




Review

# Unpacking Gender for Flat Breast Cancer Survivors Assigned Female at Birth: A Methodological Application of Visually Informed, Critical Discursive Psychology

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**Abstract:** Given the high prevalence rates of breast cancer and mastectomy as recommended treatment, a large number of breast cancer survivors assigned female at birth may face contradicting messages about whether to pursue reconstruction. Survivors desire information outside of standard biased pro-reconstruction messages, with an increase in utilization of online social platforms to learn of the lived experiences of survivors who have gone flat. As breasts are socially constructed symbols connected to femininity, fertility, motherhood, and (hetero)sexualization, the application of visually informed, critical discursive psychology holds promise as a method for analyzing how survivors “do” gender after going flat. This paper summarizes prior research on messages around reconstruction before diving into how breasts hold sociocultural meanings in relation to gender performance. A preliminary reading of a photo posted on Twitter by Tig Notaro, a comedian who has been public about breast cancer, and a photo posted on Instagram by entrepreneur Jamie Kastelic were analyzed using a visually informed, critical discursive psychology lens. Our preliminary analysis illustrates the utility of this method for understanding how flat survivors assigned female at birth construct gender for both themselves and a social media audience. This paper challenges assumptions regarding what a “healthy” breast cancer survivor looks like and aims to encourage future inquiries into how social media functions as a space where survivors can perform gender online after going flat themselves.

**Keywords:** gender; cancer; visual methods; critical discursive psychology; breast cancer; mastectomy



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## 1. Introduction

Within the United States, one in eight individuals assigned female at birth will be diagnosed with breast cancer ([American Cancer Society 2022](#)), and some studies have reported that nearly half of survivors diagnosed with early stage breast cancer will undergo mastectomy, with those rates increasing ([Albornoz et al. 2015](#); [Morrow et al. 2009](#)). Breast cancer can affect all gender identities and sexes (e.g., male, female, intersex). In fact, approximately 2800 men will be diagnosed with breast cancer each year ([American Cancer Society 2018](#)), and there is a growing body of research on how survivors who identify as men make decisions about mastectomy (e.g., [Lin et al. 2021](#)). Though there is a population of breast cancer survivors who were assigned male or intersex at birth, when we discuss “survivors” in this paper, we are referencing those who were assigned female at birth, using the term “survivors” for brevity.

Medical providers and the survivorship community alike tend to assume that reconstruction will be selected after mastectomy to uphold the social requirement of retaining one’s breasts ([Sledge 2019](#)), as breasts are often infused with symbols of femininity, fertility, and motherhood, and (hetero)sexualization ([Rubin and Tanenbaum 2011](#)). Undoubtedly, this results in problematic assumptions about people’s relationship to their bodies and to their gender identities (notably, one may not feel breasts are tied to or a fitting reflection of their gender identity). Additionally, there is a prevailing notion that reconstructed

breasts are needed for psychological as well as physical healing (Coll-Planas et al. 2017; Cromptvoets 2012).

Yet studies have reported that up to 40% of breast cancer survivors have opted *out* of breast reconstruction and instead have decided to go “flat” (Alderman et al. 2003). These experiences of going flat have remained largely invisible within the medical literature outlining treatment options and in the conversations that survivors have with their oncology and surgical teams (Greco 2015; Sledge 2019). As a result, breast cancer survivors often turn to the internet to explore possibilities for reclaiming their bodies, and likewise, possibilities pertaining to the construction of gender, after mastectomy (La et al. 2019).

This paper presents an innovative form of analysis—visually informed, critical discursive psychology (McCullough and Lester 2022)—for unpacking visual constructions of gender for those assigned female at birth in the context of breast cancer survivorship after mastectomies. A visually informed, critical discursive psychology approach can be usefully applied to unpack how gender is actively constructed through visual and verbal discourse in ways that intersect with power, privilege, and oppression (McCullough and Lester 2022). In this paper, we articulate how this approach can be applied to the study of going “flat” in relation to how visual discourses of the body are understood through this theoretical lens.

In particular, online spaces allow breast cancer survivors to construct their own narrative of their experiences (La et al. 2019; Porroche-Escudero 2014) with greater agency than provided within medical spaces where more importance has been placed on upholding ideas about gender than on medical evidence (e.g., complication rates for reconstruction) and survivors’ desires (Sledge 2019). To illustrate the rich possibilities of applying visually informed, critical discursive psychology to our understanding of gender after mastectomy, we conduct a preliminary reading of photos posted on two different social media accounts of public figures who are breast cancer survivors who have gone flat to demonstrate aspects of the early stages of analysis. In doing so, we aim to highlight the potential utility of a visually informed, critical discursive psychology approach for revealing how survivors construct gender after mastectomy, including the ways in which bodies become a site of recovery, (de)sexualization, and (gender) identity. Implications are presented for further applications of visually informed, critical discursive psychology for conceptualizing gendered discourses after illness.

## 2. Breast Cancer, Mastectomy, and Going Flat

### *Reconstruction Decision-Making*

Among women and individuals assigned female at birth (whom the discourse of this topic is centered upon), breast cancer is the most common cancer, with over 1 million new cases diagnosed worldwide each year (Jemal et al. 2011). In the United States, over 280,000 new cases of invasive breast cancer were diagnosed in 2021. Of these, an estimated 30–40% will undergo a mastectomy (Shammas et al. 2022), as surgery is the standard clinical and often primary treatment for breast cancer (Remick and Amin 2023). Surgery may involve removing breast tissue and often some lymph node sampling. During mastectomy, surgical efforts may aim to preserve breast tissue (i.e., breast-conserving surgery), as well as remove one or both breasts (i.e., mastectomy). After mastectomy, there are typically two forms of breast reconstruction, involving implants of either autologous tissue (taken from another place in the body such as the back, buttocks, or stomach) or of a silicone or saline-filled breast placed beneath the chest muscle during the mastectomy (immediate reconstruction) or after healing from the mastectomy (delayed reconstruction).

The rates of reconstruction have been reported to be as high as 50–60% of those who have mastectomy (Shammas et al. 2022), whereas others have reported that less than half of survivors who undergo mastectomy pursue reconstruction (Alderman et al. 2003). For those not pursuing reconstruction, up to 90% choose to use an external prosthesis (Roberts et al. 2003), indicating the large extent to which survivors may feel that it is important to preserve the shape of their breasts after mastectomy. Factors predictive of reconstruction include younger age, higher socioeconomic status and education, access to health insurance,

geographical access (e.g., less remote), less co-morbidity (Azzopardi et al. 2014; Bell et al. 2012; Hall and Holman 2003), and being White (Morrow et al. 2014; Alderman et al. 2009; Tseng et al. 2004). Younger age, in particular, is one of the strongest predictors of reconstruction. In the United States, 75.7% of survivors younger than 40 pursue reconstruction, and 66.7% of survivors between the ages of 40–49 pursue reconstruction. On the other hand, these numbers are lower for older individuals, with 48.3% of those 50–59 years pursuing reconstruction, and 33.4% doing so who are over 60 years old (Jagsi et al. 2014). Many of these predictors of reconstruction are proxy variables for healthcare access, quality of healthcare, and social and financial resources. Thus, to more fully understand how these predictors function for reconstruction decisions, we must dive deeper into how they intersect with the cancer care context, particularly with respect to healthcare providers, as well as with respect to sociocultural contexts.

For breast cancer survivors, they are faced with a diagnosis that forces them to process the meaning they ascribe to their breasts for their identity, relationships, sexuality, and recovery (Webb et al. 2019), and often, survivors feel that such processing must happen quickly and without adequate information (Giunta et al. 2021; Shamma et al. 2022). As early detection and advanced cancer treatments mean that breast cancer survivors are living longer, there may be long-term effects on their physical, psychological, and sexual well-being resulting from their decisions about whether to go “flat” or pursue reconstruction (Shamma et al. 2022). Yet, the median time period between breast cancer diagnosis and surgery is 5 weeks (Ter Stege et al. 2022), and survivors have described feeling overwhelmed by their diagnosis and having to make such an important decision when they may not “feel like themselves” and like their breast cancer trajectory is a “roller coaster” (Ter Stege et al. 2022, p. 235). Survivors often must decide quickly whether to take surgical steps to reconstruct their breast tissue.

Survivors have expressed how challenging it is to make an informed decision about whether to pursue reconstruction as they are only beginning to process their cancer diagnosis (Giunta et al. 2021; Holland et al. 2016). Survivors who have finished treatment advise those who are newly diagnosed to “take your time” and “don’t make the decision quickly” (Giunta et al. 2021, p. 4), noting that the process of integrating information from the medical team with personal values warrants time and energy (Ter Stege et al. 2022). Survivors describe how there may be a perception of urgency around reconstruction decisions given how quickly surgery follows diagnosis (Ter Stege et al. 2022), but in fact, they find relief in learning that theoretically, reconstruction can happen at any point in time (Giunta et al. 2021). In short, one of the first effects of breast cancer survivors’ health literacy is whether they feel rushed and where they look for information in their decision-making process.

