Psychological Approaches to Media and Gender: Media Psychology and Social Psychology

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Abstract

Psychology, as the science of experience and behavior of individuals, addresses both media-related questions (media psychology) and gender-related questions (social psychology). Psychological research on media and gender shows that there are still significant gender differences in media use and media production, which are partly due to psychological causes. It is also well-documented that gender stereotypes are widespread in media content and in the design of digital technologies such as software agents or robots. However, there are also media products that have an emancipatory and empowering effect. Overall, psychological research indicates that media can both undermine and support equality in gender relations. The chapter reports the most important findings based on studies

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and practical examples and points out limitations and gaps in the existing psychological research on media and gender.

Keywords

Gender differences · Gender stereotypes · Sexual objectification · Feminism · Media use · Media content · Media effects

1 Introduction

Psychology makes important contributions to feminist communication and media research. This is because psychology studies both media and communication, and gender and gender relations, in a systematic and theory-driven way. The psychological subdisciplines most relevant here are *Media Psychology* and *Social Psychology*.

Media Psychology, an applied subdiscipline of psychology, examines human experience and behavior in relation to media at the individual (micro) level (Trepte and Reinecke 2013; Winterhoff-Spurk 2001). The focus is usually on media use and media effects, but the analysis of media content and processes of media production also fall within the scope of media psychology.

Social Psychology, a basic subdiscipline of psychology, examines human experience and behavior in social contexts. It investigates how the presence of other people shapes a person's thoughts, feelings, and behavior (Aronson et al. 2014, p. 3; Stroebe et al. 2014, p. 6; Wirtz 2013). These "others" may be physically present, present via technology, mentally imagined, or represented by mass media or social media.

Because interpersonal interaction is central to social psychology, topics include impression formation, self-perception and self-presentation, attitudes and prejudices, interpersonal relationships, small and large groups, attraction, aggression, and prosocial behavior. In all these phenomena, gender aspects can play a role (e.g., self-presentation differences between women and men). And all these phenomena can also occur in different media contexts (e.g., self-presentation differences between women and men on YouTube, on Instagram, on Twitter/X, or on dating apps).

2 Psychological Questions and Findings on Media and Gender

Regardless of whether one is looking for gender references in media psychological contributions or for media references in gender and social psychological contributions, three central groups of psychological research questions can be identified consistently (Greenwood and Lippman 2010, p. 1): What gender differences are there in media use and media production? How widespread are gender stereotypes in media content and digital technologies? What negative and positive effects do media have on gender relations and in particular on gender equality?

2.1 What Gender Differences Are There in Media Use and Media Production?

In connection with gender and media, a central overarching psychological research question refers to gender differences in media selection, media use, and—in the context of social media—also in media production. For example, it shows that traditionally and to this day, girls and women have a greater affinity for reading books, whereas boys and men have a greater affinity for computers and digital games (Döring 2016). Gender differences are also apparent in preferred film genres (e.g., romance film versus pornographic or horror film; Greenwood and Lippman 2010).

Regarding gender differences in Internet usage, the focus has shifted: In the 1990s, review articles were still being published that investigated why more men than women used the Internet (Morahan-Martin 1998). Today, this question is obsolete, as the gender gap (*digital divide*) in Internet and digital media access has largely closed. However, there are still various *digital inequalities*, i.e., differences in the way the Internet and smartphones are used. For example, girls and women are significantly underrepresented as content producers on YouTube (Döring and Mohseni 2018; Döring 2019) and on Wikipedia (Hill and Shaw 2013) but overrepresented on other platforms (e.g., Instagram, TikTok) (mpfs 2018). Gender effects often emerge when examining whether and how women and men differ in their online self-presentation on Facebook (Tifferet and Vilnai-Yavetz 2014), in their online dating behavior (Aretz et al. 2017), in their handling of privacy on the Internet (Tifferet 2019), or in terms of their involvement in cyberbullying (Sun and Fan 2018).

Knowledge about gender differences in media use is useful and relevant for practical application, for example, to set up target group-specific media literacy and prevention programs (e.g., against gender-specific cyberbullying or against gender-specific online hate speech; Döring and Mohseni 2020) and to create media products (e.g., e-learning programs, dating apps, or games) that appeal to people of all genders equally (Hartmann and Klimmt 2017).

However, studies that unreflectively relate gender differences only to two genders, thereby reinforcing an outdated binary gender image, instead of including the diversity of genders (e.g., trans* and intersex, genderqueer, and agender identities) should be critically examined. Problematic are also studies that empirically demonstrate differences between women and men and then implicitly or explicitly present these as exclusively biologically determined, instead of (a) reflecting the underlying gender concept (how was "gender" measured and what exactly was captured with it) and (b) theoretically embedding gender effects in a broad bio-psycho-social understanding (Hegarty and Pratto 2004; Hyde 1994). For a *gender-sensitive* media psychological research on gender differences in media use, social psychology provides important theories and methods.

