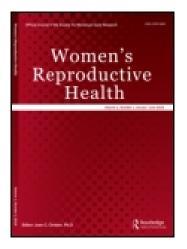
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Cycling Together: Menstrual Synchrony as a Projection of Gendered Solidarity

Breanne Fahs^a, Jax Gonzalez^a, Rose Coursey^a & Stephanie Robinson-Cestaro^a

^a Arizona State University, Glendale, Arizona, USA Published online: 09 Dec 2014.

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Cycling Together: Menstrual Synchrony as a Projection of Gendered Solidarity

Breanne Fahs, Jax Gonzalez, Rose Coursey, and Stephanie Robinson-Cestaro Arizona State University, Glendale, Arizona, USA

Though researchers have hotly debated the phenomenon of menstrual synchrony—women menstruating in tandem when living in close quarters with one another—no conclusive evidence has proven or disproven its existence. In this theoretical article, we draw from sociological theories of collective identities, psychological research on menstrual synchrony, and relevant literatures on menstrual activism and sisterhood to examine the frequent occurrence of women's belief in menstrual synchrony despite the lack of evidence that this phenomenon actually occurs. We propose a theoretical explanation for women's beliefs in menstrual synchrony by arguing that these beliefs serve several functions that enhance gender solidarity: (a) reduction of shame and taboo related to menstruation; (b) a socially acceptable way of constructing modern "sisterhood"; (c) a method for marking women's relationship to nature; and (d) a pathway to fight back against sexism and sexist assumptions about menstruation and menstruating women. We argue that women's belief in menstrual solidarity has blocked efforts to debunk "myths" associated with menstrual synchrony, as women continue to validate, perpetuate, and endorse their menstrual solidarity with other women in a culture that largely devalues both menstruation and women's social bonds.

Keywords menstrual synchrony, gender solidarity, women's health, collectivism, evolutionary biology, feminist attitudes

In 1971, a time when the U.S. women's movement had catalyzed women to see themselves as aligned and in political solidarity with other women, Martha McClintock published a study on menstrual synchrony among college women living in a shared dormitory. McClintock's study of 135 women ages 17–22 living together —the first of its kind and one that would go on to inspire decades of additional research in this area—yielded statistically significant levels of menstrual synchrony among pairs of friends and groups of female friends. The results of her study were quickly picked up by the media, spread rapidly throughout the scientific and lay communities, and appeared as both a fact as presented on television (Rosewarne, 2012) and a hotly disputed occurrence within the scientific literature (McClintock, 1971, 1998; Schank, 2000, 2001; Strassmann, 1999; Weller, A. & Weller, 1992, 1993a, 1993b, 1995a, 1995b, 1998; Weller, L., Weller, & Roizman, 1999).

Here, we are less interested in the scientific debates about the existence of menstrual synchrony, though the literature itself is a fascinating example of the controversies of science followed by

Correspondence should be sent to Breanne Fahs, PhD, Women and Gender Studies, Arizona State University, 4701 W. Thunderbird Road, Glendale, AZ 85306, USA. E-mail: breanne.fahs@asu.edu

an ultimate lack of conclusiveness; we are more interested in the personal, social, and political implications of why many women believe that they have menstrual synchrony with other women. In line with the feminist call to fuse the personal and political, the theoretical positions presented in this article are derived from our work as menstrual activists. As we have challenged and sought to combat the shame-based, sexist, and menstrual-negative culture around us, we have had ample opportunities to engage in conversations with women about menstruation, which has provided us a unique lens through which to view the political meanings of menstrual synchrony. Through casual conversations about menstruation on airplanes; dialogue with family, friends, students, and coworkers; workshops about alternative menstrual products; and discussions about menstrual cycles during psychotherapy, we have been continually curious about the frequency with which we have heard the statement, "I menstruate together with my sister/friends/mother/coworkers/lover."

Struck by the consistency, passion, and certainty that women have when describing menstrual synchrony, particularly given that those on hormonal contraceptives do not technically menstruate, we see the overwhelming presence of the belief in menstrual synchrony as a projection of gendered solidarity with other women. Specifically, we posit four different possible functions of menstrual synchrony: a way to reduce shame and taboo related to menstruation; a socially acceptable way of constructing modern "sisterhood"; a method for marking women's relationship to nature; and a pathway to fight back against sexism and sexist assumptions about menstruation and menstruating women. All of these functions underlie the importance of seeing solidarity not only on purely *political* terms, but also as a *bodily, gendered*, and *largely personal phenomenon* that has the potential to create, validate, and perpetuate social bonds between women.

