sex Roles* (and elsewhere) to ascertain whether this pattern exists in our research and certainly argues for less sole reliance on self-report methods.

There is some evidence that such a change is beginning to happen. For example, our analysis revealed a slight increase in studies employing time and labor intensive methods that allow for the discovery and analysis of the more subtle and complex aspects of behavior, such as the coding of transcriptions and videotaped and real-time observation, and qualitative methods. Such methods allow for a more micro-analytic examination of the dynamics of behavioral interactions but also take considerable time and effort to code, manage, and analyze. The investigation of changing patterns of behaviors in large-scale observational or

longitudinal studies may require dynamical analyses that may be unfamiliar to many gender researchers (Martin and Ruble 2010). Moreover, a fair amount of debate has surrounded the value and limitations of qualitative methods, though there is now growing consensus that empirical and qualitative methods each have advantages and disadvantages and can be used to complement each other (e.g., Oakley 1999).

There were also a number of gaps in the content of the articles. Overall, it seems that the emphasis in the gender development publications in *Sex Roles* has been on the development of different gender-linked abilities and traits, often in the areas of academic and career-related choices and skills. These aspects of gender development make up only a small portion of the Matrix of Gender-Typing (Ruble et al. 2006) and this emphasis on a limited set of gender-related attributes suggests that many aspects of children's gender-typing remain to be explored. Some of these aspects might be less salient or more difficult to measure (e.g., gestures, speech patterns), but nonetheless are integral aspects of gender identity. Further research is also needed to better understand the relations among the various cells in the matrix and how such relations might change across development.

Despite the prevalence of articles addressing socialization, our analysis of this category indicated that research in this area has been heavily slated toward investigating the role of parents. Less attention was focused on peers in the articles we reviewed in *Sex Roles*. Nonetheless, there has been greater focus on peers in the more recent literature. This research activity may have been facilitated by the recognition of peer influences earlier in development (e.g., Fabes et al. 2003b), as well as by methodological advances that have allowed for the exploration of peer processes in greater depth and complexity (Martin et al. 2005; Martin and Ruble 2010).

Despite the recent interest in this topic, the fact that little attention has been paid to peer relationships in children younger than adolescents may reflect a failure to recognize the importance of early peer relationships to young children's gender development and adjustment. Given that much of young children's peer-related interactions are highly structured by gender and that these gender segregated peer groups have important influences on short- and long-term adjustment (Fabes et al. 2003a; Martin and Fabes 2001), researchers who publish in *Sex Roles* (and elsewhere) need to be more attentive to the role that peers play in early gender development.

Furthermore, relatively little research has focused on the ways in which gender affects relationships and communication with peers and might impact same- and other-gender relationships across time into adulthood. In our analysis, studies that did involve relationship processes tended to focus on adolescents and addressed specific relationship contexts and issues, such as dating and sexual harassment. Few studies focused on assessing cognitions or beliefs about relationships. There is a need for theory to better understand the dynamics and development of male-female (and same-gender) relationships over time (Zosuls et al. 2011). Such knowledge would help us to better understand children's interpersonal dynamics in friendship, school, and home contexts and how to promote more positive relationships into adulthood.

Children's social cognition, including their intergroup attitudes, plays an important role in peer relationships. Intergroup attitudes and behaviors have been of longstanding interest to gender researchers coming from a social psychological perspective (e.g., Bigler 1995; Powlishta 1995a, b) and have been prominent in gender schema views (Martin and Halverson 1981; Liben and Signorella 1980). However, with the exception of the measurement of children's gender role attitudes, few studies investigated intergroup processes and gender differences in values regarding gender. The limited research on

intergroup processes is surprising given that the study of children's intergroup gender attitudes should have obvious connections to theories related to children's behaviors, including gender segregation. One reason for the dearth of research directly measuring children's intergroup gender attitudes might be that such bias is inferred from children's greater liking for peers of their own gender. Whereas such evidence certainly indicates more positive attitudes about one's own group, it does not constitute a direct measure of attitudes and is a poor gauge of the exact nature of children's feelings about their own and the other gender group (Martin and Ruble 2010; Zosuls et al. 2011). Once again, however, it could be the case that studies focused on Intergroup Processes appear in journals that more specifically address these topics (e.g., social psychology journals).