Although the majority of studies report that survivors found the information received from their oncology nurses and surgeons helpful, over 80% of studies have reported that survivors experience a lack of information (Flitcroft et al. 2017) and that they wish they had more information (Buki et al. 2016). Survivors may seek additional information from sources such as peers and the Internet (Giunta et al. 2021). In particular, survivors have indicated a gap of information about life after mastectomy without reconstruction, especially seeking photographs or visual depictions of post-mastectomy bodies that had not pursued reconstruction (Holland et al. 2016). Having access to adequate and multidimensional sources of information, such as peers, books, and the Internet, on the diverse possibilities for life post-mastectomy is critical for providing a sense of choice for survivors (Flitcroft et al. 2017) and for breaking through feelings of isolation and marginalization (Holland et al. 2016). Moreover, multidimensional sources of information can help survivors access possibilities for how they may experience their gender after surgical removal of breasts. The messages about reconstruction from each of these sources—oncology medical professionals, peers, and the Internet—will now be outlined. These messages may then influence how survivors understand expectations about gender performance after mastectomy.

### 3. Messages from Healthcare Providers about Bodies and Gender after Mastectomy

Healthcare providers can play a critical role in breast cancer survivors' treatment decision-making (Holland et al. 2016). Shared decision-making and effective patient-provider communication are key to survivors' making decisions that are right for them (Giunta et al. 2021; Shammam et al. 2022; Ter Stege et al. 2022). The medical literature depicts reconstruction as surgically optimal (Holland et al. 2016; Fang et al. 2013), especially for younger survivors (Roje et al. 2010), and survivors have reported feeling pressured and even coerced by imbalanced "pro-reconstruction messages" from healthcare teams (Holland et al. 2016; Rubin and Tanenbaum 2011). Oncology providers have used emotive words such as "disfigured" or "deformed" when describing the chest after mastectomy (Harcourt and Rumsey 2004) and may present reconstruction as a "natural step" in treatment (Rubin and Tanenbaum 2011), conveying the unacceptability of going flat (Harcourt and Rumsey 2004). Survivors describe how their oncology and surgical team may assume that reconstruction will be a part of their treatment regimen without discussion, and that to be a cooperative patient, they should include reconstruction as the "expected course of treatment" (Holland et al. 2016, p. 1692). Such assumptions have resulted in breast cancer survivors waking from their mastectomy to find that their surgeons have, without survivors' approval, left excess skin (termed as "dog ears") rather than smoothly contoured their chests (Tyner and Lee 2021). Tyner and colleagues (2021) reported that survivors were told that excess skin was left by surgeons in case survivors change their mind and decide they would like reconstruction at a later point in time. A survivor in a qualitative study conducted by Brown and McElroy (2018) reported that they were forced to meet with a psychiatrist to "justify my choice [to go flat]. . . I was told I would suffer gender confusion" (p. 412); just one example of many ways that survivors reported feeling as if they had to justify their decisions not to reconstruct to their medical providers (Rubin and Tanenbaum 2011).

In contrast, reasons for undergoing reconstruction were deemed "self-evident" (Rubin and Tanenbaum 2011). Across multiple studies (e.g., Brown and McElroy 2018; Tyner and Lee 2021), survivors have expressed how they felt pressured by their surgeons and health care teams to seek reconstruction to meet societal norms around having breasts and gender expectations for how women's bodies should look (Holland et al. 2016; Rubin and Tanenbaum 2011). They have been told that they may regret not pursuing reconstruction, that their romantic relationships may suffer, and that reconstruction is a critical component of psychological and physical healing after breast cancer, including positive body image for women (Rubin and Tanenbaum 2011). Survivors have expressed how they repeatedly had to justify their decision not to pursue reconstruction to medical teams, explicitly asserting that their breasts were not fundamental to their well-being and sense of gendered self. They noted that they had to self-advocate and be persistent on multiple occasions before their decisions were accepted by their medical team, creating additional anxiety and difficulty stemming from their interactions with their medical team above and beyond the experience of losing their breast(s). Survivors were perceptive of how they were going against the "norm" of gendered expectations for bodies of those identifying as women by not undergoing reconstruction (Holland et al. 2016).

Much medical literature outlines the aim of reconstructive surgery as "restoring physical integrity and improving the quality of life of affected patients" (Friedrich et al. 2021, p. 5365), yet some have concluded that when examined over time, there are no differences in satisfaction with decisions for those who did and did not reconstruct. In a systematic review of survivors across Europe, Asia, the United States, and South Africa, survivors reported that their emotional and psychological well-being was not dependent on whether they had breasts (Flitcroft et al. 2017). In summary, when digesting the information provided by medical providers, survivors have indicated that feeling heard, not being rushed, receiving complete information, and feeling supported in how they wanted to create their gendered selves through their bodies post-mastectomy was key for their satisfaction with their reconstruction decision-making and outcomes; for survivors who chose reconstruction and who chose going flat, the processes by which they made those decisions was key for their

satisfaction with the outcome (Giunta et al. 2021; Tyner and Lee 2021). Yet, many survivors report not having experienced affirmative medical interactions, and thus peers and online sources have served as other key areas of information on life post-mastectomy.

#### 4. Messages from Other Survivors about Bodies and Gender after Mastectomy

Without clear alternatives to reconstruction, and with pressure from medical professionals, survivors describe feeling isolated and lonely, without anyone to relate to (Giunta et al. 2021). Survivors express that it feels empowering to connect with survivors in similar circumstances who are willing to share their experiences and what they have found helpful (Ter Stege et al. 2022). Specifically, survivors indicate that it is useful to talk to other similar-aged survivors who did and did not pursue reconstruction, thereby helping survivors feel less pressure to conform to the perceived gendered “norm” of reconstruction (Holland et al. 2016). Yet peer support was not immune to the internalization of social pressures to retain breasts at all costs. In a study by Rubin and Tanenbaum (2011), one survivor (she/hers) conveyed that as she was gathering information and considering all options, the survivors in her peer support group “were shocked that I was trying to decide, that I was weighing the odds. . . I was actually surprised at the people’s reaction to me not being sure. . . And they were trying to talk me into it” (p. 406). Losing a breast has “come to be viewed as a medical condition” (Rubin and Tanenbaum 2011, p. 406) and as a sign of disability (Holland et al. 2016) indicating a deficit in a gendered body presentation. Some forms of peer support may have internalized the medicalized view of breast loss as a gendered disability.

#### 5. Messages from Social Media about Bodies and Gender after Mastectomy

Survivors have identified the Internet as the main source of images of bodies post-mastectomy that had not undergone reconstruction (Ter Stege et al. 2022). Feeling as if non-reconstructed bodies are not presented positively or in a balanced way within healthcare literature (Holland et al. 2016), survivors seek online images to obtain a more complete view of the range of breasts’ appearances with and without reconstruction (Ter Stege et al. 2022).

Social media platforms, in particular, hold the power to widen accessibility to varied representations of survivors’ bodies after going “flat”, as well as their daily lives. McCullough and Lester (2022) named that social media platforms allow users to visually construct notions of the self, including gender; and more broadly, to contribute to the construction of our social world by making visible certain social categories and roles. Not only do social media images reflect the broader cultural context, but they are also active in the creation of culture (Rose 2016).

There is a notable lack of research aimed at unpacking how online images of non-reconstructed bodies are displayed in relation to survivors’ sense of themselves as gendered beings after mastectomy. Thus, this paper aims to provide a conceptual framework for studying gendered, visual representations of going “flat” on social media. In doing so, we hope to stimulate future empirical research in this area. Given the historical disempowerment of breast cancer survivors within patriarchal medical systems (Gibson et al. 2015), it is especially critical to honor the ways in which survivors themselves construct survivorship culture. Before offering a preliminary reading of online images using a visually informed, critical discursive psychology approach, we first review the literature pertaining to the meaning of breasts more broadly as symbols of gender, and more narrowly in relation to a cancer diagnosis and mastectomy.

#### 6. Breasts as a Cultural Symbols and Markers of Gender

In exploring the symbolic meaning of breasts, it is productive to first name our guiding conceptualization of gender. Butler (1988) argued that gender is performed through language and visual expression in a daily, repetitive manner. Our daily performance of facial features and expressions, bodily gestures, and movements can enact a sense of a

gendered self, with these micro-level choices carrying meaning and agency (Butler 1988). Additionally, posture, the posing of the body, clothing choice, gaze, body hair, and representations of touch are all examples of visual features that may be employed in the expression of gender (Butler 1988; Goffman 1979; McCullough and Lester 2021, 2022). Further, an intersectional lens (Collins 1990) prompts us to consider how other salient identities (e.g., disability, sexual orientation, race, social class) may intersect with how we perform gender and how our gender performances are received by others.

Following the example of McCullough and Lester (2021), in the context of visual depictions of gender on social media, it is crucial that we similarly emphasize that “we do not mean to suggest that gender identities are outright visible and can be assumed by looking. Rather, we believe that all gender is made apparent, negotiated, fashioned and refashioned by people in distinct ways over time”. (McCullough and Lester 2021, p. 641). In much the same way, we aim to center a consideration of gender as a performative act (Butler 1988) and to stimulate future research into the visual discursive mechanisms employed by survivors to “do” gender (McCullough and Lester 2022). These types of inquiries might productively shed light upon how bodies are culturally situated in relation to gender in the U.S. context, and likewise reveal the ways in which breast cancer survivorship, gender, and health discourses intersect in the varied contexts of their production, both visually and verbally.