DEBATES ABOUT MENSTRUAL SYNCHRONY

The menstrual synchrony literature is an unusual, controversial, and passionate literature filled with rebuttals, conflicted opinions, backtracking, accusations of methodological error, and passionate defensiveness. When we reviewed the literature on menstrual synchrony, we were reminded of Elizabeth Lloyd's (2006) brilliant work in which she examined the biases of science and the ways that scientists projected their beliefs about gender and sexuality onto their evolutionary studies of orgasm. In essence, Lloyd found that, despite having no conclusive evolutionary purpose whatsoever, many scientists nevertheless reported as fact that the female orgasm has a reproductive purpose. Even in the face of contradictory evidence, researchers, blinded by their own attitudes and beliefs about women and sex, proceeded to argue "facts" that ultimately had no scientific basis. How researchers see—and what they see—leans heavily on their desires for what they *want* to see, even (or perhaps especially) within the supposedly neutral and bias-free scientific community.

The literature on menstrual synchrony has many unusual qualities, as its origin date, lack of conclusiveness, and large volume of repeated follow-up studies suggests that the *idea* of menstrual synchrony tapped into something much larger than the mere possibility of menstrual cycle alignment. The number of studies that followed McClintock's (1971) pioneering work helped to describe how women living together might menstruate together. McClintock, a psychologist at the University of Chicago who has studied human pheromones, menstrual synchrony, and the behavioral control of endocrinology, brought a distinctly feminist lens to the study of women's health and menstrual synchrony. Her most vocal critics (and those who have wavered back and

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forth about the existence of menstrual synchrony) have included J. C. Schank, a male psychologist with an emphasis on animal behavior and biopsychology, Leonard Weller, a sociologist who has studied social class and anti-Semitism (with a clear interest in social relationships between people), and Aron Weller, a psychologist interested in neuroscience and animal behavior. Collectively, these four researchers have spent much of their careers debating the existence of menstrual synchrony and attempting to have the "final word" on the matter; it is important to note that some of them are primarily interested in animal behavior and not in health-related matters.

Theoretical Debates

Following McClintock's (1971) landmark study, other researchers examined a variety of contexts and relationships in which women cohabitated or existed in close proximity, including lesbian couples (Trevathan, Burleson, & Gregory, 1993; Weller, A. & Weller, 1992), friends and roommates (Graham & McGrew, 1980; Jarett, 1984; Weller, A. & Weller, 1993a; Weller, L., Weller, & Avinir, 1995; Wilson, Kiefhaber, & Gravel, 1991), sisters and mothers/daughters (Weller, L., Weller, & Roizman, 1999), coworkers (Matteo, 1987; Weller, A., & Weller, 1995b; Weller, L., Weller, Koresh-Kamin, & Ben-Shoshan, 1999), athletes (Weller, A., & Weller, 1995a), and women not using any birth control (Collbtt, Wertenberger, & Fiske, 1955; Strassmann, 1997). Some studies showed that synchrony can be found among roommates and friends but not mothers (Weller, A., & Weller, 1993b) and that closer friendships developed more menstrual synchrony (Weller, A., & Weller, 1995b); whereas others examined a large variety of factors related to menstrual synchrony, including social factors, quality of the relationships, group size, age and age diversity, menstrual regularity, the environment, and contraceptive practices (Little, Guzick, Malina, & Ferreira, 1989; Weller, L., & Weller, 1995; Weller, L., & Weller, 1997). However, researchers have not assessed menstrual synchrony in groups of women who all use hormonal birth control, and some rightly noted that this sort of withdrawal bleeding is different from menstruation altogether (for two studies that excluded women on birth control, see Preti, Cutler, Garcia, Huggins, & Lawley [1986], and Russell, Switz, & Thompson [1980]).

Pheromone studies have formed the basis of much of the research on menstrual synchrony to date. Although friendship, common activities, cohabitating, and the amount of time spent together all correlated with higher reports of menstrual synchrony, the researchers believed that exposure to other women's ovarian-based pheromones (i.e., odorless compounds emitted from women's bodies, especially their underarms) was largely responsible for why women cycled together (Goldman & Schneider, 1987; Weller, A., & Weller, 1993a). The release of these pheromones was assumed to accelerate or delay the surge of luteinizing hormone responsible for menstrual cycle length, which resulted in women becoming increasingly more synchronized with each other (Stern & McClintock, 1998).