Although gender discrimination is a common topic of study in the adult psychological literature, research on children's same-gender peer preferences, evaluations, and interactions are rarely framed in terms of discrimination. Furthermore, relatively little is known about how children may or may not perceive gender discrimination directed at others or themselves (for an exception, see Brown and Bigler 2004, 2005). More studies investigating gender discrimination within and between gender groups would be valuable for better understanding the dynamics of girls' and boys' relationships and for designing strategies to prevent acts of gender-based discrimination among children.

Our analysis also suggested that even less is known about the impact on gender development of socialization messages children receive from features of the larger socio-cultural context, such as the media. Given how much media children are exposed to and the debates often surrounding children's media content, more studies that directly test the effects of media on gender-related self-concepts, behaviors, and perceptions would be a valuable direction for future research. Furthermore, although a number of studies investigated features of media that children are exposed to, few examined whether children perceive media messages in the ways that they are presented and assumed to be processed by adults. In the majority of studies of socialization, investigators have often worked under the assumption that gender-related features of the environment are relatively passively encoded by children, rather than actively processed. Future research should aim to test these assumptions.

The Gender Identity and Adjustment and Individual Differences categories reflected growth and evolution in theories and topics addressed by the literature, but also suggested the need for further integration of these topics into core theories and research. Both categories featured a number of studies addressing the topic of body image; however, this aspect of identity is not usually included in models and measures related to various aspects of gender identity, such as gender typicality (e.g., Egan and Perry 2001). Rather, body image is generally discussed in terms of its relation to psychological adjustment (e.g., eating disorders). Nonetheless, body image has obvious relevance to children's gender identity development and future research should aim to incorporate this idea more directly into theories and studies of gender identity. For example, body image might have relevance to children's sense of gender typicality, with children who have bodies and body images that are closer to societal ideals for their gender feeling more typical for their gender.

Finally, the vast majority of studies addressed cognitive and socialization processes. Only one published study directly focused on biological ideas about gender development (Rodgers et al. 1998). Studies focusing on biology may have been virtually nonexistent because such articles are more likely to be published in journals that are oriented to the biological sciences, and may be due to this journal's greater emphasis on socialization and feminist perspectives. Indeed, the name of this journal—*Sex Roles*—emphasizes roles, which connotes *socially* learned and prescribed behaviors. Research studies investigating of biological factors, such as hormones, also tend to be complex and expensive and are

conducted by a relatively small group of investigators interested in gender development (e.g., Alexander and Hines 2002; Berenbaum and Snyder 1995; Wallen 1996). Nonetheless, research involving a biological perspective has gained momentum in recent decades and would be a valuable addition to the body of research represented in *Sex Roles.*

Looking forward, as gender development researchers and contributors to *Sex Roles*, we should also consider what areas of research are most important to address given current inequalities, societal problems, and shifting cultural and demographic features of society and the endpoints we are interested in achieving for future generations of girls and boys. Social issues concerning educational practices and improving school outcomes have become gendered discussions (Does the gender gap in education now favor girls? Should single-sex education be encouraged or discouraged?), and these issues warrant the attention of researchers. Changes in media also provide new areas for research investigation. For instance, the ubiquity of and interest in social networking for adolescents suggests that researchers should consider how virtual, immediate, and potentially continuous social connections among adolescents influences personal and social dimensions of gender development. Biological and cultural changes suggest how the lines between adolescence and younger ages are becoming blurred. The earlier ages of puberty and increased sexualization of young girls are examples of topics that require additional research attention (American Psychological Association, Task Force on the Sexualization of Girls 2007).

Summary and Conclusion

In this paper, our primary goal was to describe trends in research on gender development published in *Sex Roles* over the past few decades. Overall, the topics receiving the greatest emphasis—Gender Differences, Socialization, and Stereotyping, and to a somewhat lesser degree, Gender Identity—were relatively stable over time. The prevalence of articles documenting gender differences is logical given that gender differences—whether real or perceived, small or large in magnitude—was the starting point of interest for which the field came into existence and that many researchers are ultimately interested in explaining. Gender differences have long captured the public's interest and have been used to justify myriad laws, policies, and practices in the public and private spheres. The emphasis on gender socialization and stereotyping is also consistent with the prominence of socialization theories beginning in the late 1960s and early 1970s and the journal's mission to provide a feminist perspective. The Gender Identity category was especially varied and rich; the studies in this category clearly reflected the broad influence of Bem's measure, but also included work influenced by Kohlberg's (1966) ideas about gender constancy, and newer multidimensional models of gender identity.