Thus, for gender differences in media selection, various psychological theories can be used, which need to be empirically tested comparatively. That girls and women participate less in gaming may, for example, be due to the fact that the existing games so rarely offer female characters as identification templates, that they

are often too violent and too competition-oriented, that meaningful social interaction is lacking in the games, that their female peers play less, that gaming is seen as a male coded hobby and they feel less feminine while doing it, or that they are little recognized as girls and women in gaming communities but often sexualized and insulted (Döring 2016; Hartmann and Klimmt 2017).

Where gender-different usage patterns are associated with exclusion (e.g., exclusion of women from gaming communities: Groen and Schröder 2015; from Wikipedia: Shane-Simpson and Gillespie-Lynch 2017; or as video producers on YouTube: Döring 2015a, 2019), media use and media production are then associated with a lack of gender equality. A decidedly psychological view can help to better understand the psychosocial processes of exclusion and then also to develop effective counter-measures.

2.2 How Prevalent Are Gender Stereotypes in Media Content and Digital Technologies?

A second overarching psychological research question about media and gender relates to the way women and men are represented in different media (Greenwood and Lippman 2010).

In terms of the *type of representation*, there are primarily four aspects that are in focus in both psychological and communication science research (Collins 2011; Scharrer 2014): (1) lack of representation of a gender, (2) gender-stereotyping representation, (3) visually subordinate representation, and (4) sexually objectifying representation. Numerous studies have documented a significantly lower representation of women in sports reporting (e.g., airtime for women's versus men's soccer on television). Professional female athletes are therefore often made invisible in the media. When women appear in advertising or in TV and cinema films, they are gender-stereotypically more likely to be depicted in private, traditionally feminine and powerless roles (e.g., as a spouse, mother, nurse, or victim of crime), while men appear much more often in professional, traditionally masculine and powerful roles (e.g., as a doctor, boss, detective, or criminal). Recently, men in advertising have sometimes also appeared in "softer" roles (e.g., as fathers; Grau and Zotos 2016). Women are often shown in a visually subordinate position compared to men (e.g., insecure stance, tilted head; Döring and Pöschl 2006). Last but not least, there are clear differences in how women and men are physically represented. Girls and women are often staged as sexual objects; they appear much more often scantily clad and meet strict beauty standards (extremely slim, very young, and white). Men are less reduced to their appearance; instead, their personality, competencies and achievements are more strongly staged in the media.

These gender-asymmetric forms of representation are found in mass media, in social media, and also in innovative digital media technologies. With regard to the type of media and technologies in which gender representations are examined, the focus has long been on the *mass media*. Clearly asymmetric gender representations in the sense of the four aspects mentioned above are proven for children's books,

coloring books, and textbooks; for sports and political reporting; for fictional TV shows and cinema films; and for music videos, games, and advertising (Aubrey and Harrison 2004; Mühlen-Achs 2003; Scharrer 2014; Wallis 2011).

Recent research examines whether and how women and men in *social media* represent themselves in a gender-asymmetric (i.e., stereotyping and sexualizing) way (e.g., Döring 2019; Tifferet and Vilnai-Yavetz 2014). Although social media offer many degrees of freedom in self-presentation, it turns out that the gender clichés criticized in the mass media are not fundamentally mitigated in the self-produced social media content such as YouTube videos, Facebook profiles, or mobile self-portraits (so-called selfies) (e.g., Oberst et al. 2016), but in some cases, they are even more pronounced (e.g., Döring 2015a, 2016). Women present themselves on YouTube and Instagram often as sweet and sexy with makeup collections and pouting lips, whereas men show themselves as powerful and strong with status symbols and impressive biceps. Digital image editing programs are now available on every smartphone to support self-presentation oriented towards gender-specific beauty ideals, so that the standards are rising: Not only international stars present themselves visually perfect but also "the girl next door" is increasingly showing an unnaturally perfect appearance on social media (Kleemans et al. 2017). An important theoretical concept here, in addition to stereotyping, is sexual self-objectification, i.e., self-presentation that frames one's own body primarily as a sexual object for evaluation by others (Cohen et al. 2018).

Current psychological contributions to gender stereotyping are turning to *contemporary digital media technologies* such as bots, avatars, and social robots as well as generative artifical intelligence tools. These artificial social actors are in turn to be examined as to whether they are not gender-neutral, but gendered (e.g., Android versus Gynoid; Malebot versus Fembot) and thereby transport traditional gender stereotypes (Søraa 2017). It is probably no coincidence that the most famous digital voice assistant systems, "Alexa" from Amazon, "Cortana" from Microsoft, and "Siri" from Apple, work with feminine names, voices, and speech patterns; after all, subordinate assistance roles have traditionally been associated with women (Hannon 2016). Gender stereotypes are deliberately used in the design of robots to control the expectations of users towards the technology. Thus, a robot designed to be feminine through name, voice, and physical appearance (e.g., hair length and hip-waist ratio) is perceived in accordance with gender roles as nonthreatening, friendly, and helpful (Eyssel and Hegel 2012; Trovato et al. 2018). However, it is also exposed to sexual harassment (Cercas Curry and Rieser 2018). An extreme form of stereotyped sexualization is visible in female sex robots, i.e., robots designed for parasocial sexual interactions and parasocial romantic bonding (Döring 2017). They can cause some women to feel appearance anxiety, self-doubt, and jealousy (Szczuka and Krämer 2018).