Though many studies consistently demonstrated the existence of menstrual synchrony (particularly those by Weller and Weller), one study showed that it occurred only because of environmental influences (Little et al., 1989), and results of a number of studies led researchers to question its existence or refute its existence entirely (Jarrett, 1984; Schank, 2002; Strassmann, 1999; Trevathan, Burleson, & Gregory, 1993; Weller, A., & Weller, 1998; Weller, L., Weller, & Avinir, 1995; Wilson, Kiefhaber, & Gravel, 1991; Yang & Schank, 2006; Ziomkiewicz, 2006). Wilson (1992) showed that, mathematically, menstrual synchrony would be expected in one half of the women studied without any external manipulation or contextual factors influencing it, as some women cycle regularly and some irregularly. He also found three methodological errors that could have skewed the results of earlier studies: too short an observation period, incorrect methods of calculating the menstrual onset differences, and exclusion of certain women from the analysis.

Evolutionary biologists have also debated the existence of menstrual synchrony, because strong disagreements appear in the literature with regard to whether (and why) menstrual synchrony occurs (McClintock, 1998). Scientists have theorized a variety of reasons for menstrual synchrony, including the higher likelihood for conception in societies where many women share one man (he would sense the pheromones, want to have sex with multiple women, and impregnation would become more likely, whereas unsynchronized cycles would "confuse" men; Burley, 1979). Menstrual synchrony has also been proposed to increase a man's interest in his female offspring (Knowlton, 1979; Turke, 1984) or provide a back-up wet nurse in times of high maternal mortality (Frisch, 1984).

Despite these evolutionary explanations, no studies have shown that women ovulate together or have similar fertility periods while cohabitating, which refutes the likelihood of most of the evolutionary explanations (Kiltie, 1982; Strassmann, 1999; Yang & Schank, 2006; Ziomkiewicz, 2006). Even more important, urbanized and nonurbanized societies show markedly different patterns of fertility and menstruation, because women in urbanized societies have a greater number of menstrual cycles, fewer pregnancies (and longer periods of nursing), and more years when they menstruate than do women in nonurbanized societies (Strassmann, 1997; Strassmann, 1999; Umeora & Egwuatu, 2008). Some recent researchers have cautioned that scientists know very little about menstrual synchrony and its possible reasons, and, consequently, researchers should not draw sweeping conclusions about such a complex phenomenon (Harris & Vitzthum, 2013).

Methodological Debates

Several researchers have found additional methodological problems, particularly the difficulty of assessing menstrual synchrony in light of "within" and "between" women differences. Each individual woman may not have a consistent cycle length (e.g., Woman A has a 28-day cycle in one month and a 31-day cycle in another), just as women often differ among one another in their average cycle lengths (Woman A typically has 28-day cycles, and Woman B typically has 31-day cycles; Schank, 2000). Finally, some researchers found no evidence of menstrual synchrony among those not using hormonal contraceptives (Strassmann, 1997; Strassmann, 1999), and a few studies yielded no evidence of menstrual synchrony in lesbian couples (Trevathan, Burleson, & Gregory, 1993; Weller, A., & Weller, 1998), which called into doubt the existence of menstrual synchrony in its entirety.

Furthermore, the methodological problems of studying menstrual synchrony—particularly Weller and Weller's methods—may have *created* the phenomenon as an artifact of how it was studied (Schank, 2000). In his review of all studies of menstrual synchrony, Schank (2001) concluded that allowing women to fill out their own menstrual onset calendars might have encouraged women to *want* to report synchrony rather than their actual onset dates. Weller and Weller wrote two rebuttal pieces in which they asserted that they had used sound methods (Weller,

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A. & Weller, 2002a, 2002b), and Schank (2002) replied that Weller and Weller over-relied on recall data. In short, women who *wanted to have menstrual synchrony might have remembered and reported menstrual synchrony*. He then went on to show that no evidence of menstrual synchrony existed (Yang & Schank, 2006), and that all eight of the pheromone studies had "serious problems" with methodological errors (Schank, 2006).