Gender development has progressed a long way from the initial study of gender differences, and has continued to move forward steadily. Leaders in the field have encouraged increasingly precise and clear terminology, more sophisticated methods and analytic techniques, and a greater diversity of topics of study. Assumptions made about one domain of gender development predicting all others have been questioned, and the multidimensionality of gender has been highlighted, as evidenced here in the many topics covered by researchers. *Sex Roles* has played an important role in the growth of the field by providing an outlet dedicated to disseminating research on the wide array of topics associated with gender development. In the next 35 years, our hope is that the journal will continue to play a leadership role in the field, and to promote more diversity in topics, methods, and ages employed in gender development research.

Acknowledgments

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Appendix A

To determine inclusion, we used several parameters. In addition to including studies that had children as direct participants, we also included studies that had children or child development as the targets of study (e.g., maternal reports about children, parents' gender-typed discipline strategies). Second, we included studies that involved content analyses of children's media (e.g., gender-typed behaviors displayed in children's cartoons). Third, studies with a primary purpose of reporting the psychometric properties of a measure

developed for and used with children were also included. We excluded studies that were based on a college student sample or that included participants 17 years and older if the primary purpose of the study did not concern adolescence. Moreover, we did not include retrospective studies, and we did not include non-empirical theoretical and review papers.
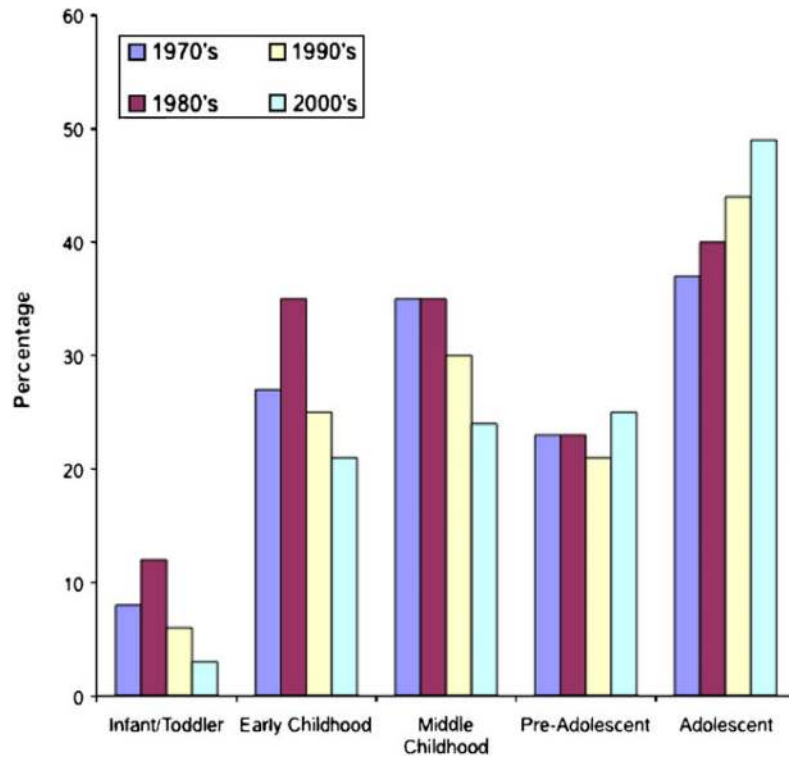
Fig. 1.
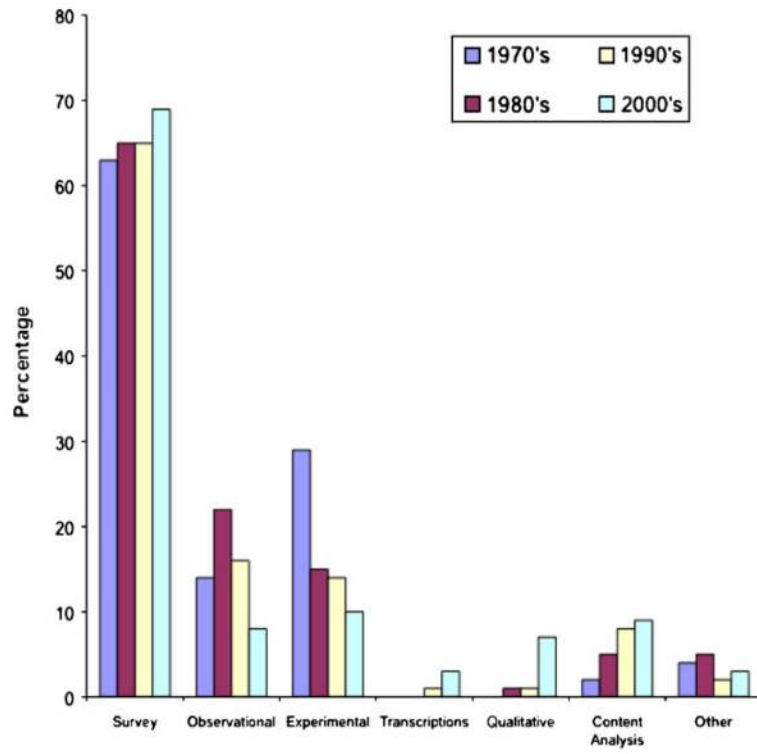Percentage of articles by decade including each age grouping