The decision to go “flat” is situated within a broader cultural, social, and economic context (Webb et al. 2019), and examining this context is critical to understanding the meanings associated with going “flat”. For instance, the way in which disability intersects with gender is important to consider in the context of breast cancer survivorship. In general, for cancer that involves a specific visible body part, that body part can become a symbol of health and/or disease. Healthism “situates the problem of health and disease at the level of the individual” (Crawford 1980, p. 365); thus, survivors themselves are to blame for illness, including for signs of illness displayed by their body. Survivors may anticipate that others will judge their health and sense of “wholeness” based on their presentation of that body part (Elder et al. 2005). They may feel that they must portray themselves as healthy to be valued and seen as desirable by society. Thus, regaining a sense of control by hiding bodily signs of illness and (re)presenting their bodies as healthy may take on great importance (Fernández-Morales and Menéndez-Menéndez 2022).

The ways in which breasts after cancer indicate returning to a healthy state intersects with how breasts are treated as objects of gender identity, femininity, fertility (Buki et al. 2016), motherhood (Phoosuwan and Lundberg 2023), desirability, and sexuality for women (Fang et al. 2013). More specifically, breasts are socially construed as a sign of womanhood and femininity, feminine gender expression(s), reproductive capabilities, and the ability to nurture children through breastfeeding (Webb et al. 2019).

Moreover, much of women’s value in American society stems from the extent to which they are deemed attractive and sexually desirable from the male gaze (Woertman and Brink 2012). Large-breasts are often one of the components of media portrayals of the ideal woman, along with slim hips and long-legs (Byrd-Bredbenner and Murray 2003). Feminist scholars conjecture that traditional heterosexual culture has centered men’s experiences of sexuality on sexual pleasure, and women’s on being the object of desire and cultivating emotional intimacy (Bancroft and Graham 2011), with their bodies viewed as objects for men’s pleasure (Murnen and Smolak 2009). Having positive body image, including positive feelings towards one’s breasts after mastectomy, has been associated with more satisfying sex lives among survivors (Satinsky et al. 2012). Further, Latina survivors have reported their husbands’ acceptance of their bodies post-mastectomy as being key to their own acceptance of their bodies (Buki et al. 2016). This source of positive body image stemming from their husbands’ feelings about their bodies exemplifies the continued power of the male gaze for some survivors.

Taken together, the primacy of appearance that breast cancer survivors themselves report, as well as the cultural socialization of objectifying and valuing feminine-presenting

people based on their bodies, can explain why so much of the support for breast cancer survivors assigned female at birth has focused on how survivors look after cancer, and how well they can continue to adhere to heteronormative beauty standards of femininity (Fernández-Morales and Menéndez-Menéndez 2022). Further, breast cancer as a crisis focused on restoring femininity functions to offer distance from existential threats posed by cancer; death is not included in the breast cancer discussion (Fernández-Morales and Menéndez-Menéndez 2022). With breasts as a form of gender performance (Butler 1988) that is bound up in women's value stemming from appearance, it may feel more familiar and perhaps even more comfortable to focus on cosmetics and aesthetics than to acknowledge cancer's threat to mortality (Jain 2007). Romantic partners, friends, and family members, colleagues, strangers, and even survivors themselves, may desire distance from reminders of the bodily and emotional pain and destruction that cancer may cause. Jain (2007, pp. 505–6) writes that the “focus on pink and breasts and comfort may be, quite simply, a convenient way to displace sheer terror; after all, what would it mean to acknowledge—really acknowledge—the fact that 41,000 people each year die from a disease from which one literally rots from the inside out with no cure while so many known causes continue to be pumped into the environment? Further, the relentless hyper- and heterosexualization of the disease results in something of a recursive process through which gender is produced and policed”.

In continuing to engage in research relevant to survivors who have chosen to go “flat”, we believe that the methodological approach of visually informed, critical discursive psychology can be particularly useful lens to approach this topic. First, critical discursive psychology has ties to critical approaches to research and can attend to the critical and cultural nature of bodies, gender, health, and cancer. It is likewise a generative lens for examining psychological topics, such as issues related to constructions of the self, social roles, and identities (e.g., cancer survivor, gender identity), while still maintaining analytic bridges to larger cultural discourses. In short, there is a focus on the kind of discursive work that is happening at the “micro” individual level, in connection to and informed by broader “macro” structures (Wetherell 1998). Further, McCullough and Lester (2022) recently provided guidance for critical discursive psychology researchers interested in the examination of visual materials (e.g., photos, videos), arguing that visual methods can be particularly useful when studying topics such as identity performance, including the ways in which identities are visually constructed and made visible.

Therefore, this approach could be productively leveraged to examine how survivors who have gone “flat” visually and verbally construct themselves as gendered beings in everyday life, such as on social media, in ways that connect to constructions of the self, health, and illness. Given that survivors are likely to turn to the Internet for visual representations of bodies that have gone “flat”, we believe this is an important site of inquiry. We now present visually informed, critical discursive psychology as a valuable method for offering a unique lens for exploring how breast cancer survivors (visually) frame their experience of going flat in the context of gender performance. Accordingly, we turn to a brief overview of the historical and conceptual origins of visually informed, critical discursive psychology. After outlining the origins of the method, we then present a preliminary reading of a photograph posted on Twitter by a breast cancer survivor, Tig Notaro, who went flat after mastectomy, using this methodological perspective. We also briefly describe how visually informed critical discursive psychology could apply to a second photo by breast cancer survivor Jamie Kastelic posted on Instagram. By analyzing visual representations of going flat in social media spaces, we can explore how breast cancer survivors are influenced by and enact agency in the creation of breast cancer survivorship culture.

## 7. Introduction to Discourse Analysis and (Critical) Discursive Psychology

Critical discursive psychology falls under the broad umbrella of “discourse analysis”, consisting of a range of qualitative approaches that study everyday “discourse”

(Widdowson 1995). Discourse has been defined as “the actual use of language along with other multi-modal resources (e.g., facial expression, gazes, gesture, body movements, artifacts, and the material settings) to accomplish actions, negotiate identities, and construct ideologies” (Waring 2017, p. 8). Discourse analysts examine how people strategically and flexibly use language and other multimodal resources to accomplish social actions (e.g., to construct identities) in mundane contexts. In relation to health psychology, discourse analysis has been leveraged to examine health-related topics such as online representations of breast cancer (Gibson et al. 2015) and delayed motherhood (Budds et al. 2016).

Discursive psychology, specifically, can be seen as the application of discourse analytic methods to the study of psychological concepts (Wiggins 2017). Discursive psychology researchers analyze how psychological notions such as identities, ideologies, and personalities are routinely made visible, negotiated, and performed through everyday language use (and other multimodal expressions) for social purposes (e.g., to build a rationale for a decision; Potter 2012). In alignment with discourse analytic methods more broadly, discursive psychology researchers utilize naturally occurring data to investigate how psychological discourses “come to be” and are situationally employed in everyday life.

The focus of the current paper is the strand of discursive psychology called “critical discursive psychology”. Aptly named, this strand assumes a “critical” vantage point from the onset of the research process. Critical discursive psychology researchers purposefully examine how psychological discourse use intersects with and (re)produces systems of power, privilege, and oppression. This method holds an “assumption that there are existing power structures that advantage some and disadvantage others that must be attended to by researchers. Critical discursive psychology researchers contemplate how, at different moments, the status quo is either challenged or reinforced and, more broadly, how systems of inequality are constructed and maintained through discourse” (McCullough and Lester 2022, p. 6). In this way, critical discursive psychology inquiries productively draw upon “micro” forms of analysis (e.g., close examination of discourse construction and use) and “macro” perspectives (e.g., by connecting discourse use to broader cultural systems and ideas; Wetherell 1998).

While a range of discourse analysts have incorporated aspects of visuality into their work (Mondada 2019; Nevile 2015; Saint-Georges 2004; Streeck et al. 2011; Van Leeuwen 2004), critical discursive psychology researchers, specifically, have long maintained an interest in the study of gender and identity work (Potter 2012; Wetherell 1998; Wetherell and Edley 2014; McCullough and Lester 2021), with increased attention paid to visuality in recent years (McCullough and Lester 2022; McCullough 2023). In taking up psychological topics from a critical vantage point, a visually informed, critical discursive psychology approach is particularly well-suited for examining everyday constructions of gender identity, the self, and notions of health (see Locke and Budds 2020) in spaces such as social media (McCullough and Lester 2022).

## 8. Visually Informed Critical Discursive Psychology

Recently, McCullough and Lester (2022) articulated the benefits of integrating a focus on visuality and visual methods into the field of critical discursive psychology, outlining what they called a “visually informed” approach to critical discursive psychology. This approach, which is the narrowest focus of our paper, can productively account for the ways in which both verbal and visual discourses are utilized to construct particular social roles, categories, and identities in mundane settings (e.g., social media contexts). In this tradition, “visual discourse” is defined as “the visual in use” (McCullough and Lester 2022, p. 12) with “visual materials” as the researcher’s object of study (e.g., images, videos).