The psychological negative consequences of gender stereotyping and sexual objectification are conceptualized in similar ways for mass media, social media, and technical artifacts such as robots (Scharrer 2014). On the one hand, there is a concern that stereotyped, sexualized, and objectifying media and technology images of women may encourage boys and men to view and treat girls and women as

subordinate sexual objects, including in ways that can escalate to sexual harassment and violence. On the other hand, there is a concern that such depictions communicate to girls and women that recognition depends on perfect appearance, which may undermine self-esteem and body image and is associated with eating disorders and depression (APA 2007; Grabe et al. 2008).

Psychological research in this field is important as it proves the persistence of pronounced gender stereotyping in media content and media technologies and thus also provides recommendations for action: In the interest of promoting media and technology literacy, media and technology users must be made aware of how widespread gender stereotyping is and of its potential harms (Döveling and Fischer 2014; Döveling 2016). In the interest of media and technology design, work must simultaneously be done to create and promote diverse, egalitarian, and also stereotype-contrary gender representations.

Gender-sensitive research in this field should avoid the following limitations: (1) sole focus on girls and women, (2) one-sided criticism and blame on girls and women, as well as (3) essentialist technology criticism: Even though girls and women are particularly affected by media stereotyping as well as sexual objectification and their negative consequences, boys and men as well as people of other genders should not be overlooked, as gender stereotypes can also be a problem for them (Greenwood and Lippman 2010). For example, the media beauty pressure on boys and men seems to be increasing, with an increasingly superhuman muscularity being demanded (Vandenbosch and Eggermont 2013). Research designs with more gender diversity and considering intersectionality would be desirable (for quantifying intersectionality, see Bowleg and Bauer 2016; Else-Quest and Hyde 2016). From a theoretical and empirical perspective, it would be interesting to study trans* and genderqueer individuals who use codes of femininity (e.g., elaborate long hairstyles, conspicuous make-up, and body-hugging clothing), which is then usually appreciated as positive self-expression and not understood as harmful self-sexualization.

In the recent public and academic debate about dangerous sexual self-objectification of girls and young women in social media ("girls perform striptease in front of the webcam and thereby attract pedophiles," "girls drive each other in eating disorders on Instagram") from a feminist perspective, four problems can be identified (Döring 2015b; Egan and Hawkes 2008; Lerum and Dworkin 2009; Page Jeffery 2017; Vanwesenbeeck 2009): (1) reductionist explanatory models (eating disorders have diverse societal, familial, psychological, and genetic causes and cannot be reduced to media effects), (2) victim-blaming (girls are blamed for their own problems—be it sexual victimization or eating disorders—because they allegedly create their problems willfully through their incorrect use of media; this promotes feelings of shame and guilt and support is withdrawn), (3) reinforcement of gender stereotypes (girls are portrayed as notoriously naive, self-absorbed, and reckless media users; their existing media literacy is denied), (4) repressive and sexually hostile attitudes (any sexual self-expression by girls is classified as harmful self-sexualization; there remains in such research contexts theoretically and empirically no room for pleasurable and self-determined sexual self-exploration and self-presentation in digital contexts).

In parts of the psychological literature, there is an essentialist critique of technology, which attributes inherent misogyny to certain technologies—currently, for example, to sex robots. It is neglected that technology can be shaped through public technology discourses and thus research questions about what kinds of love and sex robots, with which functions and in which usage scenarios, would actually be desired by women, queers, or people with disabilities are highly relevant in order to overcome the male-centered focus in the development of technology (Döring 2017; Döring and Poeschl 2019).

2.3 What Negative and Positive Effects Do Media Have on Gender Relations?

Media effects on gender relations are predominantly conceptualized negatively from a media and social psychological perspective. Building on previous findings, five commonly discussed negative effects can be highlighted:

1. *Exclusion of women from media worlds:* Gender differences in media use and production often represent an expression and consequence of the exclusion of women (e.g., from video production on YouTube, from contributing to Wikipedia or participating in gaming communities). As a result, certain media worlds are confirmed as male worlds. Girls and women are thus denied access to arenas for leisure, professional development, cultural participation, and co-creation.
2. *Promotion of aggression especially in boys and men:* In boys and men, due to their stronger affinity to violent media content (e.g., shooter games and horror films), a media effect that may foster aggressive attitudes and behaviors has been discussed (Greenwood and Lippman 2010).
3. *Promotion of sexism and sexual violence, especially among boys and men:* As a result of the reception of sexist and sexualizing media images of women, a reinforcement of sexist attitudes and sexually aggressive behaviors is demonstrated among some boys and men (Galdi et al. 2014).
4. *Promotion of sexual self-objectification and disorders of body image and self-image, especially among girls and women:* Due to the large amount of idealized and sexualizing media images of girls and women, an increased sexual self-objectification and impairment of body image, self-esteem, and mental health is observed among some girls and women (APA 2007; Greenwood and Lippman 2010; Karsay et al. 2018).
5. *Affirmation of traditional gender roles:* Another negative psychological effect of gender-stereotypical media images can be that both female and male media audiences are encouraged to think more in gender stereotypes and then to behave more in line with traditional gender roles. Whether because they feel affirmed in their gender identity through role-conforming behavior or because they may fear backlash when behaving in nonconforming ways (so-called *stereotype threat;* Greenwood and Lippman 2010). This restricts private and professional self-development opportunities beyond traditional gender roles.