Subjective Feelings About Menstrual Synchrony

Debates among biological researchers have dominated the menstrual synchrony literature, but a few social scientists have measured women's subjective feelings about their personal experiences of menstrual synchrony. One qualitative study of 13 White, highly educated women, ages 25–46, showed that *all* of the women reported having experienced menstrual synchrony, and most thought that there were biological rather than social reasons for its occurrence (e.g., hormones or other biochemistry; Klebanoff & Keyser, 1996). Another study (Arden, Dye, & Walker, 1999) showed that women overwhelmingly knew about menstrual synchrony and believed that they had experienced it. In that study of 122 British women, 84% were aware of menstrual synchrony (note that the authors did not present menstrual synchrony as a controversy), and 70% reported personal experiences with it. Further, the women reported having experienced synchrony with close friends, roommates, mothers, and sisters; and 51% of them reported three or more episodes of synchrony with different women. The women in this study felt positively about menstrual synchrony (e.g., social support, closeness, mysticism), and they said that they knew about the timing of other women's menstrual cycles primarily through verbal communication and complaints about PMS symptoms.

The Media Storm About Menstruating Together

This critique that women may *want* to report menstrual synchrony and that their desire to experience it potentially biased the findings in Weller and Weller's work seems highly plausible, given the volume of interest and unequivocal belief in menstrual synchrony displayed in popular culture. Most film and television sources have not portrayed menstrual synchrony as a controversy. From women's magazines to television shows to blogs (Clancy, 2011; Rosewarne, 2012), women hear (and are likely to internalize) the notion that women who live together bleed together. As Rosewarne (2012) wrote in her analysis of the presentation of menstrual synchrony on television, "The menstrual synchrony narrative is perhaps the strongest example of on-screen menstrual bonding, presenting women not merely united by menstruation, but by the experience of bleeding *simultaneously*" (p. 20).

Television shows and films have sometimes depicted menstrual synchrony both as a bond between women and as a source of horror. The series *Charmed* (1998–2006) depicted three witches with aligned periods: Phoebe (Alyssa Milano) was more "emotional," Paige (Rose McGowan) was more "jumpy," and Piper (Holly Marie Combs) was more "pissy." In an episode of *30 Rock*, Jack (Alec Baldwin) remarked offhandedly, "Oh sure, we can sit around and braid each other's hair until we get our periods at the same time." Howard (Simon Helberg) in *Big Bang Theory* joked after watching *Sex and the City*: "Fine, let's watch it. Maybe all our periods will synchronize." And, on *The Office* (2005–2013), Dwight (Rainn Wilson) sarcastically advised against women meeting together on their own: "If they stay in there too long, they're gonna get on the same cycle. Wreak havoc on our plumbing." An example of the "horrors" of menstrual synchrony is found in the Korean film, *A Tale of Two Sisters* (2013), which displayed two sisters who awoke to realize they were menstruating together—something the film portrays as weird and otherworldly (Rosewarne, 2012).

Women's magazines and blogs also offer a host of (mis)information about menstrual synchrony, such as that menstrual synchrony is based on exposure to natural light (Macleod, 2013) and that menstrual-cycle-related pheromones determine the likelihood of conception (Edmonds, 2010). Magazines such as *Women's Health*, *Shape*, *Women's Day*, *New Scientist*, and *Bust* have all discussed menstrual synchrony as well, sometimes presenting it as a compelling controversy but most often describing it as a real phenomenon. *Shape* writers leaned heavily on the argument that women have menstrual synchrony: "And it's hard to say how factors like stress, sexual partners, and birth control play into the syncing game—if synchrony does exist, it's possible these factors override it, making matched cycles appear less common than they might actually be" (Newcomer, 2012). Dozens of blogs—feminist, scientific, health, and personal—have discussed menstrual synchrony, usually portraying it as a common, everyday occurrence.

MENSTRUAL SOLIDARITY

Given these pieces of evidence, particularly that scientific research has never conclusively determined that menstrual synchrony actually exists and that the media nevertheless have taken it up largely as factual, we consider the concept of "menstrual solidarity" to be a key motivator for maintaining the story of menstrual synchrony. We now propose our theories about why women believe in menstrual synchrony.

The concept of feminist or gendered solidarity has most often been used as a political and moral concept; that is, fighting for members of one's own groups and communities in the public sphere (Mohanty, 2003), such as social movements against war, collective bargaining, protests against policies, and group actions against the powers of the State. However, solidarity can also involve linkages and connections in private spheres, including women's reproductive health. Politicized collective identities often require an awareness of shared grievances, adversarial attributions, and involvement in society at large (Simon & Klandermans, 2001); thus, menstrual solidarity can work as a way to address, on a highly personal level, an awareness of shared grievances, and might, in some cases, allow women to work toward identifying an adversary (e.g., sexism) and getting involved in society at large (e.g., activism) via their reproductive health.