To guide future inquiries, these authors (re)defined and expanded upon one of the analytic concepts commonly drawn upon in critical discursive psychology research, that of “interpretative repertoires”. Critical discursive psychology researchers often work to identify interpretative repertoires, defined as culturally available resources in the form of “discernible clusters of terms, descriptions, and figures of speech often assembled around



metaphors or vivid images” (Wetherell and Potter 1993, p. 90). As part of the “tool-kit” of communicative tools or resources available for individual use within a particular culture, interpretative repertoires are inherently tied to the broader cultural context. In other words, cultures provide certain tools or resources that individuals can use when needed. Individuals can flexibly employ particular interpretative repertoires at certain moments, opting to draw upon some and neglect others, depending on the social work that needs to be accomplished. By identifying the resources available for meaning-making within a culture, researchers can examine how cultural meanings are strategically and variably used in “micro” interactional settings, i.e., in performances that can eventually work to inform broader “macro” contexts.

Traditionally, researchers have worked to identify linguistic repertoires and their functional and contextual uses. However, McCullough and Lester (2022) noted that researchers can also opt to identify “visual repertoires” or “visible clusters of visual features, qualities, and elements assembled around culturally recognizable imagery” (McCullough and Lester 2022, p. 16), as well as “hybrid” repertoires or “clusters of terms, descriptions, and figures of speech tied to visual features, qualities and elements that are collectively assembled around metaphors or imagery” (McCullough and Lester 2022, p. 16), the latter involving a blend of visual and verbal analysis. In short, researchers can choose to identify linguistic, visual, and/or hybrid repertoires depending upon the nature of their dataset (primarily verbal, visual, or combined verbal and visual (e.g., videos)).

## 9. Visually Informed, Critical Discursive Psychology and Gender

Critical discursive psychology has been used to unpack discursive constructions of gender, including femininity (Locke and Yarwood 2017) and masculinity (McCullough and Lester 2021; Wetherell and Edley 2014). Building upon Locke and Budds’ (2020) writing around applying critical discursive psychology to health research, we believe that visually informed, critical discursive psychology can further provide a productive lens through which to examine how gender identity is discursively constructed by those who have gone “flat”.

Critical discursive psychology researchers examine how people routinely draw upon culturally recognizable ways of presenting to “do” gender, i.e., to produce the illusion of an internal, gendered self. People may construct gendered presentations through a variety of discursive practices—particular speech, mannerisms, acts, and physical appearances (e.g., clothing, body shaping habits and activities; Wetherell and Edley 2014). Accordingly, identities are constructed both visually and verbally, and often concurrently (McCullough and Lester 2022). In the visual realm, individuals selectively leverage distinct visual features (as well as visual interpretative repertoires) to implicate or convey certain roles or identities (McCullough and Lester 2022). On the site of the body, this can encompass clothing choice, body shaping habits (e.g., muscularity), grooming choice (e.g., hairstyle, hair removal), and body modification (e.g., surgeries). While some visual discursive practices may be linked more broadly to femininity or masculinity, the specific cultural meanings associated with these practices are contextually built and open for negotiation and re-interpretation over time (Gonsalves 2020). Importantly, people can flexibly utilize and perform different visual discursive practices in different contexts to convey specific narratives about who they are and who they are not by virtue of what is selected for display (and, conversely, what is neglected).

McCullough and Lester (2022) described that some of the visual features that critical discursive psychology researchers may attend to include those relevant to bodily features and physical presentations, such as the overall lines and shapes of the face and body. Relatedly, the decision to engage or not engage in breast reconstruction does not exist in a cultural vacuum; in the contemporary present, bodily features are laden with gendered implications (Gonsalves 2020). As described in the breast cancer literature presented earlier, breasts continue to be imbued with gendered cultural meanings. As previous research with breast cancer survivors has shown, the appearance of breasts is tied to

perceptions and experiences of gender and femininity. On the other hand, flat chests may be connected to masculine presentations more generally (McCullough 2023; McGuire et al. 2016; Siebler 2012).

For instance, Johnston (1996) examined the bodily practices of female body-builders, noting the perceived “transgressive” nature of female body-builders who reduce their body fat to the degree that their breasts appear much smaller or become imperceptible. As such, some female body-builders utilize breast implants to maintain ties to femininity. Further, in a qualitative study of young, transgender individuals (McGuire et al. 2016), participants named numerous bodily practices that they engaged in to reduce or remove the appearance of breasts (e.g., chest-binding, mastectomy, wearing baggy clothes) to deemphasize the feminizing meanings culturally associated with breasts. Alternatively, some opted to construct breasts via hormones or surgeries, likewise due to the cultural ties to femininity associated with breasts. In sum, the decision for breast cancer survivors to reconstruct breasts or “go flat” is consequential to how they may choose to visually construct their gender in the present and future.

Moreover, as highlighted by McCullough (2023), bodies are routinely positioned as “pre-discursive” or “natural”. Kessler and McKenna (1978, p. 77) state that in Western culture, the “physical and biological reality is the ultimate reality”. In other words, bodies are often rhetorically situated as free from the influence of culture or individual intervention in a way that persuasively constructs them as “factual” and “uninfluenced”, despite people routinely manipulating their bodies for gendered effects (Gonsalves 2020; Johnston 1996; McCullough 2023; McCullough and Lester 2021, 2022; McGuire et al. 2016). Nevertheless, since bodies often transcend questioning or critique under the presumption of “naturalness”, the decision of whether to go flat or pursue reconstruction provides survivors a unique opportunity to tap into the persuasive power of bodily discourse in the construction of (gender) identities. Accordingly, survivors can opt to produce or construct masculine or feminine features within a space that functions to provide considerable credibility toward the discursive construction of identities. In other words, the site of the body can be meaningfully leveraged to do highly persuasive, gendered work, both more generally and by breast cancer survivors specifically.

### **10. Applying Visually Informed Critical Discursive Psychology to the Study of Going Flat: Methodological Process and Close Reading of an Example Image**

In this section, we will outline the typical methodological process for researchers conducting a visually informed, critical discursive psychology analysis for the interested reader. In other words, we aim to describe what the analytic process looks like for researchers examining visual discourse, or “the visual in use” (McCullough and Lester 2022, p. 12) through the empirical study of visual materials (e.g., photos, videos). Afterward, two photo examples will be analyzed to illustrate aspects of the early stages of data analysis and to highlight the potential utility of visually informed, critical discursive psychology in studying visual representations of breast cancer survivors who have gone “flat”.

The analytic process (McCullough and Lester 2022) is typically carried out in two overarching stages: (1) close examination of visual materials; and (2) identification of visual interpretative repertoires. The first stage, close examination of visual materials, involves closely observing, labeling, and analyzing the specific visual features, qualities, and elements that altogether “compose” or “construct” the visual materials. When working with visual materials, there are a seemingly endless number of potential visual features that one could attend to, such as aspects related to color, line, angle, pose, facial expression, bodily configuration, bodily features, and more (see McCullough and Lester 2022 for an extensive list of potential visual features of interest). Although there is a plethora of visual elements and qualities present in visual materials, researchers are encouraged to attend to the dimensions that are most salient to their specific research question, as well as to the body of theoretical and empirical literature on which their project draws (McCullough and Lester 2022). The process of labeling specific visual features is helpful toward documenting what

is present in the dataset. It is further useful for tracking and observing patterns in visual features, or patterns in labels by proxy, across the dataset. Upon thorough engagement with the labeling process, researchers are encouraged to reflect upon the dataset by engaging in a memoing process. These memos can capture overall reflections on the visual materials, patterns in visual features across the dataset, the potential social functions of specific visual features (e.g., smiling versus not smiling), and reflections upon what appears to be missing from the dataset (e.g., clothing vs no clothing). These memos can be connected to extant literature to deepen one's understanding of what is visible in the dataset and to support potential interpretations of the social functions of specific visual features.

The second stage, the identification of interpretative repertoires, builds upon the labeling and memoing process from the first stage. In the second stage, however, there is particular attention dedicated to *clusters* of visual features that frequently manifest *together* across the dataset. In other words, there is greater attention to identifiable visual discursive patterns. In observing specific clusters of visual features that repeatedly manifest together, one might wonder what *social purpose(s)* or *function(s)* they are accomplishing for the user, given their repeated manifestation. Put another way, one might question why these clusters of visual features are repeatedly being utilized by the user(s). If repeated themes appear to have an identifiable social function, then there is preliminary evidence for an interpretative repertoire. The last step is to connect recurrent clusters of visual features to broader cultural meanings, images, outside literature, and/or previous findings, as interpretative repertoires are thought to be "culturally available" resources and should therefore be evident beyond the confines of one's dataset. In sum, the process of identifying interpretative repertoires involves (a) close readings of images with attention to clusters of repeated visual features; (b) an examination of the social function(s) of clusters of repeated visual features; and (c) an analysis regarding connections between clusters of repeated visual features and broader cultural ideas and images (McCullough and Lester 2022).

