

ORIGINAL RESEARCH—WOMEN'S SEXUAL HEALTH

A Woman's History of Vaginal Orgasm is Discernible from Her Walk

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DOI: 10.1111/j.1743-6109.2008.00942.x

ABSTRACT

Introduction. Research has demonstrated the association between vaginal orgasm and better mental health. Some theories of psychotherapy assert a link between muscle blocks and disturbances of both character and sexual function. In Functional–Sexological therapy, one focus of treatment is amelioration of voluntary movement. The present study examines the association of general everyday body movement with history of vaginal orgasm.

Aim. The objective was to determine if appropriately trained sexologists could infer women's history of vaginal orgasm from observing only their gait.

Methods. Women with known histories of either vaginal orgasm or vaginal anorgasmia were videotaped walking on the street, and their orgasmic status was judged by sexologists blind to their history.

Main Outcome Measure. The concordance between having had orgasms triggered by penile–vaginal intercourse (not orgasm from direct clitoral stimulation) and raters' inferences of vaginal orgasm history based on observation of the woman's walk was the main outcome measure.

Results. In the sample of healthy young Belgian women (half of whom were vaginally orgasmic), history of vaginal orgasm (triggered solely by penile–vaginal intercourse) was diagnosable at far better than chance level (81.25% correct, Fisher's Exact Test $P < 0.05$) by appropriately trained sexologists. Clitoral orgasm history was unrelated to both ratings and to vaginal orgasm history. Exploratory analyses suggest that greater pelvic and vertebral rotation and stride length might be characteristic of the gait of women who have experienced vaginal orgasm ($r = 0.51$, $P < 0.05$).

Conclusions. The discerning observer may infer women's experience of vaginal orgasm from a gait that comprises fluidity, energy, sensuality, freedom, and absence of both flaccid and locked muscles. Results are discussed with regard to previous research on gait, the effect of the musculature on sexual function, the special nature of vaginal orgasm, and implications for sexual therapy. **Nicholas A, Brody S, de Sutter P, and de Carufel F. A woman's history of vaginal orgasm is discernible from her walk. J Sex Med 2008;5:2119–2124.**

Key Words. Orgasm; Sexual Intercourse; Gait; Psychoanalytic Theory; Functional–Sexological Therapy; Movement

The goddess was discovered by her gait.

(Virgil)

Introduction

A growing corpus of empirical research has clarified that orgasm triggered by stimulation of the vagina and cervix differs physiologically from climax induced by clitoral stimulation [1–4]. Clitoral sensory information is conducted via the pudendal nerve to the spinal cord for transmission

to the brain. In contrast, sensory information from the vagina and cervix travels not only the pudendal nerve, but also the pelvic, hypogastric, and vagus nerves. The vagus nerve does not pass via the spinal cord, but is one of the 12 cranial nerves. Thus, even women with a completely severed spinal cord can have vaginal–cervical orgasms verifiable by functional magnetic resonance imaging, even in the absence of any clitoral connection to the brain [3,4]. Although nerves are relatively

uniformly located throughout the vaginal and cervical submucosa [5], cervical stimulation is generally required for sexual stimulation of the vagus nerve. The stimulation of the vagus nerve produced by penile buffeting of the cervix [3,4]—but not produced by clitoral stimulation—appears involved in processes of better cardiovascular and psychological function [6,7]. For both sexes, the far greater postorgasmic prolactin increase caused by penile–vaginal intercourse relative to other sexual activities has beneficial implications for both sexual satiety and mental health [2].

Compared to women who have had vaginal orgasm (triggered solely by penile–vaginal stimulation), vaginally anorgasmic women display more use of immature psychological defense mechanisms [1], are less satisfied with their relationships, mental health, and life in general [8,9], and are more likely to suffer from global sexual dysfunction [10].

At a more speculative, theoretical level, the idea that chronic muscle blocks (or excessive muscle flaccidity) impair sexual function by impairing feeling, sexual motility (and perhaps being a tangible representation of corresponding psychological blocks), and the discharge of sexual tension has its roots in a theory developed by Reich [11]. His student Lowen [12,13] developed that theory (and safely distanced it from one of Reich's less well reasoned theories developed later in his life) and the corresponding psychotherapeutic approach of bioenergetics, which sought to integrate psychoanalytic psychotherapy approaches with direct liberation of chronic muscle blocks. Other body therapies focus more exclusively on the muscle blocks alone. These body therapies and the underlying theory have rarely been subject to empirical evaluation.

However, one study of men found that the Rolting method of tissue manipulation led to both a decrease in standing pelvic tilt angle and an increase in cardiac vagus nerve tone associated with improved parasympathetic function [14]. Other studies found that a similar measure of cardiac vagus nerve tone is associated with frequency of penile–vaginal intercourse (but not of other sexual behaviors) [7,15].

