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Women, 'Madness' and Exercise

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Women, 'Madness' and Exercise

Abstract

The positive relationship between exercise and mental health is often taken for granted in today's society, despite the lack of academic literature evidencing this symbiosis. Gender is considered a significant determinant in a number of mental health diagnoses. Indeed, women are considered twice as likely as men to experience the most pervasive mental health condition, depression. Exercise for women's mental health is promoted through various macro-level charity, as well as micro-level, campaigns that influence government health-care policy and National Health Service guidelines. Indeed, 'exercise prescriptions' in the treatment of depression is not uncommon. Yet, this link between exercise as a treatment for women's mental health has not always been so pervasive. In fact, an examination of asylum reports and medical journals from the late-nineteenthcentury highlights a significant shift in attitude towards the role of exercise in the treatment of women's emotional states and mental health. This paper specifically examines how this treatment of women's mental health through exercise has moved from what might be regarded as a focus on exercise as a 'cause' of women's mental ailments to exercise promoted as a 'cure'. Unpacking the changing medical attitudes towards exercise for women in line with larger socio-political and historic contexts reveals that while this shift toward exercise promotion might *prima facie* appear as a less essentialist view of women and their mental and physical states, it inevitably remains tied to larger policy and governance agendas. New modes of exercise 'treatment' for women's mental health are not politically neutral and, thus, what appear to emerge as forms of liberation are, in actuality, subtler forms of regulation.

Introduction

In 1879, American health reformer, William Blaikie, published a popular guide to health and exercise. Its content could be regarded as relatively maverick: nervous disorders, that suffered "astounding increase...in both sexes, but especially among the women" (p 57)[1], Blaikie suggested, were to be treated through the active pursuit of exercise:

Let every intelligent girl and woman in this land bear in mind that, from every point of view, a vigorous and healthy body, kept toned up by rational, systematic, daily exercise, is one of the very greatest blessings which can be had in this world;...it is never too late to begin, and that one hour a day, properly spent, is all that is needed to secure it (p 73)[1].

Blaikie's views emphasised exercise's physical, but also its mental, benefits. For Blaikie, like most health reformers and physicians of the period, these two elements – the body and mind - were inseparable, and were materially connected through a holistic view of the person, in keeping with the physicalist medical worldview of its day.

Blaikie's words, expressed in the pages of the late nineteenth-century manual "How to Get Strong and How to Stay So," are somewhat analogous to that of today's message across the global north: exercise is regarded as a positive function of health and wellbeing, both for emotional health, as well as for good physical health. Women, in particular, who are allegedly twice as likely to develop depression than men, are actively encouraged to engage in physical activity to avoid or offset depressive states. A recent 2016 joint-campaign from the mental health charity Mind and England Athletics, which actively promotes running for women's mental health, illustrates this conviction[2]. Elsewhere, guidelines from the National Institute for Health and Clinical Excellence (NICE) regarding 'women's issues', such as postnatal depression, also encourage women to seek the benefits of exercise[3].

Indeed, exercise appears to be the 'cure all'—the panacea— for all health ailments, including matters of the brain[4]. Yet, unlike in our modern day where these views of exercise as a 'cure' for mental health dominate, Blaikie's views were somewhat trailblazing, entangled within wider discussions between physicians and other health reformers who were uncertain about the role of exercise in the treatment of women with mental ailments. In the late 1800s, at least, the association Blaikie had drawn between exercise and positive mental health in women was not commonly held, nor was it regarded as medically sound or desirable. While the claim that a 'sound mind in a sound body' has been long associated with exercise's benefits on brain health and wellbeing, historically women have been caught up in a rather different set of assumptions concerning exercise.² In fact, as this paper argues, many strongly believed that exercise was a 'cause' of women's mental ailments and that the appropriate regulation of women's movement needed to be maintained.

¹ While today these two agendas – physical and mental health – are separated mainly around the benefits of exercise for cardiopulmonary and diabetic purposes versus mental health purposes such as depression, anxiety, PMS, and PMDD, historically the mental and physical were more clearly linked as diseases of the nervous system – the root cause of both physical and mental illnesses.

² For a comprehensive history of the relation between exercise, medicine, and women's bodies more generally, see Berryman [9,10,11] and Vertinsky[13].