For the purpose of this paper, we first offer a preliminary analysis of a photo that was posted to Twitter by comedian and breast cancer survivor Tig Notaro. By analyzing this photo, we intend to engage in and illustrate aspects of the first stage of analysis—the close reading of visual materials. Specifically, we aim to identify specific visual features in the photo, contemplate the potential social functions of these features, and connect these interpretations to outside literature. A fuller critical discursive psychology analysis would include more data segments, a larger consideration of repetitive discursive patterning across the dataset, and thorough engagement with the process of identifying interpretative repertoires (and their functional use(s) in context). As such, we strongly encourage interested readers to see McCullough and Lester (2022) for more details regarding how to carry out a visually informed, critical discursive psychology study.

### 11. Tig Notaro Photograph Example

Tig Notaro is an American stand-up comedian who became well-known for raw performances about topics such as sexuality, breast cancer, mastectomy, and death. We opted to analyze a photo posted by Tig given that they have publicly discussed breast cancer and posted photos of their body after going "flat". This photo can be found at: <https://twitter.com/TigNotaro/status/755119291436036096?lang=en> (accessed on 16 May 2023).

Examining the photo (Notaro 2016), starting with Tig's presentation, the adult figure has short, dark, thick, uncombed hair, and light skin tone. The subject's eyes are half closed, with small lines and slightly dark circles under the eyes. They have straight, white teeth that are visible as the subject smiles softly. In examining the figure's body, the chest is without clothes. The chest appears largely flat, with a small, straight line of darker skin, resembling a nipple, visible. Moreover, there is no visible scarring on the chest. Furthermore, there is a small bunch of dark hair under the right armpit, which is the only underarm area visible. Further, Tig's head is turned toward the right, with their gaze downward toward one of the babies.

Regarding other visible elements in the photograph, two newborn babies lay near Tig. One baby appears to be asleep and naked, tucked into and resting upon the left side of the adult's chest. The second baby is wearing a white onesie, appearing to be awake with eyes slightly open, tucked between Tig's chin and right shoulder, and also supported by Tig's right arm.

Tig and the babies lie in white, fluffy, ruffled bedding. There is a white pillow underneath Tig's head, among other white pillows in the background. A white blanket is pulled down below Tig's arms and chest, such that it falls mid-stomach. There appears to be soft lighting in the room.

In analyzing images using critical discursive psychology, the specific visual features in the photo(s) are considered meaningful since they were chosen for display, as opposed to numerous other features that could have been drawn upon but were neglected. In examining the photo, there is an adult and two children lying on a bed together, with the intimate setting of a bed, physical closeness between figures, and use of touch (Goffman 1979) suggesting a close, familial relationship. Within the tradition of family photography, there is a long history of familial photos serving as a "form of self-knowledge and self-representation" (Hirsch 1999, p. xxiii). In this literature, it has been observed that family photographs frequently depict feminine presenting parents with (sometimes naked) children or babies, oftentimes with the feminine presenting parent holding and supporting the children in a tender and protective manner (Hirsch 1999; Richards and Finger 1975). More broadly, "mother-child" iconography has been pervasive in art history, tracing back to the renaissance era, often linked to cultural representations of the "ideal mother" (Leonard 1999). Accordingly, the visual representation of a parent holding babies has cultural ties to feminine parenting styles in both art history and family photography.

Moreover, as evidenced by Tig's messy hair, bags under their eyes (which parents of newborns will easily recognize), gaze away from the camera, lack of smiles or forced joviality on behalf of the babies, the natural wrinkles visible on all the figures' skin, and ruffled bedding, the image is not perfectly manicured. There is a sense of this moment being a "real" or "natural", everyday moment. The viewer may assume that they have "caught" Tig in a moment of parental love, as captured by Tig's loving gaze and natural smile (not too big, not too small).

Further, the image appears to have been taken from slightly above and to the side of the subjects, indicating that it may have been taken from someone else lying in the bed. The angle and close frame further work to convey a sense of unplanned intimacy. Historically, in family photography, the absence of the second parent in the photo has been interpreted as implying the second parent is the photographer, standing outside the image, able to surprise the subject (Barthes 1981).

Honing in more closely on the adult's gender, there are several feminine and masculine discursive practices apparent, largely evidenced through the body and its positioning. Goffman's (1979) review of gender in advertising found that feminine presenting people are more likely than masculine presenting people to be pictured laying down, on beds, nuzzling children, and touching and cradling objects and people, in what he called "the feminine touch". Further, feminine presenting figures in advertising photos are more commonly shown looking away from the camera (Schroeder and Borgerson 1998), often smiling to convey emotions such as delight (Goffman 1979). The depiction of nurturing one's baby with skin-to-skin contact likewise falls within stereotypical feminine depictions of gender roles (Goffman 1979; Hirsch 1999). In these ways, Tig is presented as fitting and performing some conventions of femininity through aspects of posturing, expression, and posing.

Additionally, there are several masculine discursive practices performed by Tig. The visible nipple and small, round breast tissue challenge the size and shape of what is typically depicted as "breasts". Tig's chest, itself, may be read as "masculine" due to its flatness (McCullough 2023; McGuire et al. 2016; Siebler 2012). Further, there is a visible presence of under armpit hair. McNeill and Douglas (2011) outlined how certain grooming practices

are linked to cultural expectations of gender, and the presence of body hair has often been linked to masculinity and masculine bodily presentations (McGuire et al. 2016; Gonsalves 2020). In these ways, Tig's armpit hair and flat chest serve as indicators of masculinity in relation to cultural expectations around chest-shape and (gendered) grooming practices. The subject's face also appears to be absent of any make-up, a practice that is frequently utilized to emphasize or exaggerate feminine features of the face. Altogether, alongside the more feminine components of the photo named in the previous paragraph, there appears to be some evidence for the mixing of feminine and masculine discursive practices in ways that may work to convey a more "androgynous" presentation (Řiháková 2013).

Moreover, and importantly, Tig's photo reveals the body of a breast cancer survivor that has chosen to go "flat". In this photo, specifically, the subject is holding babies close to a flat chest. The depiction of feminine presenting parents holding babies close to the chest, or engaging in the act of nursing, is common in photography, art, and advertising studies (Richards and Finger 1975; Goffman 1979). However, these visual depictions typically include the presence of breasts. In this photo, there is a visual connection between parenting, in the act of holding children close to the chest, and a flat chest, specifically. In the close configuration of and touch between subjects, it appears that Tig is connecting with the babies through bodily touch (Goffman 1979). Importantly, the subject's body is one that was once filled with cancer, has been forever changed, and has become flat. In echoing the posing common of feminine presenting parents in photography, art, and advertisements, this image seems to convey that a flat chest can still allow for moments of connection, love, and peace, and can also be a safe and nurturing space for newborn babies to be comforted through touch.

Such an image is noticeably counter to the medicalized view that losing a breast is a disability that marks the body as "defective", (Fang et al. 2013) and "deformed" (Harcourt and Rumsey 2004), with little value to others. In contrast to this perspective, this image appears to convey a more positive message about the experience of going "flat". Moreover, as evidenced by the soft lighting and white bedding, there is also a sense of lightness and purity that is likewise commonly evident in photos of parents and children, particularly of photos of mothers with babies (Gallop and Blau 1999).

More broadly, photographs of cancer survivors often display women survivors in ways that express vitality, health, and triumph over the pain, disease, and risk of death posed by cancer; such photos hide cancer "behind assertion of normalcy" (Phillips 2009, p. 78). Tig's photo seems to offer a subversive alternative to "what is normal, healthy, courageous, inspiring, and beautiful", while simultaneously challenging the components of the "universally desirable female body" (Phillips 2009, pp. 80–81). In many ways, this photo draws upon common conventions of photos of mothers with children, often considered "normal" and "positive", to effectively display parenting after going "flat" in a more positive manner. Consequently, this image appears to be both conventional and subversive, both drawing from and challenging the status quo in which conventional femininity is deemed the ideal representation of parenting.

Moreover, it can be assumed that Tig would not have shared this image if they did not have a degree of comfort displaying a body that has gone "flat". There was an intentional sharing of this photo, which was textually claimed by the user with the caption "This is my life". Among the many potential images of moments with newborns that could have been shared (e.g., babies crying or spitting up), this moment was selected and posted for public display. The caption could be interpreted as expression of pride and empowerment, and given the contents of the photo, could also imply a sense of wholeness and completion without the need for breast reconstruction. Sturken (1999, p. 178) argues that the "most poignant of photographs are those that were created within personal or familial contexts yet have since acquired a cultural, legal, or historical status. . ." This photo appears to counter the largely negative messages around what a "flat" chest means for survivors who opt out of breast reconstruction (Fang et al. 2013; Harcourt and Rumsey 2004).