Another study (without clear controls) reported that a physical therapy technique intended to free pelvic adhesions led to improved orgasmic function in women [16]. A recent review indicated that at least disturbances of pelvic floor tone are associated with sexual disorders [17].

A new sexological approach to the treatment of sexual dysfunctions (Functional–Sexological

therapy) incorporates retraining of muscle use, body movement, and breathing for intercourse-based treatment [18]. For the treatment of premature ejaculation, it was shown to have advantages over traditional masturbation-based treatment [18]. Similarly, an intercourse-based treatment of vaginal anorgasmia (coital alignment technique) that incorporates training in synchronized partner movements and body alignment was shown to be superior to traditional masturbation-based treatment [19].

Observation of the characteristics of a person's walk can convey diagnostic information beyond the obvious musculoskeletal and neurological disorders. In older persons, slower walking speed and lesser stride length were both associated with increased risk of dependency, mortality, and institutionalization in a three-year follow up period [20]. In middle-aged men, spontaneous walking speed was one of the best predictors of subsequent lesser mortality and less cardiovascular events (especially compared to participation in many forms of exercise assumed to confer cardioprotection) [21,22]. More subtle aspects of walking movements can convey further information. Relative movement of hips and shoulders provide fairly accurate indicators to differentiate (in different directions) male and female homosexual and heterosexual walkers [23]. Given that penile–vaginal intercourse (and thus, the vaginal orgasm induced by penile–vaginal intercourse *per se*) is the one sexual behavior that can only be performed heterosexually, we hypothesize that there might be some overlap between messages sent by perambulating hips and readiness for vaginal orgasm.

The primary hypothesis in the present study is that clinical sexologists appropriately trained in the relationship between personality, sexology, and body movement will be able to differentiate between women with and without a history of vaginal orgasm purely on the basis of observing the women walking. As an exploratory measure, there is also an examination of the association of vaginal orgasm history with specified components of the walk (described below).

Materials and Methods

Female university students of psychology in Belgium were approached by a female researcher (A.N.), and asked to complete a preliminary questionnaire on sexual behavior. Of the women who completed the questions and also indicated their willingness to be contacted for a further study,

Table 1 Sample profile

	Vaginally orgasmic (N = 7)	Vaginally anorgasmic (N = 9)
Age (mean \pm standard deviation)	21.5 \pm 1.4	20.8 \pm 0.7
University student	100%	100%
Married	0%	0%
Nulliparous	100%	100%

10 were selected who reported “always” or “often” having vaginal orgasm, and 10 were selected who reported “never” or “rarely” having vaginal orgasm. Women were also asked to report clitoral orgasm ability with a partner separately.

Anonymity and confidentiality were assured, and participants were made aware of their ability to discontinue participation (for which they were not paid). After complete description of the study to the subjects, written informed consent was obtained. The study was conducted in accordance with the principles of the Helsinki Declaration, and ethical approval was granted by the academic department as part of the process of approving the thesis on which this research is based.

Four women did not appear for their scheduled session. The female researcher met participants individually in a public place, and asked the participant to first walk 100 m (being filmed at a distance) while thinking pleasant thoughts of being on a vacation beach, then another 100 m while thinking of being in the same locale but in the company of a man for whom she had thoughts of love. Participants were blind to the experimental hypotheses.

The resulting videotapes were then rated (blind to orgasmic history) by two appropriately trained (in Functional–Sexological therapy) professors of sexology (F. de C. and P. de S.) and two female research assistants. The basis for judgment was a global impression of the women’s free, fluid, energetic, sensual manner of walking (with an emphasis on energy flow through the rotation of the pelvis and the spine). The raters conferred and agreed on the vaginal orgasm status of the women, and the results were recorded. As an exploratory measure, the raters also subjectively rated each woman’s walk on a 0–10 point scale for the extent of: hip adduction, hip rotation, vertebral rotation, stride length, arm movement, and fluidity of movement. An additional derived variable reflecting the movement of the leg through the back (sum of ratings of stride length and vertebral rotation) was calculated.

The correspondence between reported and diagnosed vaginal orgasm history was examined

with chi-square and Fisher’s exact tests (a similar analysis was performed for clitoral orgasm history). The association between components of gait and vaginal orgasm history was examined with Spearman correlation coefficients. All tests are two-tailed.

Results

Table 1 provides demographic details for participants in the vaginally orgasmic and vaginally anorgasmic groups.

The hypothesis was supported, because the trained sexologists were able to infer vaginal orgasm history on the basis of watching the women’s walk (81.25% correct, 95% confidence interval = 61.8–100%). Table 2 depicts the results. For the 2 \times 2 cross-tabulation, the overall chi-square was 6.35, $\phi = 0.63$, $P = 0.012$; Fisher’s Exact test: $P < 0.05$.

Reported clitoral orgasm ability was unrelated to both rated vaginal orgasmic ability (chi-square = 1.33, $\phi = 0.29$, $P = 0.25$), and to reported vaginal orgasm ability (chi-square = 0.8, $\phi = 0.22$, $P = 0.38$).

