PMS IN THE WORKPLACE: MYTH OR METHOD?

ARTHUR G. BEDEIAN
Louisiana State University, LA, USA
ANTOINETTE S. PHILLIPS
Southeastern Louisiana University, LA, USA

Hardie (1997) purportedly examined the effects of menstrual cycle status and perceived (i.e., self-diagnosed) premenstrual syndrome on work performance. Although research to fill the numerous gaps in our understanding of PMS is encouraged, methodologic imprecision compromises Hardie's findings.

Hardie (1997), in an article titled “PMS in the Workplace: Dispelling the Myth of Cyclic Dysfunction,” claimed to provide evidence that menstrual cycle status has no effect on female employees’ work performance. In doing so, she opened and closed her presentation by referencing our earlier work, published in this journal, in which we (Phillips & Bedeian, 1989) offered that there was yet clear-cut scientific evidence that premenstrual syndrome (PMS) adversely affects workplace behavior. She further stated that we nonetheless held that because “most people believe the opposite, employers should acknowledge PMS as a workplace problem” (p. 97). The purpose of this brief commentary is to (a) correct Hardie's misinterpretation of our work and (b) proffer that, despite Hardie's findings, the question of whether PMS influences job performance remains unanswered. Our aim is not to defend one position or another. Rather, it is to consider methodological inadequacies in Hardie’s study design that render her find-

Arthur G. Bedeian, Department of Management, Louisiana State University; Antoinette S. Phillips, Department of Management, Southeastern Louisiana University.
Please address correspondence and reprint requests to: Arthur G. Bedeian, Department of Management, Louisiana State University, Baton Rouge, LA 70803-6312, USA. (Telephone: +01(504)388-6411. Fax: +01(504)388-6140. Electronic mail may be sent via Internet to abede@lsu.edu)
ings problematic. It is our belief that dialogues of this nature are useful lighting methodological concerns that have characterized research and, thus, for advancing our knowledge base.

MISINTERPRETATION

Hardie misinterprets/mis-represents our work on two counts. First, Hardie’s contention, we did not state that “most people” believe P employee behavior. We made no such relative assessment. Second, then conclude that, for this reason, “employers should acknowledge workplace problem.” We did, however, hold that because “women and believe there are tangible associated effects . . . it seems logical to appr related beliefs as attributions” (p. 171). In specifying an agenda for PM we did go on to call for future investigations into whether such attri differentially affect male and female evaluations of female employe and (b) apply to women as a group or only to specific women exhibiting PMS symptoms). Thus, counter to Hardie’s claim, we did 1 that employers acknowledge PMS as a workplace problem, but did co the belief or attribution associated with the perception that PMS effe formance is a problem that should be addressed. Indeed, Hardie’s data using perceptual-based (i.e., self-diagnosed) measures of PMS and men status, support this conclusion. The perceived PMS (PPMS) group in “consistently” reported greater work impairment than a No PPMS c group, despite there being no between-group differences in their wor As Hardie states, “for female employees, the perception of hav disorder was itself problematic” (p. 101). The use of our work to fo straw man, for whatever purpose, is rejected.

METHODOLOGICAL CONCERNS

It is also Hardie’s claim that whereas the bulk of early PMS res conceptually and methodologically flawed, thereby contributing to th widespread cyclic dysfunction, her findings dispel this myth. This cl several methodological aspects of Hardie’s study are of concern. Our in to criticize Hardie per se, but to consider aspects of her study in light o ties that may be particularly salient in future studies into the effects o workplace behavior.

SAMPLE FRAME

The nature of a study’s sample frame should clearly define the focal be investigated. In this respect, Hardie addresses neither the represent nor relevance of the 438 university employees (95 men, 343 women,
WORKPLACE PMS

veyed to gather the data on which her results are based. To be sure, the addition of entry criteria in screening a target population is confounded by a multitude of factors common to all PMS research. First among these factors is that by very definition and diagnosis of PMS are widely contested (Halbreich & Er 1985). The aetiology of PMS is likewise debated. Broadly considered, PMI be prototypically defined as “the cyclic recurrence, in the luteal phase of menstrual cycle [i.e., the week before the onset of menses] of a combination of distressing physical, psychological, and/or behavioral changes of sufficient severity to result in deterioration of interpersonal relationships and/or interfere with normal activities” (Reid, 1985, p. 5). Consistent with criteria specified in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994), this definition would exclude women with mild premenstrual symptoms (e.g., skin changes, edema, food cravings) that rarely interfere with normal functioning. It would, however, include more severe symptoms (e.g., irritability, depression, mood swings) if they seriously impair occupational and social activities (Schnurr, 1989).