While the visual composition of the image of Tig appears to construct a more androgynous presentation, the decision to “go flat” does not necessarily equate to a performance of androgyny. For example, see the following image posted on Instagram by breast cancer survivor Jamie Kastelic: [https://www.instagram.com/p/CF2nB68ASXv/?utm\\_source=ig\\_embed&ig\\_rid=e73f9fec-97f1-439f-a2e7-5ccfaec9beb5](https://www.instagram.com/p/CF2nB68ASXv/?utm_source=ig_embed&ig_rid=e73f9fec-97f1-439f-a2e7-5ccfaec9beb5) (accessed on 15 August 2023). In this photo, there is likewise a visual representation of “going flat”. However, this survivor showcases a flat chest alongside other visual markers of femininity. More specifically, in this image, the survivor presents with eye makeup, blush on the cheeks, lipstick, dangling earrings, and long, brushed hair. There is a long history of research on makeup as a visual appearance enhancement tool across time and place (e.g., [Davis and Arnocky 2020](#)), with women presenting with darkened eyes and mouth (such as through the use of makeup) deemed more attractive and more feminine ([Russell 2009](#)). Other studies have reported that women with makeup have been perceived as more attractive to men than women without makeup (e.g., [Cox and Glick 1986](#)). In a recent study with 50 Brazilian women focused on self-perceptions of attractiveness, participants with makeup reported higher self-perceptions of femininity, health, and self-esteem ([Anchieta et al. 2021](#)). Further, long hair, especially that which is intentionally styled, has been socially constructed to equate with femininity and attractiveness to men (e.g., [Bardo 1989](#); [Weitz 2001](#)). In sum, multiple aspects of this Instagram photo point to a more feminine gender display.

Taken together, these two social media examples highlight the potential (and probable) variability in gender presentations amongst cancer survivors who opt to “go flat”. Examining the diversity in presentation, as well as the variable ways in which survivors who “go flat” construct gender, is an important area of future inquiry. This is especially due to the fact that survivors themselves are likely to seek out images of others who have “gone flat”, as the individual in image 2 noted in her caption, “It feels like there is always a push to have a perfect body. Even after a breast cancer diagnosis it is often assumed you will have reconstruction of some sort. . . I desperately sought other women that were in my shoes. Women that looked like me I OFTEN searched the internet looking for pictures of mastectomies. Unfortunately at that time no one was posting those. I decided I would change that and post pictures of my scars. . . I’m so proud of how far the breast cancer community has come in supporting one another and being inclusive. Together we are stronger, because beauty is being redefined”.

In analyzing these photos, the unique visual “work” being undertaken challenges us to attend to the visual intersections of gender, cancer, and healthism. By reviewing the existing literature surrounding the context of breast cancer survivors who opt to go flat and introducing and reviewing the benefits of a visually informed, critical discursive psychology approach, we hope that future researchers may feel encouraged to use this lens to study the everyday intersections of breast cancer survivorship, gender, and visibility.

While these two images were selected for preliminary analysis, it is important to reiterate that a close examination of one photo, or even many photos, does not constitute a sufficient analysis from a critical discursive psychology perspective. More data segments must be analyzed and examined, particularly with attention to relevant discursive patterning and the functional aspects of these patterns, with a focus on identifying interpretative repertoires that emerge throughout the dataset.

## 12. Conclusions

Breast cancer is more than a deadly disease; it is a modern representation of how sociocultural perceptions of bodies and constructions of gender influence and are influenced by medical treatments. The relationship between culture and medical treatments can be understood in the unclear messages received about options following mastectomy for treatment of breast cancer. The decision to go “flat” and opt out of reconstructive surgery following mastectomy is not a common treatment option found in the medical literature; however, it is an option up to 40% of breast cancer survivors report choosing ([Alderman et al. 2003](#)). Historically, research has claimed that engaging in reconstruction following

mastectomy will optimize health and well-being (Coll-Planas et al. 2017; Cromptvoets 2012). Survivors have begun to utilize resources outside of their oncology team to seek out options. Social media is an increasingly popular vehicle in decision making for this community. While there is no “right” decision beyond what is “right” for each survivor, it is vital that survivors are aware of their options, and for the breast cancer community to be critical of the role sociocultural messages about breasts, gender, and bodies may play in treatment options and decision-making.

To better understand why there are narrow assumptions made regarding treatment options, bodies, and gender, and gender expression following mastectomy, we reviewed the literature pertaining to the symbolic power of breasts in relation to gender performance in Western culture. Utilizing a visually informed, critical discursive psychology approach, we further analyzed a photo of Tig Notaro posted on the social media platform of Twitter and of Jamie Kastelic posted on Instagram. Tig’s photo features a survivor who has chosen to go “flat”, holding babies near the chest in a casual and “normal” manner. This visual composition of this image is one that many people and parents might recognize. However, many aspects of the image serve to challenge how healthism assumes that a survivor who has gone “flat” is somehow “defective” as either a woman or parent. In this photo, Tig’s self-representation as a breast cancer survivor is simultaneously conventional and subversive in relation to notions of health, gender, and parenting. In Jamie’s photo, the survivor expresses the intent to “redefine beauty” and presents with many markers of femininity (e.g., make-up, long hair); a “flat” chest is part of that redefinition of beauty and, by extension, of femininity.

### 13. Future Directions

Future empirical research should continue to highlight and more thoroughly examine visual representations of going “flat” in daily life. A visually informed, critical discursive psychology approach can be a productive lens through which to examine how gender, cancer, and health are constructed visually and verbally in everyday settings. For example, in analyzing just one photo posted by Tig, a survivor, on social media, many aspects of parenting, gender, and health were brought to focus. Building from our preliminary analysis, future studies that examine a wider dataset in greater detail might specifically explore how gender is constructed in relation to the social role of parenting amongst survivors who have gone “flat”, utilizing a larger dataset. Future empirical inquiries may continue to explore aspects of these themes and/or other themes that are often relevant to survivors. For instance, elements of attractiveness, including the heterosexist view of losing desirability after going “flat”, and inquiries into potential representations of the male gaze could spur future areas of research. Additionally, researchers can (visually) investigate the influence of going flat on intimacy, particularly in relation to gender identity, gender expression, and sexual identity.

Moreover, it should be noted that much of the research already available on breast cancer survivors is heavily focused on heterosexual and cisgender women. Importantly, it must be recognized that individuals of all gender identities, gender expressions, and sexual orientation identities are diagnosed with breast cancer, and are all impacted by the sociocultural influences of gender within (and outside of) the healthcare system. As such, future inquiries should attend to the diversity in gender and sexual orientation identities within the breast cancer survivor population, alongside other diverse identities and experiences (e.g., the experiences of men).

Notes: We use the term “cancer survivor”, opposed to “patient”, for inclusivity and consistency with the National Cancer Institute’s definition of survivorship beginning at the point of cancer diagnosis. We referred to the LGBT Cancer Network Terminology Resource (<https://cancer-network.org/resources/lgbt-terminology-resource>) (accessed on 3 March 2023) for determining the terms referencing gender identity and sexual orientation.

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## References

- Albornoz, Claudia R., Evan Matros, Clara N. Lee, Clifford A. Hudis, Andrea L. Pusic, Elena Elkin, Peter B. Bach, Peter G. Cordeiro, and Monica Morrow. 2015. Bilateral mastectomy versus breast-conserving surgery for early-stage breast cancer: The role of breast reconstruction. *Plastic Reconstructive Surgery* 135: 1518–26. [CrossRef] [PubMed]
- Alderman, Amy K., Laurence McMahon Jr., and Edwin G. Wilkins. 2003. The national utilization of immediate and early delayed breast reconstruction and the effect of sociodemographic factors. *Plastic and Reconstructive Surgery* 111: 695–703. [CrossRef] [PubMed]
- Alderman, Amy K., Sarah T. Hawley, Nancy K. Janz, Mahasin S. Mujahid, Monica Morrow, Ann S. Hamilton, John J. Graff, and Steven J. Katz. 2009. Racial and ethnic disparities in the use of postmastectomy breast reconstruction: Results from a population-based study. *Journal of Clinical Oncology* 27: 5325–30. [CrossRef]
- American Cancer Society. 2018. *About Breast Cancer in Men*. Atlanta: American Cancer Society. Available online: <https://www.cancer.org/cancer/types/breast-cancer-in-men/about/key-statistics.html> (accessed on 16 May 2023).
- American Cancer Society. 2022. *Breast Cancer Facts & Figures 2022–2024*. Atlanta: American Cancer Society, Inc.
- Anchieta, Natália M., Anthonieta L. Mafra, Roberta T. Hokama, Marco. A. C. Varella, Jailson de A. Melo, da Luana O. Silva, da Caio S. A. Silva, and Jaroslava V. Valentova. 2021. Makeup and its application simulation affect women’s self-perceptions. *Archives of Sexual Behavior* 50: 3777–84. [CrossRef] [PubMed]
- Azzopardi, Jonathan, David Walsh, Chilton Chong, and Corey Taylor. 2014. Impact of geographic location on surgical outcomes of women with breast cancer. *Australia and New Zealand Journal of Surgery* 84: 735–39. [CrossRef] [PubMed]
- Bancroft, John, and Cynthia A. Graham. 2011. The varied nature of women’s sexuality: Unresolved issues and a theoretical approach. *Hormones and Behavior* 59: 717–29. [CrossRef]
- Bardo, Susan. 1989. The body and the reproduction of femininity: A feminist appropriation of Foucault. In *Gender/Body/Knowledge*. Edited by Alison M. Jagger and Susan. R. Bordo. New Brunswick: Rutgers University Press.
- Barthes, Roland. 1981. *Camera Lucida: Reflections on Photography*. Translated by Richard Howard. New York: Hill and Wang.
- Bell, Robin J., Penny J. Robinson, Pamela Fradkin, Max Schwarz, and Susan R. Davis. 2012. Breast reconstruction following mastectomy for invasive breast cancer is strongly influenced by demographic factors in women in Victoria, Australia. *The Breast* 21: 394–400. [CrossRef] [PubMed]
- Brown, Marie T., and Jane A. McElroy. 2018. Sexual and gender minority breast cancer patients choosing bilateral mastectomy without reconstruction: “I now have a body that fits me”. *Women & Health* 58: 403–18. [CrossRef]
- Budds, Kristy, Abigail Locke, and Vivien Burr. 2016. “For some people it isn’t a choice, it’s just how it happens”: Accounts of ‘delayed’ motherhood among middle-class women in the UK. *Feminism and Psychology* 26: 170–87. [CrossRef]
- Buki, Lydia. P., Micaela Reich, and Emaan. N. Lehardy. 2016. “Our organs have a purpose”: Body image acceptance in Latina breast cancer survivors. *Psycho-Oncology* 25: 1337–42. [CrossRef]
- Butler, Judith. 1988. Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre Journal* 40: 519–31. [CrossRef]
- Byrd-Bredbenner, Carol, and Jesscia Murray. 2003. A comparison of the anthropometric measurements of idealized female body images in media directed to men, women, and mixed gender audiences. *Topics in Clinical Nutrition* 18: 117–29. [CrossRef]
- Collins, Patricia H. 1990. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Abingdon-on-Thames: Routledge.
- Coll-Planas, Gerald, Marta Cruells, and Eva Alfama. 2017. Breast surgery as a gender technology: Analysing plastic surgeons’ discourses. *Studies in Gender and Sexuality* 18: 178–89. [CrossRef]
- Cox, Cathryn L., and William H. Glick. 1986. Resume evaluations and cosmetics use: When more is not better. *Sex Roles: A Journal of Research* 14: 51–58. [CrossRef]
- Crawford, Robert. 1980. Healthism and the medicalization of everyday life. *International Journal of Health Service* 10: 365–88. [CrossRef]
- Cromptoets, Samantha. 2012. Prosthetic fantasies: Loss, recovery, and the marketing of wholeness after breast cancer. *Social Semiotics* 22: 107–20. [CrossRef]
- Davis, Adam C., and Steven Arnocky. 2020. An evolutionary perspective on appearance enhancement behavior. *Archives of Sexual Behavior* 51: 3–37. [CrossRef]