Some sociologists have conceptualized these linkages as *frame transformation*, that is, the process by which something negative transforms in meaning and becomes the basis for political activism and solidarity (Snow, Rochford, Worden, & Benford, 1986). In this case, menstrual solidarity may function to transform menstruation from a shameful or taboo experience into something more positive. Some feminist theorists have called for a radical re-envisioning of feminist solidarity and argued for *affective* solidarity based on emotions rather than identities (Hemmings, 2012), a deeper analysis of how women relate to each other in the face of patriarchal power (Cornwall, 2007), and/or a reinvention of the collective, multifaceted sense of "we" (Dean, 1997). In addition, feminist social scientists have addressed the importance of women's

collectivism (Gurin, Miller, & Gurin, 1980), menstrual anarchy and menstrual activism (Bobel, 2006; Bobel, 2010; Fahs, 2013), and how stories of menarche (girls' first periods) can connect people to larger cultural, religious, and societal stories that concern women (Uskul, 2004) and give girls a greater sense of solidarity with other girls and women (Jackson & Falmagne, 2013; Lee, 1994). In light of this, we take seriously the questions of how one's community and in-groups are constructed, particularly in connection to menstruation, and how women have specifically faced barriers to conceptualizing themselves as a part of women-only communities.

Radical feminists of the late 1960s conceptualized women's solidarity as both a necessity in the fight against patriarchy and as quite difficult in light of family and living arrangements that presumably separate women and pair them with men. Radical feminists, such as Boston's Cell 16, New York Radical Women, and Redstockings, argued for the value of "women-only spaces," celibacy-by-choice, and even political lesbianism (Atkinson, 1974; Dunbar, 1974; Dworkin, 1989; Sarachild, 1975; Solanas, 1996), and they fought for recognition that women's shared sexual, political, domestic, social, and personal experiences with other women could all form the basis for dramatic political changes. And, in many ways, these spaces did create numerous advances that have since eroded or been abandoned along with women-only communities and politically based separation from men. Radical feminists fought for abortion rights (Koedt, Levine, & Rapone, 1973), rape crisis centers, domestic violence shelters, better healthcare for women, and womenonly spaces for political organizing and solidarity, just as they took a firmly critical stance against heterosexual marriage and childrearing (Echols, 1989; Frye, 1983). At the core of their assertions stood a unique definition of solidarity: Because women so rarely have opportunities to prioritize their "woman-identified" experiences and spaces, solidarity must be *created* and *recognized* by seeing women as a class (Atkinson, 1974).

THEORIZING THE BELIEF IN MENSTRUAL SOLIDARITY

After collectively working through the possible reasons for an insistence on menstrual solidarity, we theorize that the belief in menstrual synchrony serves a variety purposes, each of which sheds light on why women may *want* to believe in menstrual solidarity. As stated previously, we propose that menstrual synchrony serves as: (a) a way to reduce shame and taboo narratives related to menstruation; (b) a socially acceptable way of constructing modern "sisterhood"; (c) a method for reinforcing connections between women, their bodies, and nature; and (d) a pathway to fight back against sexism and sexist assumptions about menstruation and menstruating women. To illustrate these themes, we give examples from our menstrual activist work alongside our collective theorizing about what might underlie claims of menstrual solidarity.

Reducing Shame and Taboo Related to Menstruation

Silence, shame, and taboos related to menstruation have defined women's menstrual cycles for many generations. To consider why menstrual solidarity may be so appealing to U.S. women, the context of menstrual negativity must be assessed. When women worry about their menstrual cycles, or see their menstrual periods as "dirty" or "disgusting," they are reflecting a long history

of revulsion regarding menstruation and women's bodies. Historically, women learned to see menstruation as taboo and as something in need of management (Delaney, Lupton, & Toth, 1988); in various cultures and times, menstrual blood has signified disease, corruption, social violations (Read, 2008; Shuttle & Redgrove, 1988), failed reproduction (Kerkham, 2003; Martin, 2001), and disability (Kissling, 2006). Women face an onslaught of negative imagery about menstruation, as the media imply that menstruation makes women "unclean" (Briefel, 2005; Kissling, 2006; Rosewarne, 2012), and the medicalization of menstruation has resulted in women seeing their menstrual cycles as inconvenient, unnecessary, something to medicate away, and, in the worst cases, something that causes mental illness (Johnston-Robledo, Barnack, & Wares, 2006; Rose, Chrisler, & Couture, 2008). Advertisers routinely depict women's menstruating bodies as unfeminine, dirty, tainted, and disgusting in order to sell pads, panty liners, and tampons to consumers (Berg & Coutts, 1994; Davidson, 2012; Kissling, 2006). Even the phrase *feminine hygiene*, a relic from 1930s advertisements for birth control, connotes that women should construct menstrual blood as fundamentally dirty (Fahs, 2012; Tone, 1996).