Although there is largely consensus about these negative media effects, it should be noted that the *effect sizes* can vary greatly depending on the type of media content, the type of use, the characteristics of the person, the situation, and the environment. Media literacy is considered an important protective factor against negative media effects. Conversely, vulnerable individuals are particularly susceptible to negative media effects.

Positive media effects related to gender equality, emancipation, and self-empowerment have only rarely been examined in psychological media research. These are more in the focus of humanities and cultural studies media research (e.g., Hoffmann 2017; Jackson 2018). Nevertheless, two media psychology journals in their respective special issues on gender and media have explicitly not only focused on the known risks but also on the opportunities of media for gender equality: The journal *CyberPsychology & Behavior* published a special issue in 2000 "Women and the Internet: Promise and Perils," which discusses emancipatory aspects of the Internet in connection with feminist online activism (Kennedy 2000) and with sexual self-determination of women (Döring 2000). The journal *Psychology of Popular Media Culture* published a special issue in 2015 on "Gender Stereotypes in the Media," which among other things shows that listening to equality-oriented songs (e.g., "Respect" by Aretha Franklin) can promote gender-equal attitudes (Greitemeyer et al. 2015).

It should also be noted that the media landscape is fundamentally diversifying and differentiating. However, the most popular social media channels and profiles often adhere to gender stereotypes. Nevertheless, there is a wealth of social media accounts that show much more diverse role models than traditional mass media (Döring 2019). In addition, feminist counter-publics are organized on the Internet and alternative body images are made visible and appreciated (e.g., #bodypositivity). However, such content can only have a positive effect in terms of empowerment and emancipation to the extent that it is found and used by significant audiences. This requires, on the one hand, media literacy among users and, on the other hand, platform responsibility: algorithms could be designed, for example, to not only amplify mainstream content but also make niche content more visible.

3 Psychological Theories for the Study of Media and Gender

In all studies that deal empirically with gender issues, the *conceptualization of gender* is crucial. A simple binary classification of the participants as "female" or "male" is not sufficient, because the spectrum of genders is larger (e.g., nonbinary, genderqueer, trans*, and inter*) and because, from a psychological perspective, subjective gender identity (i.e., to what extent does a person define themselves as feminine, masculine, androgynous or agender; Bem 1974) is often more informative. Gender research should be clear about its concept of gender (Muehlenhard and Peterson 2011) and then also choose appropriate operationalizations (Döring 2013). The most popular instrument for measuring gender identity to this day is the *Bem Sex Role Inventory* by social psychologist Sandra Bem (1974), which is also

available in German (Troche and Rammsayer 2011). It is based on a trait-oriented model of gender identity, alongside which a category-based approach also exists (Wood and Eagly 2015).

An explicit theoretical clarification and subsequent operationalization is not only important for "gender" but also for all other central concepts in this field of research, be they "gender stereotypes," "prejudices," "discrimination," "objectification," or "sexism." Here, social psychological theories play a central role (Eckes 2008; Fiske 1998; Fredrickson and Roberts 2016).

Various psychological theories are designed to explain media effects on gender relations. With the *Gender Schema Theory* of social psychologist Sandra Bem (1981), one would predict that media content that conveys gender stereotypes guides media users to think and act in a gender schematic way, i.e., to categorize themselves and other people based on gender roles (Starr and Zurbriggen 2017). Similarly, the *Social-Cognitive Theory of Mass Communication* of social psychologist Albert Bandura (2001) argues that media prescribe gender roles that directly affect the thinking, feeling, and acting of media users and indirectly unfold effects through the cultural influence of the media. The *Theory of Differential Susceptibility to Media Effects* of media scientist Patti Valkenburg (Valkenburg and Peter 2013) represents a synthesis of various media effect theories and emphasizes that media effects strongly depend on individual prerequisites and on media content as well as on feedback loops in the media usage process.

4 Psychological Methods for Investigating Media and Gender

Psychological research on media and gender usually relies on quantitative research designs, less often on qualitative approaches (e.g., Luca 2003). The quantitative study designs are sometimes experimental and then focus on the short-term effect of selected media stimuli (e.g., Greitemeyer et al. 2015). But often they are correlational and establish relationships between long-term everyday media use and various outcome variables using survey data (e.g., Stermer and Burkley 2015). True longitudinal studies with surveys at multiple points in time are rare due to their high costs (e.g., Breuer et al. 2015). Research synthesis in the form of review articles (e.g., Greenwood and Lippman 2010; Scharrer 2014) and meta-analyses (e.g., Grabe et al. 2008; Sun and Fan 2018; Tifferet 2019; Karsay et al. 2018) is gaining importance.