- Elder, Elisabeth E., Yvonne Brandberg, Tina Björklund, Richard Rylander, Jakob Lagergren, Göran Jurell, Marie Wickman, and Kerstin Sandelin. 2005. Quality of life and patient satisfaction in breast cancer patients after immediate breast reconstruction: A prospective study. *Breast (Edinburgh, Scotland)* 14: 201–8. [\[CrossRef\]](#)
- Fang, Su-Ying Y., Bin-Ching Shu, and Ying-Ju Chang. 2013. The effect of breast reconstruction surgery on body image among women after mastectomy: A meta-analysis. *Breast Cancer Research and Treatment* 137: 13–21. [\[CrossRef\]](#)
- Fernández-Morales, Marta, and Maria I. Menéndez-Menéndez. 2022. Breast cancer photography and the turn-of-the-century studium. Two case studies to illustrate a paradigm shift. *Cultural Studies* 36: 598–623. [\[CrossRef\]](#)
- Flitcroft, Kathy, Meagen Brennan, and Andrew Spillane. 2017. Making decisions about breast reconstruction: A systematic review of patient-reported factors influencing choice. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation* 26: 2287–319. [\[CrossRef\]](#) [\[PubMed\]](#)
- Friedrich, Michael, Stefan Krämer, Dominique Friedrich, Clayton Kraft, Nicolia Maass, and Christoph Rogmans. 2021. Difficulties of Breast Reconstruction—Problems That No One Likes to Face. *Anticancer research* 41: 5365–75. [\[CrossRef\]](#) [\[PubMed\]](#)
- Gallop, Jane, and Dick Blau. 1999. Observations of a mother. In *Familial Gaze*. Edited by Marianne Hirsch. Lebanon: University Press of New England, pp. 67–84.
- Gibson, Alexandra. F., Christina Lee, and Shona Crabb. 2015. Reading between the lines: Applying multimodal critical discourse analysis to online constructions of breast cancer. *Qualitative Research in Psychology* 12: 272–86. [\[CrossRef\]](#)
- Giunta, Sarah, Rebekah Laidsaar-Powell, Lorna Huang, Natasha Hatcher, Haryana Dhillon, Danielle M. Muscat, Susan Carroll, Catriona McNeil, Lucinda Burke, Pamela Howson, and et al. 2021. Considering the type and timing of breast reconstruction after mastectomy: Qualitative insights into women’s decision-making. *European Journal of Oncology Nursing* 54: 102024. [\[CrossRef\]](#)
- Goffman, Erving. 1979. *Gender Advertisements*. New York: Macmillan International Higher Education.
- Gonsalves, Tara. 2020. Gender identity, the sexed body, and the medical making of transgender. *Gender & Society* 34: 1005–33.
- Greco, Cinzia. 2015. Shining a light on the grey zones of gender construction: Breast surgery in France and Italy. *Journal of Gender Studies* 25: 1–15. [\[CrossRef\]](#)
- Hall, Sonia E., and C. D. J. Holman. 2003. Inequalities in breast cancer reconstructive surgery according to social and locational status in Western Australia. *European Journal of Surgical Oncology* 29: S19–S25. [\[CrossRef\]](#)
- Harcourt, Diana, and Nichola Rumsey. 2004. Mastectomy patients’ decision making for or against immediate breast reconstruction. *Psycho-Oncology* 13: 106–15. [\[CrossRef\]](#)
- Hirsch, Marianne, ed. 1999. *The Familial Gaze*. Lebanon: University Press of New England.
- Holland, Fiona, Stephanie Archer, and Jane Montague. 2016. Younger women’s experiences of deciding against delayed breast reconstruction post-mastectomy following breast cancer: An interpretative phenomenological analysis. *Journal of Health Psychology* 21: 1688–99. [\[CrossRef\]](#)
- Jagsi, Reshma, Jing Jiang, Adeyiza O. Momoh, Amy Alderman, Sharon H. Giordano, Thomas A. Buchholz, Steven J. Kronowitz, and Benjamin D. Smith. 2014. Trends and variation in use of breast reconstruction in patients with breast cancer undergoing mastectomy in the United States. *Journal of Clinical Oncology* 32: 919–26. [\[CrossRef\]](#)
- Jain, S. Lochlann. 2007. Cancer butch. *Cultural Anthropology* 22: 501–38. [\[CrossRef\]](#)
- Jemal, Ahmedin, Freddie Bray, Melissa M. Center, Jacques Ferlay, Elizabeth Ward, and David Forman. 2011. Global cancer statistics. *CA: A Cancer Journal for Clinicians* 61: 69–90. [\[CrossRef\]](#) [\[PubMed\]](#)
- Johnston, Lynda. 1996. Flexing femininity: Female body-builders refiguring ‘the body’. *Gender, Place and Culture: A Journal of Feminist Geography* 3: 327–40. [\[CrossRef\]](#)
- Kessler, Suzanne J., and Wendy McKenna. 1978. *Gender: An Ethnomethodological Approach*. Chicago: University of Chicago Press.
- La, Jessica, Sue Jackson, and Rhonda Shaw. 2019. ‘Flat and fabulous’: Women’s breast reconstruction refusals post-mastectomy and the negotiation of normative femininity. *Journal of Gender Studies* 28: 603–16. [\[CrossRef\]](#)
- Leonard, Joanne. 1999. Photography, feminism, and the good enough mother. In *Familial Gaze*. Edited by Marianne Hirsch. Lebanon: University Press of New England, pp. 293–310.
- Lin, A. P., T. W. Huang, and K. W. Tam. 2021. Treatment of male breast cancer: Meta-analysis of real-world evidence. *The British Journal of Surgery* 108: 1034–42. [\[CrossRef\]](#) [\[PubMed\]](#)
- Locke, Abigail, and Gemma Yarwood. 2017. Exploring the depths of gender, parenting and ‘work’: Critical discursive psychology and the ‘missing voices’ of involved fatherhood. *Community. Work & Family* 20: 4–18.
- Locke, Abigail, and Kirsty Budds. 2020. Applying critical discursive psychology to health psychology research: A practical guide. *Health Psychology and Behavioral Medicine* 8: 234–47. [\[CrossRef\]](#)
- McCullough, Keiko M. 2023. Critical Discursive Psychology and visual displays of gender. *Qualitative Research in Psychology*. [\[CrossRef\]](#)
- McCullough, Keiko M., and Jessica N. Lester. 2021. Masculinities made visible: A critical discursive psychology study of Instagram photos. *Psychology of Men & Masculinity* 22: 639–48. [\[CrossRef\]](#)
- McCullough, Keiko M., and Jessica N. Lester. 2022. Beyond talk and text: Visuality and critical discursive psychology. *Qualitative Research in Psychology* 20: 74–99. [\[CrossRef\]](#)
- McGuire, Jennifer K., Jennifer L. Doty, Jory M. Catalpa, and Cindy Ola. 2016. Body image in transgender young people: Findings from a qualitative, community based study. *Body Image* 18: 96–107. [\[CrossRef\]](#) [\[PubMed\]](#)
- McNeill, Lisa S., and Katie Douglas. 2011. Retailing masculinity: Gender expectations and social image of male grooming products in New Zealand. *Journal of Retailing and Consumer Services* 18: 448–54. [\[CrossRef\]](#)