Though women may not always recognize their collective status as women, they do face collective struggles, such as menstrual negativity and the shaming of women's bodies. In fact, women and girls in the United States typically face a lifetime of negative messages about menstruation. Girls learn early on to dislike their menstruating bodies, and this attitude has been found most strongly among older girls (Rembeck, Moller, & Gunnarsson, 2006), those prone to self-objectification (Roberts & Waters, 2004), those with less sexual experience and more body shame (Schooler, Ward, Merriweather, & Caruthers, 2005), and those who communicated with their mothers less frequently about menstruation (Rembeck, Moller, & Gunnarsson, 2006). As adults, links between menstrual negativity and shame regarding breastfeeding (Johnston-Robledo, Sheffield, Voigt, & Wilcox-Constantine, 2007) also appear. Further, women often internalize the idea that sex during menstruation is "dirty," "disgusting," and "gross." In one study, less than one half of the women said they had ever engaged in menstrual sex, and over 30% said that they would *never* do so (Allen & Goldberg, 2009). In another study, heterosexual women even if they had male partners (Fahs, 2011).

Given this history, it makes sense that women generally approach menstruation from a position of silence and shame, as they manage their menses quietly and efficiently and rarely discuss anything about menstruation publicly. As menstrual activists, when we approach people to discuss menstruation—even the relatively benign topic of alternative menstrual products—these conversations are often met with disdain and discomfort (e.g., nervously changing the subject). The notable exception, however, is when women describe menstrual synchrony. Claims of menstrual solidarity, we theorize, function as a way to fight back against the silence and secrecy that surrounds menstruation, because menstrual synchrony provides one of the only socially acceptable *positive* attributes women can openly discuss about menstruation. Further, they can discuss the actual *bleeding* that occurs during menstruation, which is rarely discussed publicly or collectively otherwise.

Menstrual synchrony also provides an in-road for women to discuss menstruation in nonpathologizing language. Women would rarely say things such as "I bled through my pants today. How are you?" or "I'm passing some large clots right now," whereas they *will* say "My friend and I cycle together." This comment opens conversation and allows the topic of menstruation to exist without being framed entirely as a negative or disgusting experience. In short, women can take a break from the process of self-loathing so common in menstrual discourse and reveal *affective solidarity* (Hemmings, 2012).

A Socially Acceptable Way of Constructing Modern "Sisterhood"

At the onset of the women's movement in the late 1960s, discussions of "sisterhood" permeated the political and social fabric of the budding feminist scene. The concept of "sisterhood" originated in the Middle Ages to describe groups of nuns living together (Ludlow & Forbes, 1866); the women's movement, however, saw this phrase as an opportunity to establish political bonds between women (Morgan, 1970, 1984). Feminists in the late 1960s and early 1970s used sisterhood as a bridge to connect women from different social backgrounds, create stories of shared histories and experiences, and cultivate consciousness-raising about injustices that they faced at home (Morgan, 1970). As the years passed, these notions of "sisterhood" created during the women's movement largely dropped away. Consciousness-raising groups-once used as early women's studies curricula and widely popular with women from diverse backgrounds (Kravetz, Maracek, & Finn, 1983)—no longer occur with any regularity, and sisterhood has largely been appropriated by consumer culture and capitalism to drive up sales on "girly" items (e.g., Spice Girls music, Barbie dolls, Sisterhood of the Traveling Pants). The tradition of sisterhood has been taken up in postfeminist discourses as a way to celebrate girlhood and girl power through an antifeminist lens that reaffirms traditional patriarchal values about women (Bae, 2011). Furthermore, one study of media consumption showed that adult women enjoy teen television shows, such as Charmed, because they often include themes of sisterhood, which shows how the media tap into sisterhood as a commodity that can be sold to specific audiences (Feasey, 2006).