In terms of data collection, written survey and test methods dominate in psychological media use and media effect research. Psychometric scales that match the theories are then used to measure gender identity (*Bem Sex Role Inventory* BSRI, Bem 1974; Troche and Rammsayer 2011), gender stereotypes (e.g., percentage estimation method, Eckes 1997), sexism (*Ambivalent Sexism Inventory* ASI, Glick and Fiske 1996), or sexual self-objectification (*Self-Objectification Questionnaire* SOQ, Noll and Fredrickson 1998).

If the constructs are to be measured not in individuals, but in media samples, these self-report scales must be transformed into codebooks. In media content research, quantitative media content analysis is primarily used, with established coding schemes also existing here, such as in the tradition of the instrument by Erving Goffman (1979), to measure the visual subordination of women (e.g., Döring and Pöschl 2006; Döring 2016). In research on media and gender, innovative methodological approaches such as *neuroimaging* (Rippon et al. 2014) and *big data analyses* will play an even greater role in the future.

5 Conclusion

The existing psychological research on media and gender is largely limited to women and men. It is essential to consider additional genders (e.g., trans*, intersex, genderqueer, and agender, nonbinary) as well as intersectionality in the sense of differentiation within gender groups (e.g., according to sexual identity, religion, ethnicity, socioeconomic status, or disability). Fulfilling these theoretical claims requires appropriate methodological and empirical prerequisites, especially the availability and use of differentiated measurement methods for gender concepts and correspondingly large and heterogeneous person and media samples.

So far, psychological research on media and gender has primarily focused on mass media. Social media has been added in the last decade. It will be important in the future to include the respective innovative media technologies (currently, for example, social robots, generative artificial intelligence) early and comprehensively in feminist research. Early participation allows feminist perspectives to influence how new technologies are designed in the direction of gender equality.

The media and social psychological perspectives on media and gender have in common that they mainly consider negative media effects to this day. Here, a greater opening of the research field for positive media effects would make sense. A one-sided negative view risks reproducing gender stereotypes (e.g., portraying girls as allegedly notoriously naive and incompetent social media users) and enforcing repressive norms (e.g., framing any sexual self-expression by girls in social media as harmful "self-sexualization"). For a more balanced view, it would be necessary to connect to the humanistic *Positive Psychology* movement (Seligman and Csikszentmihalyi 2014), which extends the traditionally one-sided focus of the field of psychology on problems and disorders to include the study of human strengths and factors of well-being. In this tradition, a *Positive Sexuality* approach is advocated in sexual research, which calls for sexuality to be treated not only with a view to risks and dangers but to pay more attention to opportunities and resources (Williams et al. 2015). The same applies to technology development: instead of framing new media technologies only as dehumanizing and socially harmful, a *Positive Technology* approach argues that deliberately designed technologies can contribute to well-being and "good living" (Riva et al. 2012). A better understanding of positive media effects on gender

relations must not deny ongoing problems with exclusion and stereotyping in media worlds.

References

APA. 2007. Report of the APA task force on the sexualization of girls. https://www.apa.org/pi/women/programs/girls/report-full.pdf. Accessed 16 Apr 2019.

Aretz, Wera, Dominic-Nicolas Gansen-Ammann, Katja Mierke, and Annika Musiol. 2017. Date me if you can: Ein systematischer Überblick über den aktuellen Forschungsstand von Online-Dating. *Zeitschrift für Sexualforschung* 30 (01): 7–34.

Aronson, Elliot, Timothy D. Wilson, and Robin M. Akert. 2014. *Sozialpsychologie*, 8., akt. Aufl. Hallbergmoos: Pearson.

Aubrey, Jennifer Stevens, and Kristen Harrison. 2004. The gender-role content of children's favorite television programs and its links to their gender-related perceptions. *Media Psychology* 6 (2): 111–146.

Bandura, Albert. 2001. Social cognitive theory of mass communication. *Media Psychology* 3 (3): 265–299.

Bem, Sandra Lipsitz. 1974. The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology* 42 (2): 155–162.

———. 1981. Gender schema theory: A cognitive account of sex typing. *Psychological Review* 88 (4): 354–364.

Bowleg, Lisa, and Greta Bauer. 2016. Invited reflection. *Psychology of Women Quarterly* 40 (3): 337–341.

Breuer, Johannes, Rachel Kowert, Ruth Festl, and Thorsten Quandt. 2015. Sexist games = sexist gamers? A longitudinal study on the relationship between video game use and sexist attitudes. *Cyberpsychology, Behavior and Social Networking* 18 (4): 197–202.

Cercas Curry, Amanda, and Verena Rieser. 2018. #Metoo Alexa: How conversational systems respond to sexual harassment. In *Proceedings of the second ACL workshop on ethics in natural language processing*, ed. Mark Alfano, Dirk Hovy, Margaret Mitchell, and Michael Strube, 7–14. Stroudsburg: Association for Computational Linguistics.