- Mondada, Lorenza. 2019. Contemporary issues in conversation analysis: Embodiment and materiality, multimodality and multisensoriality in social interaction. *Journal of Pragmatics* 145: 47–62. [CrossRef]
- Morrow, Monica, Reshma Jagsi, Amy K. Alderman, Jennifer J. Griggs, Sarah T. Hawley, Ann S. Hamilton, John J. Graff, and Steven J. Katz. 2009. Surgeon recommendations and receipt of mastectomy for treatment of breast cancer. *JAMA* 302: 1551–56. [CrossRef]
- Morrow, Monica, Yun Li, Amy K. Alderman, Reshma Jagsi, Ann S. Hamilton, John J. Graff, Sarah T. Hawley, and Steven J. Katz. 2014. Access to breast reconstruction after mastectomy and patient perspectives on reconstruction decision making. *JAMA Surgery* 149: 1015–21. [CrossRef]
- Murnen, Sarah K., and Linda Smolak. 2009. Are feminist women protected from body image problems? A meta-analytic review of relevant research. *Sex Roles* 60: 186–97. [CrossRef]
- Neville, Maurice. 2015. The embodied turn in research on language and social interaction. *Research on Language and Social Interaction* 48: 121–51. [CrossRef]
- Notaro, Tig. 2016. [tignotaro]. (2016, July 18). This Is My Life. [Instagram Photograph]. Available online: <https://twitter.com/TigNotaro/status/755119291436036096?s=20> (accessed on 16 May 2023).
- Phillips, Catherine. 2009. Images, femininity, and cancer: An analysis of an international patient education programme. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness, and Medicine* 13: 67–85. [CrossRef]
- Phoosuwat, Nitikorn, and Pranee C. Lundberg. 2023. Life satisfaction, body image and associated factors among women with breast cancer after mastectomy. *Psycho-Oncology* 32: 610–18. [CrossRef]
- Porroche-Escudero, Ana. 2014. Perilous equations? Empowerment and the pedagogy of fear in breast cancer awareness campaigns. *Women's Studies International Forum* 47: 77–92. [CrossRef]
- Potter, Jonathan. 2012. Discourse analysis and discursive psychology. In *APA Handbook of Research Methods in Psychology, Vol. 2. Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological*. Edited by Harris Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf and K. J. Sher. Washington, DC: American Psychological Association, pp. 119–38.
- Remick, Jill, and Neha P. Amin. 2023. *Postmastectomy Breast Cancer Radiation Therapy*. St. Petersburg: StatPearls Publishing.
- Richards, Joel L., and Stanley Finger. 1975. Mother-child holding patterns: A cross-cultural photographic study. *Child Development* 46: 1001–4. [CrossRef]
- Roberts, Susan, Patricia Livingston, Victoria White, and Anne Gibbs. 2003. External breast prosthesis use: Experiences and views of women with breast cancer, breast care nurses and prosthesis fitters. *Cancer Nursing* 26: 179–86. [CrossRef] [PubMed]
- Roje, Zdravko Zelika Roje, Stipan Jankovic, and Milomir Ninković. 2010. Breast reconstruction after mastectomy. *Collegium Antropologicum* 34: 113–23.
- Rose, Gillian. 2016. *Visual Methodologies: An Introduction to Researching with Visual Materials*. London: Sage.
- Rubin, Lisa R., and Molly Tanenbaum. 2011. “Does that make me a woman?”: Breast cancer, mastectomy, and breast reconstruction decisions among sexual minority women. *Psychology of Women Quarterly* 35: 401–14. [CrossRef]
- Russell, Richard. 2009. A sex difference in facial contrast and its exaggeration by cosmetics. *Perception* 38: 1211–19. [CrossRef] [PubMed]
- Řiháková, B. 2013. *Ways of Seeing Androgyny: Confronting the Alternative*. Doctoral dissertation, Masarykova Univerzita, Fakulta Sociálních Studií, Brno, Czech Republic.
- Saint-Georges, Ingrid de. 2004. Materiality in discourse: The influence of space and layout in making meaning. In *Discourse and Technology: Multimodal Discourse Analysis*. Edited by Phillip LeVine and Ron Scollon. Washington, DC: Georgetown University Press, pp. 71–87.
- Satinsky, Sonya, Michael Reece, Barbara Dennis, Stephanie Sanders, and Shaowen Bardzell. 2012. An assessment of body appreciation and its relationship to sexual function in women. *Body Image* 9: 137–44. [CrossRef]
- Schroeder, Jonathan E., and Janet L. Borgerson. 1998. Marketing images of gender: A visual analysis. *Consumption Markets & Culture* 2: 161–201. [CrossRef]
- Shammas, Ronnie L., Laura J. Fish, Amanda R. Sergesketter, Anaeze. C. Offodile, Brett T. Phillips, Sachi Oshima, Clara N. Lee, Scott T. Hollenbeck, and Rachel A. Greenup. 2022. Dissatisfaction after post-mastectomy breast reconstruction: A mixed-methods study. *Annals of Surgical Oncology* 29: 1109–19. [CrossRef]
- Siebler, Kay. 2012. Transgender Transitions: Sex/Gender Binaries in the Digital Age. *Journal of Gay & Lesbian Mental Health* 16: 74–99. [CrossRef]
- Sledge, Piper. 2019. From decision to incision: Ideologies of gender in surgical cancer care. *Social Science & Medicine* 239: 1122550. [CrossRef]
- Streeck, Jürgen, Charles Goodwin, and Curtis LeBaron. 2011. *Embodied INTERACTION: Language and Body in the Material World*. Cambridge: Cambridge University Press.
- Sturken, Marita. 1999. The image as memorial: Personal photographs in cultural memory. In *Familial Gaze*. Edited by Marianne Hirsch. Lebanon: University Press of New England, pp. 178–95.
- Ter Stege, Jacqueline A., Daniela B. Raphael, Hester S. A. Oldenburg, Martine A. van Huizum, Frederieke H. Duijnhoven, Daniela E. E. Hahn, Klemens Karssen, Irene S. Krabbe, Menno Huikeshoeven, Quinten Ruhé, and et al. 2022. Development of a patient decision aid for patients with breast cancer who consider immediate breast reconstruction after mastectomy. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy* 25: 232–44. [CrossRef]

- Tseng, Jennifer F., Steven J. Kronowitz, Charlotte C. Sun, Allison C. Perry, Kelly K. Hunt, Gildy V. Babiera, Lisa A. Newman, S. Eva Singletary, Nadeem Q. Mirza, Frederick C. Ames, and et al. 2004. The effect of ethnicity on immediate reconstruction rates after mastectomy for breast cancer. *Cancer* 101: 1514–23. [[CrossRef](#)] [[PubMed](#)]
- Tyner, Tracey E., and Mikyoung A. Lee. 2021. Satisfaction Outcomes in Women Who “Choose to Go Flat” After Mastectomy: An Integrative Review. *ANS. Advances in Nursing Science* 44: 31–51. [[CrossRef](#)] [[PubMed](#)]
- Van Leeuwen, Theo. 2004. Ten reasons why linguists should pay attention to visual communication. In *Discourse and Technology: Multimodal Discourse Analysis*. Edited by Phillip LeVine and Ron Scollon. Washington, DC: Georgetown University Press, pp. 7–19.
- Waring, Hansun Z. 2017. *Discourse Analysis: The Questions Discourse Analysts Ask and How They Answer Them*. New York: Taylor & Francis.
- Webb, Carmen, Natalie Jacox, and Claire Temple-Oberle. 2019. The making of breasts: Navigating the symbolism of breasts in women facing cancer. *Plastic Surgery* 27: 49–53. [[CrossRef](#)] [[PubMed](#)]
- Weitz, Rose. 2001. Women and their hair: Seeking power through resistance and accommodation. *Gender & Society* 15: 667–86. [[CrossRef](#)]
- Wetherell, Margaret. 1998. Positioning and interpretative repertoires: Conversation analysis and post-structuralism in dialogue. *Discourse & Society* 9: 387–412. [[CrossRef](#)]
- Wetherell, Margaret, and Nigel Edley. 2014. A discursive psychological framework for analyzing men and masculinities. *Psychology of Men & Masculinity* 15: 355–64. [[CrossRef](#)]
- Wetherell, Margaret, and Jonathan Potter. 1993. *Mapping the Language of Racism: Discourse and the Legitimation of Exploitation*. Columbia: Columbia University Press.
- Widdowson, H. G. 1995. Discourse analysis: A critical view. *Language and Literature: International Journal of Stylistics* 4: 157–172. [[CrossRef](#)]
- Wiggins, Sally. 2017. *Discursive Psychology: Theory, Method and Applications*. London: Sage.
- Woertman, Liesbeth, and Femke van den Brink. 2012. Body image and female sexual functioning and behavior: A review. *Journal of Sex Research* 49: 184–211. [[CrossRef](#)]

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