Menstrual synchrony, it seems, may serve as a somewhat socially acceptable way to (re)claim a space for sisterhood. Indications of our shared experience with other women (e.g., we *menstruate together*) realign us with the notion that women as a group are connected, that we share common experiences, and that we cope with (or, in fewer cases, celebrate) our menstrual cycles. Unlike other common experiences for women (e.g., breastfeeding, pregnancy, careers, child rearing), menstrual cycles signal a nearly universal experience for adult women across all demographics. Based on sociological frameworks for collective identity (Ashmore, Deaux, & McLaughlin-Volpe, 2004), we believe that menstrual solidarity may function as a way both to attach women to other women and to claim a sense of interdependence with other women. After all, menstrual synchrony implies that "my cycle is dependent on yours." Theoretically, then, women may be able to see this and other aspects of their lives as connected to, and dependent on, other women's lives—a rare opportunity to reinforce women's interdependence at the exclusion of men.

This sense of connection to other women also appears in women's shared accounts of menstrual misery, as premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) create a context for women to assess negative symptoms of their menstrual cycles in a collective way. Because research has shown that women identify PMS symptoms as a common way to communicate about their menstrual cycles (Arden et al., 1999), sisterhood may appear as a shared expression of feeling bloated, crampy, or irritable. We have even seen this within our own research group, because we have sometimes expressed in the meetings that we are bleeding heavily or have strong cramps. Dunnavant and Roberts (2013) found that women of "prescriptive religions" (i.e., religions that emphasize religious authority figures as a conduit through which to

speak with their higher power) often had a sense of community with other menstruating women; when these religions dictated certain rituals or actions regarding menstruation, women sometimes benefitted from them (e.g., worshipping together). Because of the strict prohibitions within certain religions, women found that "menarche becomes a time to welcome girls into a community of menstruating women who will go on to teach them the prescriptions and prohibitions specific to their culture" (p. 127).

Although these sorts of connections based on menstruation may seem less ideal than a positive identification between women based on shared experiences and goals, distress (and, ideally, the *recognition of* women's collective distress) has been a basis for much political organizing and solidarity work (Hemmings, 2012; Mohanty, 2003). Perhaps the identification of individual symptoms and experiences with menstruation—however troubling in light of the over-medicalization of women's bodies (Chrisler, 2011)—can underlie women's social and political bonds.

Women Marking Their Relationship to Nature

Women also may claim menstrual synchrony as a way to demarcate the unique links between women, lunar cycles, nature, and their bodies. Although connections between women and animals (Harris & Vitzthum, 2013), and women and their bodies (Martin, 2001), have been fraught with political tensions about whether these links reinforce oppression or solidify bonds between women, menstrual solidarity can serve as a women-only space in which to resist patriarchal power. In other words, although links between women and animals/nature play directly into dangerous dichotomies between (masculine) rationality and (feminine) irrationality, or between (masculine) nonemotionality and (feminine) emotionality, these overlaps also serve as potentially separatist and politically charged. If women openly discuss menstruation, particularly how they menstruate *together*, the discussion allows women to mark a mystical, unique, perhaps even sacred relationship to nature (and each other) that men simply lack. Such conversations also directly confront notions of menstruation as frankly abject and terrifying by pushing against menstruation as a symbol of death (Kristeva, 1982).

When women articulate menstrual synchrony and mark their relationship to nature, we believe that they are fostering a sense of power that has been taken away from them because of patriarchy, urbanization, medicalization, capitalism, and an overvaluing of so-called "masculine" life. For example, the general distaste that both patriarchy and capitalism have for cycles—the denial of cycles altogether, the lack of varied work schedules, the need for constant 24/7 production, excessive emphasis on work at the expense of leisure, and so on—is abundant throughout most people's lives (Fahs, 2013; Martin, 2001). By claiming menstrual solidarity and establishing their connections to nature, women are also resisting sexist forces, valuing their cyclic life, and reclaiming their relationship to lunar cycles and to the natural world.

As a vivid story that depicts this process, one of us who has regularly lived among anarchists and feminists in communal living environments has repeatedly heard discussions not only of menstrual synchrony but of lunar synchrony ("What moon phase do you cycle with?"). These conversations have allowed women to create bonds without having to include men and to situate their bodies cycling together as a positive aspect of their lives. Menstrual conversations—and overlaps women find in their menstrual experiences—have functioned to solidify political and affective alliances between women in these already radical communities, as well as allowed women to identify their links to nature and lunar cycling.