Estimates, cited by Hardie, of the percentage of women who experience more symptoms at a level so severe and disabling as to be classified as suffering from PMS typically range up to 5 percent (e.g., Reid, 1991). Accepting these estimates, the prior odds that a randomly chosen ovulatory female does suffer from PMS is, thus, .052 (e.g., .05/.95), or 1 in 19 (Murphy, 1987). Even if H: 283 ovulatory female employees qualified as a random sample, only so (283/19=14.8) would likely qualify as PMS sufferers. Consequently, given the absence of specific inclusion and exclusion criteria in the Hardie study, sample size adequacy for analytical purposes is an issue as error ranges may have been large as to camouflage real effects due to the specific forces under study (Ferber, 1977).

SYMPTOM REPORTING

To the above consideration, it also should be noted that Hardie’s reliance on self-report retrospective instrument to gauge the impact of cyclic changes in one-week period is likewise problematic. Prevalence rates based on retrospective data have been shown to be highly questionable, generally overestimating symptoms due to errors in recall. Symptoms occurring near menstruation are remembered, whereas those occurring during the intermenstrual phase are forgotten. Indeed, some 50 percent of women who report a history of premenstrual change do not corroborate such reports when they complete daily diaries over multiple months (Rubinow & Roy-Byrne, 1984). For this reason, Rubinow and Roy-Byrne (1984) hold that “prospective longitudinal symptom reporting is the only available way of demonstrating a relationship between mood changes and menstrual cycle phase” (p. 165).
Reid (1991) likewise states that prospective daily ratings are essential in firming the severity and timing of symptoms so as to confirm a diagnosis of PMS. Brooks-Gunn (1986) has stressed that the existence of premenstrual syndrome is an entirely different phenomenon from the designation of a premenstrual syndrome. By not addressing the question of symptom timing and failure to measure symptom severity, Hardie’s findings fail to differentiate between occurrence and symptom exacerbation (i.e., degree of impairment). This oversight is confounded by the fact that (a) PMS symptoms do not necessarily occur at the onset of menstruation and, thus, PMS sufferers may be symptomatic other times of their menstrual cycle (Rubinow & Roy-Byrne, 1984) and menstrual symptoms can vary throughout life, as well as from cycle to cycle (Gunn, 1986). In recognizing these facts, a National Institute of Mental Health panel has accordingly recommended that a PMS diagnosis be made only if there is a 30 percent or more increase in the intensity of symptoms (e.g., tension, anxiety, irritability) in the seven days before menses as compared with the seven days afterwards (Hamilton, Parry, Alagna, Blumenthal, & Her. Furthermore, it is recommended that the intermenstrual baseline be at least three ovulatory menstrual cycles to permit discrimination of random variability in symptom expression (Rubinow & Roy-Byrne, 1984). Assessments of symptom fluctuation can also provide information on degree of symptom fluctuation and variability from one cycle to the next and, thus, the consistency and variability of PMS state.

Risk Factors for Premenstrual Symptoms
In addition to Hardie’s general failure to address the preceding concerns, further unresolved methodological issue relates to risk factors that influence individual’s vulnerability to premenstrual symptomatology. Whereas the sample included in Hardie’s sample completed various self-report measures pertaining to health, work, and stress variables, no attempt was made to screen subjects for potential risk factors. For instance, the use of psychoactive medications, as well as hormonal preparations (including oral contraceptives), mineral or vitamin supplements and nonsteroidal antiinflammatory drugs are all considered possible risk factors. Moreover, women with irregular menstrual cycles (< 21 or > 35 days) generally excluded from PMS samples (cf. Rivera-Towar & Frank, 1985). Furthermore, PMS symptoms have been shown to vary according to chronic health status, gynecologic age (i.e., sexual maturity), parity (i.e., having borne offspring), marital status, and various personality traits (see, e.g., Logue & Moos, 1986). A homogeneot characterized sample is, thus, necessary to differentiate changes attributable to PMS from concomitants entrained to these changes. On this count, the meaningfulness of Hardie’s results is, hence, suspect.
The preceding issues are obviously not unique to the Hardie study. Despite some 65 years of research (Richardson, 1995), numerous gaps exist in our understanding of PMS. PMS research is difficult not only due to the methodological issues noted, but because of a lack of agreement on the syndrome’s definition and a failure to differentiate premenstrual symptoms from the more specific premenstrual syndromal condition. We have previously offered suggestions for future research into the effects of PMS on workplace behavior (Phillips & Bedeian, 1989) and will, thus, not do so again. Recognizing the difficulty of PMS research, we do applaud Hardie’s effort to extend previous findings concerning the effects of PMS on job performance. We nevertheless are not yet convinced that the scientific evidence is sufficiently strong to conclude unequivocally that PMS does or does not affect workplace behavior. Like other areas of uncertainty and confusion, numerous unanswered questions remain. The lack of definitive answers results, in part, from researchers failing to avoid such methodological inadequacies as those cited. It is, thus, our hope that these comments will hereby inform future researchers contemplating work in this area.

REFERENCES