Cohen, Rachel, Toby Newton-John, and Amy Slater. 2018. 'Selfie'-objectification: The role of selfies in self-objectification and disordered eating in young women. *Computers in Human Behavior* 79: 68–74.

Collins, Rebecca L. 2011. Content analysis of gender roles in media: Where are we now and where should we go? *Sex Roles* 64 (3–4): 290–298.

Döring, Nicola. 2000. Feminist views of cybersex: Victimization, liberation, and empowerment. *Cyberpsychology & Behavior* 3 (5): 863–884.

———. 2013. Zur Operationalisierung von Geschlecht im Fragebogen: Probleme und Lösungsansätze aus Sicht von Mess-, Umfrage-, Gender- und Queer-Theorie. *Gender – Zeitschrift für Geschlecht, Kultur und Gesellschaft* 5 (2): 94–113.

———. 2015a. Die YouTube-Kultur im Gender-Check. *merz – medien + erziehung, zeitschrift für medienpädagogik* 59 (1): 17–24.

———. 2015b. Gefährliche Videoübertragung aus dem Kinderzimmer? YouNow im Faktencheck. *merz – medien + erziehung, zeitschrift für medienpädagogik* 59 (3): 51–58.

———. 2016. Gendersensible Förderung von Medienkompetenz: Was ist zu tun? *ajs informationen* 52 (1): 22–28.

———. 2017. Vom Internetsex zum Robotersex: Forschungsstand und Herausforderungen für die Sexualwissenschaft. *Zeitschrift für Sexualforschung* 30 (01): 35–57.

———. 2019. Videoproduktion auf YouTube: Die Bedeutung von Geschlechterbildern. In *Handbuch Medien und Geschlecht: Perspektiven und Befunde der feministischen*

Kommunikations- und Medienforschung, ed. Johanna Dorer, Brigitte Geiger, Brigitte Hipfl, and Viktorija Ratković. Wiesbaden: Springer Fachmedien.

Döring, Nicola, and Sandra Poeschl. 2019. Love and sex with robots: A content analysis of media representations. *International Journal of Social Robotics* 11 (4): 665–677.

Döring, Nicola, and Sandra Pöschl. 2006. Images of men and women in mobile phone advertisements: A content analysis of advertisements for mobile communication systems in selected popular magazines. *Sex Roles* 55 (3–4): 173–185.

Döring, Nicola, and M. Rohangis Mohseni. 2018. Male dominance and sexism on YouTube: Results of three content analyses. *Feminist Media Studies* 19: 512–524.

———. 2020. Gendered hate speech in YouTube and YouNow comments: Results of two content analyses. *Studies in Communication and Media* 9 (1): 62–88.

Döveling, Katrin. 2016. Gender in Serie. Alles nur Seifenblase oder Tabubruch als Programm? Eine medienethische Analyse genderspezifischer Darstellungs- und Aneignungsmuster in populären Serienformaten. In *Eine Frage der Ethik? Eine Ethik des Fragens – interdisziplinäre Untersuchungen zu Medien, Ethik und Geschlecht*, ed. Sigrid Kannengießer, Claudia Riesmeyer, Ingrid Stapf, and Larissa Krainer, 123–152. Weinheim: Beltz Juventa.

Döveling, Katrin, and Jana Fischer. 2014. Typisch Mann – Typisch-Frau. Gender-Stereotype in den Medien. Medienethische Perspektiven. In *Gender, Ethik, und Medien, Schriftenreihe Medienethik*, ed. Petra Grimm and Oliver Zöllner, 115–140. Stuttgart: Franz Steiner.

Eckes, Thomas. 1997. *Geschlechterstereotype: Frau und Mann in sozialpsychologischer Sicht*. Pfaffenweiler: Centaurus-Verlag-Ges.

———. 2008. Geschlechterstereotype: Von Rollen, Identitäten und Vorurteilen. In *Handbuch Frauen- und Geschlechterforschung*, ed. Ruth Becker and Beate Kortendiek, 171–182. Wiesbaden: VS Verlag für Sozialwissenschaften.

Egan, R. Danielle, and Gail L. Hawkes. 2008. Endangered girls and incendiary objects: Unpacking the discourse on sexualization. *Sexuality & Culture* 12 (4): 291–311.

Else-Quest, Nicole M., and Janet Shibley Hyde. 2016. Intersectionality in quantitative psychological research. *Psychology of Women Quarterly* 40 (3): 319–336.

Eyssel, Friederike, and Frank Hegel. 2012. (S)he's got the look: Gender stereotyping of robots. *Journal of Applied Social Psychology* 42 (9): 2213–2230.

Fiske, Susan T. 1998. Stereotyping, prejudice, and discrimination. In *Handbook of social psychology*, ed. Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey, 357–411. New York: McGraw-Hill.

Fredrickson, Barbara L., and Tomi-Ann Roberts. 2016. Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly* 21 (2): 173–206.