For the exploratory analyses, Spearman correlations (ρ) of vaginal orgasm history were only statistically significant for the association with the sum of stride length and vertebral rotation ($r = 0.51$, $P < 0.05$). Other correlations were all $r > 0.3$, but not significant with the obtained sample size. Age was unrelated to the sexual variables.

Discussion

Appropriately trained sexologists were able to infer vaginal orgasm history on the basis of watching women walk. The sexologists made global inferences about the women’s vaginal orgasm history based on the extent to which the women had a fluid, sensual, energetic, free gait. The ratings were unrelated to the women’s reports of

Table 2 Vaginal orgasm inferred from walk and as reported by the participants

	VO+ (self-report)	VO– (self-report)
VO+ (raters inference)	6	2
VO– (raters inference)	1	7

$P < 0.05$ (Fisher’s exact test).
VO = vaginal orgasm history.

clitoral orgasm with a partner, and clitoral orgasm was unrelated to vaginal orgasm.

Although the couple of incorrect diagnoses could simply be that, it is also possible that in the case of the two false positives, it might be that the women have the capacity for vaginal orgasm, but have not yet had sufficient experience or met a man of sufficient quality to induce vaginal orgasm. In addition to the possible anatomical issue of whether her man has a penis of sufficient length to produce cervical buffeting, and the issue of whether the man maintains his erection for a sufficient duration (having neither premature ejaculation nor erectile dysfunction), studies have indicated that women are most likely to have an intercourse orgasm with men displaying indicators of greater genetic fitness (including physical attractiveness) [24,25].

The additional exploratory analyses yielded one significant specific motoric correlate of vaginal orgasm history: the sum of stride length and vertebral rotation was greater for the vaginally orgasmic women. This could reflect the free, unblocked energetic flow from the legs through the pelvis to the spine. However, the exploratory nature of the secondary finding implies that less emphasis be placed upon it pending appropriate replication.

As in any correlational study, a universe of possible unmeasured factors could play a role in the observed findings. In addition to the conceptual framework presented in the introduction (and discussed later), there are alternate explanations (that could also coexist with the primary conceptual framework). One possible issue is that anatomical features predispose to greater or lesser readiness for vaginal orgasm. For example, the greater the distance between the urethra and the vagina, the more likely a woman is to report having had vaginal orgasm [26]. Such characteristics might conceivably influence both vaginal orgasm and pelvic movements directly, whether they are a true precursor of vaginal orgasm, or develop as a consequence of developing vaginal orgasm. In addition, the vaginally orgasmic women might feel more confident or comfortable about their sexuality, and this might be reflected in their gait. Such confidence might also be related to the relationship(s) that a woman has had, given the finding that specifically penile–vaginal orgasm is associated with indices of better relationship quality [8,9].

This was a small convenience sample of volunteer university students. This may limit the generalizability of these results to older women and to the wider community. Future studies might also

examine the relationship of gait with frequencies of specific sexual activities, and include women of a broader age range (the age range of the participants was rather limited) and of other occupational groups. However, large surveys have indicated that age and education are not associated with history of vaginal anorgasmia [8], and that neither age nor social class are risk factors for the somewhat broader category of female coital anorgasmia [27].

The present finding of vaginal orgasm being associated with a more fluid, sensual, energetic, free, unblocked gait adds to the empirical research findings of penile–vaginal orgasm history being specifically associated with indices of women's better psychological and interpersonal function [1,8,9]. The integration of body movement more characteristic of vaginally orgasmic women has a parallel in the replicated research findings that penile–vaginal intercourse orgasmic consistency (but not orgasmic consistency from other sexual activities) is associated with concordance of genital and subjective response to erotica in laboratory settings [28,29].

In a recent study, women who had a history of vaginal orgasm manifested less use of immature psychological defense mechanisms than women who were vaginally anorgasmic [1]. Two of the specific immature defense mechanisms (somatization and dissociation) that differentiated vaginally orgasmic and anorgasmic women might be related to aspects of the present findings. Dissociation involves disconnection of the usually integrated psychological (including sensory–motor) functions of the self, and somatization involves converting psychological problems into physical complaints and impairments.

Conclusions

Although the sample was small, the result (that history of specifically vaginal orgasm is discernible by appropriately trained sexologists simply from observing women walk) is consistent with both theory and previous empirical findings using both representative and targeted samples. These studies found that women with vaginal orgasm have better psychological function than women without vaginal orgasm (even if they have clitoral orgasm) [1,8,9,30].

The present finding also provides some potential support for theoretical assumptions of a link between muscle blocks and impairment of sexual and character function [11–13], and is also consistent with the possible utility of incorporating

training in movement, breathing, and muscle patterns into the treatment of sexual dysfunctions [18].

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Conflict of Interest: None declared.

Statement of Authorship

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