Fig. 2.
Percentage of articles by decade using each type of methodology

Table 1

Classification of articles in the matrix of gender-typing (Ruble et al. 2006): total number of articles (percentage of total articles)

Content area	Construct				
	A. Concepts or beliefs	B. Identity or self-perception	C. Preferences	D. Behavioral enactment	Total
1. Biological/categorical sex	1A. 19 (3%)	1B. 4 (.6%)	1C. 4 (.6%)	1D. 0 (0%)	27 (4%)
2. Activities and interests	2A. 47 (7%)	2B. 13 (2%)	2C. 38 (6%)	2D. 40 (6%)	138 (21%)
3. Personal-social attributes	3A. 45 (7%)	3B. 75 (11%)	3C. 5 (.8%)	3D. 84 (13%)	209 (32%)
4. Gender-based social relationships	4A. 1 (.2%)	4B. 6 (.9%)	4C. 7 (1%)	4D. 10 (2%)	24 (4%)
5. Styles and symbols	5A. 3 (.5%)	5B. 23 (4%)	5C. 4 (.6%)	5D. 12 (2%)	42 (6%)
6. Values regarding gender	6A. 0 (0%)	6B. 5 (.8%)	6C. 39 (6%)	6D. 3 (.5%)	47 (7%)
Total	115 (17%)	126 (19%)	97 (15%)	149 (23%)	487 (74%)

Content areas and Constructs were from the latest version of the multidimensional matrix from the *Handbook of Child Psychology* (Ruble et al. 2006)

Table 2

Topic categories by decade: total number of articles (percentage of articles)

	Topic categories								
Decade	Gender differences	Socialization	Stereotyping	Gender identity	Cross-cultural	Media	Individual differences/Adjustment	Intergroup processes	Biology
1970s	30 (61%)	15 (31%)	14 (29%)	7 (14%)	2 (4%)	2 (4%)	9 (18%)	2 (4%)	0 (0%)
1980s	103 (49%)	83 (40%)	59 (28%)	35 (17%)	21 (10%)	8 (4%)	23 (11%)	2 (1%)	0 (0%)
1990s	135 (63%)	71 (33%)	45 (21%)	33 (15%)	19 (9%)	21 (10%)	29 (14%)	2 (1%)	1 (.5%)
2000s	97(52%)	73 (39%)	38 (20%)	37 (20%)	32 (17%)	20 (11%)	62 (33%)	3 (2%)	0 (0%)

Percentages calculated as a proportion of the total number of child-focused articles in individual decades. The 1970s included the years 1975–1979 and the 2000s included the years 2000–2009