Galdi, Silvia, Anne Maass, and Mara Cadinu. 2014. Objectifying media: Their effect on gender role norms and sexual harassment of women. *Psychology of Women Quarterly* 38 (3): 398–413.

Glick, Peter, and Susan T. Fiske. 1996. The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology* 70 (3): 491–512.

Goffman, Erving. 1979. *Gender advertisements*. Cambridge, MA: Harvard University Press.

Grabe, Shelly, L. Monique Ward, and Janet Shibley Hyde. 2008. The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin* 134 (3): 460–476.

Grau, Stacy Landreth, and Yorgos C. Zotos. 2016. Gender stereotypes in advertising: A review of current research. *International Journal of Advertising* 35 (5): 761–770.

Greenwood, Dara N., and Julia R. Lippman. 2010. Gender and media: Content, uses, and impact. In *Handbook of gender research in psychology. Volume 2: Gender research in social and applied psychology*, ed. Joan C. Chrisler and Donald R. McCreary, 643–669. New York: Springer.

Greitemeyer, Tobias, Jack Hollingdale, and Eva Traut-Mattausch. 2015. Changing the track in music and misogyny: Listening to music with pro-equality lyrics improves attitudes and behavior toward women. *Psychology of Popular Media Culture* 4 (1): 56–67.

Groen, Maike, and Arne Schröder. 2015. Jugendkultur im Binärsystem? Perspektiven auf Gender und sexuelle Identitäten in Online-Spielen. In *Selbstbestimmung und Anerkennung sexueller und geschlechtlicher Vielfalt*, ed. Friederike Schmidt, Anne-Christin Schondelmayer, and Ute B. Schröder, 193–203. Wiesbaden: Springer Fachmedien.

Hannon, Charles. 2016. Gender and status in voice user interfaces. *Interactions* 23 (3): 34–37.

Hartmann, Tilo, and Christoph Klimmt. 2017. Gender and computer games: Exploring females' dislikes. *Journal of Computer-Mediated Communication* 11 (4): 910–931.

Hegarty, Peter, and Felicia Pratto. 2004. The differences that norms make: Empiricism, social constructionism, and the interpretation of group differences. *Sex Roles* 50 (7/8): 445–453.

Hill, Benjamin Mako, and Aaron Shaw. 2013. The Wikipedia gender gap revisited: Characterizing survey response bias with propensity score estimation. *PLoS One* 8 (6): e65782.

Hoffmann, Dagmar. 2017. (Self-)Empowerment und Medienpraktiken im Netz. In *Das umkämpfte Netz*, ed. Ralf Biermann and Dan Verständig, 111–127. Wiesbaden: Springer Fachmedien.

Hyde, Janet Shibley. 1994. Should psychologists study gender differences? Yes, with some guidelines. *Feminism & Psychology* 4 (4): 507–512.

Jackson, Sue. 2018. Young feminists, feminism and digital media. *Feminism & Psychology* 28 (1): 32–49.

Karsay, Kathrin, Johannes Knoll, and Jörg Matthes. 2018. Sexualizing media use and self-objectification: A meta-analysis. *Psychology of Women Quarterly* 42 (1): 9–28.

Kennedy, Tracy L.M. 2000. An exploratory study of feminist experiences in cyberspace. *Cyberpsychology & Behavior* 3 (5): 707–719.

Kleemans, Mariska, Serena Daalmans, Ilana Carbaat, and Doeschka Anschütz. 2017. Picture perfect: The direct effect of manipulated Instagram photos on body image in adolescent girls. *Media Psychology* 21 (1): 93–110.

Lerum, Kari, and Shari L. Dworkin. 2009. "Bad Girls Rule": An interdisciplinary feminist commentary on the report of the APA Task Force on the Sexualization of Girls. *Journal of Sex Research* 46 (4): 250–263.

Luca, Renate. 2003. Medien. In *Sozialisation. Geschlecht. Fallstudien aus der sozialwissenschaftlichen Forschungspraxis*. München: kopaed.

Morahan-Martin, J. 1998. The gender gap in Internet use: Why men use the Internet more than women–a literature review. *Cyberpsychology & Behavior* 1 (1): 3–10.

mpfs. 2018. JIM-Studie 2018. Jugend, Information, Medien. Basisuntersuchung zum Medienumgang 12- bis 19-Jähriger. https://mpfs.de/studie/jim-studie-2018/. Accessed 16 Apr 2019.

Muehlenhard, Charlene L., and Zoe D. Peterson. 2011. Distinguishing between sex and gender: History, current conceptualizations, and implications. *Sex Roles* 64 (11–12): 791–803.

Mühlen-Achs, Gitta. 2003. Frauenbilder: Konstruktionen des anderen Geschlechts. In *Geschlecht und Medien, Reihe Medienpädagogik*, ed. Bernd Schorb, vol. 7, 13–37. München: kopaed.

Noll, Stephanie M., and Barbara L. Fredrickson. 1998. A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly* 22 (4): 623–636.