A Pathway to Fight Back Against Sexism and Sexist Assumptions About Menstruation

Sociologists have framed collective identity as people's belief that they have "a place in the social world" (Simon & Klandermans, 2001, p. 320), that is, the belief that they have something in common. Notions of collective identity serve as a key socializing force in the development of social movements and even in individuals' will to fight back against oppression. Moreover, when women care about other women, or embrace feminist identities, they more often challenge sexist practices in society (Yoder, Tobias, & Snell, 2011).

Claims of menstrual solidarity, then, may combat some of the toxicity surrounding menstruation, as women may use menstrual solidarity to fight back against sexism, sexist assumptions about menstruation, and menstrual shame. Speaking about menstruation at all can prove immensely difficult and provocative, because most women believe that the silence about their menstrual cycles is necessary (Kissling, 1996; Rose et al., 2008). Women who endorse menstrual synchrony, however, not only empower themselves personally but also break the silence by talking about menstruation (Bobel, 2006). In short, menstrual solidarity moves menstruation out of the menstrual closet.

THE POLITICS OF BIOLOGY/THE BIOLOGY OF POLITICS

The literature on menstrual synchrony has several striking and unique features that speak to the discursive power of the phenomenon. First, researchers continue to study whether menstrual synchrony exists despite nearly 40 years of conflict over the topic and substantial evidence that methodological errors could have biased results (Schank, 2002). Second, the mainstream media have taken up menstrual synchrony as fact, a phenomenon not often seen in regard to the topic of women's bonds with other women (Rosewarne, 2012). And, finally, despite (what we see as) fairly convincing evidence that menstrual synchrony does not consistently exist across populations (urban/rural, industrialized/nonindustrialized, heterosexual/lesbian), women themselves *want to believe in it*.

This desire to believe in menstrual synchrony might serve a variety of political purposes, as outlined above, which can, at least partially, explain why the scientific literatures remain hotly contested and why large percentages of women nevertheless describe experiences with menstrual synchrony (Arden et al., 1999; Klebanoff & Keyser, 1996). We theorize that declarations of menstrual synchrony do not result merely from "hearing a rumor" about its existence, but rather, that these claims have deep roots in women's *desires* to align themselves politically and personally with other women, particularly in light of sexist and patriarchal assumptions about menstruation. Assertions of menstrual solidarity have even appeared in poetry about menstruation, such as slam poet's Dominique Christina's (2014) claim that, "When we're with our friends, our sisters, our mothers, our menstrual cycles will actually sync the fuck up ... Everybody I love knows how to bleed with me. Hold on to that. There's a metaphor in it." Perhaps Christina is correct; there *is*

a metaphor in it, and this holds women not only to the belief in menstrual synchrony but to each other.

Women's assertions of, beliefs in, and perpetuation of menstrual solidarity raise several questions for future inquiry and interrogation: What do biological linkages and connections between women achieve politically, and how might they help the cause of social justice? Does the retrenchment of connections between women and their bodies (and women and nature) have a place in social movements to advance the cause of women's rights? Should social movements (and collective identities) rely on experiences of the body as a potential point of alignment between people, and, if so, how? Can science, popular culture, and political movements collide to produce, enhance, or erode women's solidarity with other women? And, finally, how must the project of solidarity take up areas typically dismissed as "too feminine," including connections between people and animals (Harris & Vitzthum, 2013), solidarity produced by women-only spaces and experiences (Dunbar, 1974), and (potentially erroneous) beliefs in menstrual synchrony?

Menstrual synchrony reveals the politics of biology; the seemingly scientific, empirical, neutral, bodily, measurable (and so on) occurrences assessed by researchers of the body have far reaching political implications. Connections between women based on biological and physiological experiences can create political alliances, foreground and background different scientific findings, and alter the relevance of science to people's daily lives. Similarly, women's political connections to each other also have deeply biological roots, ripe for more exploration, assessment, deconstruction, and celebration. In this moment where sex and gender are exploding into a multiplicity of categories, what does it mean to share something biological? Can (or should) the biological drive influence our political selves, and what is at stake in even asking such a question?

As a call for future research, we hope that scholars will consider such questions both theoretically and empirically. In-depth interviews with women about their beliefs in menstrual synchrony could prove especially interesting, and such data could help us to understand the conditions within which women validate the existence of menstrual synchrony. Ultimately, the debates about menstrual synchrony, and the persistent belief in its existence, point to the need for more spaces for women to feel in solidarity with each other, something that not only portrays a hopeful future for women but also paves the way for political and social progress.

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