Oberst, Ursula, Vanessa Renau, Andrés Chamarro, and Xavier Carbonell. 2016. Gender stereotypes in Facebook profiles: Are women more female online? *Computers in Human Behavior* 60: 559–564.

Page Jeffery, Catherine. 2017. Too sexy too soon, or just another moral panic? Sexualization, children, and "technopanics" in the Australian media 2004–2015. *Feminist Media Studies* 18 (3): 366–380.

Rippon, Gina, Rebecca Jordan-Young, Anelis Kaiser, and Cordelia Fine. 2014. Recommendations for sex/gender neuroimaging research: Key principles and implications for research design, analysis, and interpretation. *Frontiers in Human Neuroscience* 8: 650.

Riva, Giuseppe, Rosa M. Baños, Cristina Botella, Brenda K. Wiederhold, and Andrea Gaggioli. 2012. Positive technology: Using interactive technologies to promote positive functioning. *Cyberpsychology, Behavior and Social Networking* 15 (2): 69–77.

Scharrer, Erica L. 2014. Representations of gender in the media. In *The Oxford handbook of media psychology*, ed. Karen Dill, 267–284. Oxford: Oxford University Press.
Seligman, Martin E. P., and Mihaly Csikszentmihalyi, eds. 2014. Positive psychology: An introduction. In *Flow and the foundations of positive psychology*, 279–298. Dordrecht: Springer Netherlands.
Shane-Simpson, Christina, and Kristen Gillespie-Lynch. 2017. Examining potential mechanisms underlying the Wikipedia gender gap through a collaborative editing task. *Computers in Human Behavior* 66: 312–328.
Søraa, Roger Andre. 2017. Mechanical genders: How do humans gender robots? *Gender, Technology and Development* 21 (1–2): 99–115.
Starr, Christine R., and Eileen L. Zurbriggen. 2017. Sandra Bem's gender schema theory after 34 years: A review of its reach and impact. *Sex Roles* 76 (9–10): 566–578.
Stermer, S. Paul, and Melissa Burkley. 2015. SeX-Box: Exposure to sexist video games predicts benevolent sexism. *Psychology of Popular Media Culture* 4 (1): 47–55.
Stroebe, Wolfgang, Miles Hewstone, and Klaus Jonas, eds. 2014. Einführung in die Sozialpsychologie. In *Sozialpsychologie*, 6th edition 1–28. Springer-Lehrbuch. Berlin: Springer.
Sun, Shaojing, and Xitao Fan. 2018. Is there a gender difference in cyber-victimization? A meta-analysis. *Journal of Media Psychology* 30 (3): 125–138.
Szczuka, Jessica M., and Nicole C. Krämer. 2018. Jealousy 4.0? An empirical study on jealousy-related discomfort of women evoked by other women and gynoid robots. *Paladyn, Journal of Behavioral Robotics* 9 (1): 323–336.
Tifferet, Sigal. 2019. Gender differences in privacy tendencies on social network sites: A meta-analysis. *Computers in Human Behavior* 93: 1–12.
Tifferet, Sigal, and Iris Vilnai-Yavetz. 2014. Gender differences in Facebook self-presentation: An international randomized study. *Computers in Human Behavior* 35: 388–399.
Trepte, Sabine, and Leonard Reinecke. 2013. *Medienpsychologie*. Stuttgart: W. Kohlhammer.
Troche, Stefan J., and Thomas H. Rammsayer. 2011. Eine Revision des deutschsprachigen Bem Sex-Role Inventory. *Klinische Diagnostik und Evaluation* 4: 262–283.
Trovato, Gabriele, Cesar Lucho, and Renato Paredes. 2018. She's electric – The influence of body proportions on perceived gender of robots across cultures. *Robotics* 7 (3): 1–12.
Valkenburg, Patti M., and Jochen Peter. 2013. The differential susceptibility to media effects model. *Journal of Communication* 63 (2): 221–243.
Vandenbosch, Laura, and Steven Eggermont. 2013. Sexualization of adolescent boys. *Men and Masculinities* 16 (3): 283–306.
Vanwesenbeeck, Ine. 2009. The risks and rights of sexualization: An appreciative commentary on Lerum and Dworkin's "Bad girls rule". *Journal of Sex Research* 46 (4): 268–270.
Wallis, Cara. 2011. Performing gender: A content analysis of gender display in music videos. *Sex Roles* 64 (3–4): 160–172.
Williams, D.J., Jeremy N. Thomas, Emily E. Prior, and Wendy Walters. 2015. Introducing a multidisciplinary framework of positive sexuality. *Journal of Positive Sexuality* 1: 6–11.
Winterhoff-Spurk, Peter. 2001. Kassensturz – Zur Lage der Medienpsychologie. *Zeitschrift für Medienpsychologie* 13 (1): 3–10.
Wirtz, Markus Antonius, ed. 2013. *Dorsch – Lexikon der Psychologie*, 16th edition, Bern: Huber.
Wood, Wendy, and Alice H. Eagly. 2015. Two traditions of research on gender identity. *Sex Roles* 73 (11–12): 461–473.