Through a partial genealogical method, this paper traces some of the rules of formation that shaped exercise advice and prescriptions given to women from the mid-nineteenth century to the present day, from 'cause' to 'cure'. Discourses regarding women's madness as well as the appropriate regulation of women's exercise had, of course, emerged much earlier than the nineteenth century; however, this period marked a 'fundamental shift in the medical gaze' (Rose & Abi-Rached, p 56)[5]. The rise of neurology and its dissociation from psychiatry, the emergence of prominent voices in the treatment of neurological conditions directly aimed at women through the likes of Silas Weir Mitchell, evidence of women's resistance to such practices, contradictory advice emerging in methods of asylum management, an expanse of healthcare guides to women, and the burgeoning space of physical education for girls and women all took place within this historic period.

This paper does not attempt to present a linear depiction of exercise for women as having moved merely from being regarded as a 'cause' to a 'cure' for mental health. Nor do I suggest here that what existed in the past actively exists in the present. Instead, using a partial genealogical method, I attempt to 'dislodge entrenched beliefs' (p 54)[6]. The aim of genealogy is not simply to account for the emergence of things but rather to 'destabilize these things' by revealing their contingency (McWhorter, p 52[6]; see also Foucault[7]). The aim is, thus, not to 'restor[e] an unbroken continuity' but, instead, the deconstructive gesture of genealogy is to examine lines of descent that usurp the notion of an 'origin'[6]. In this respect, this paper aims to reveal the contingencies of various knowledges about exercise and women's mental health that emerged throughout the late-nineteenth-century and that continue into the present day. The intention is to explore various instances in which exercise for women's mental health has been attested to in various historical formations, shaped by power/knowledge arrangements. I aim to reveal the grounding of different knowledges about women's mental health and the role of exercise as both cause and treatment. For example, the paper explores the dominance of neurological knowledge and its conflicts with other knowledges such as psychiatry and later psycho-social models of behaviour, and the ways that medical and legal experts construct different views about women's movement and their minds (see Foucault[8]). The paper also explores, in turn, how these various discourses have come to govern subjects or perhaps, better put, how subjects have come to govern themselves through discourses.

This genealogy is necessarily a partial and, thus, a broken one, limited to a selection of events from sources that highlight both shared and taken-for-granted knowledge, as well as disruptive forms of knowledge, within the confines of this paper. It is partial for at least two reasons: first, because genealogies can never be 'complete' in the sense that this approach abandons the search for a meta-narrative and, second, because, pragmatically, it is beyond the scope of this paper to attempt something much wider. Examining the history of conflicting views on the role of exercise in the cause or treatment of women's mental health provides insight into the complex medical assumptions and rationales related to exercise for women's mental health that prevails, even today. Drawing on archival material from late-nineteenth-century editions of the *British Journal of Psychiatry*, the *Journal of Mental Science* the *American Journal of the Insane*, *The British Medical Journal* and various *Asylum Reports*, alongside several key texts from health reformers in this period, this paper provides a glimpse into some of the rationales used by medical practitioners in relation to women and mental health, and women's appropriate relationship to exercise that has laid the bedrock of views on the role of exercise in relation to women's mental health in the present day.

Exercise: From Cause to Cure

Despite Blaikie's words of advice, many physicians in the late-nineteenth-century were less than enthused about women's involvement in exercise[9, 10, 11, 12, 13], especially when dealing with women who had been classified as insane. The most popular voice of opposition was the well-known American neurologist, Dr Silas Weir Mitchell, whose famous speech to asylum superintendents in 1894 outlined what was to be regarded as a 'common cure' for mental illness that would permeate health reformist's views, and would also influence the treatment of the then-diagnosed clinically insane within American, but also within British, asylums[14]. Mitchell firmly believed, like many others at the time including Freud, that a physical cause could be found for mental illness and that science would save mental health. If one were to search for a cure for the mind, neurologists like Mitchell thought that one had first to cure the body and restore the individual to physical health.

Neurology's influence on (or as this paper argues, its construction of) knowledge about madness³ shaped the 'discovery' of two 'diseases' that physicians argued predominantly affected women: neurasthenia and hysteria[15]. Both of these 'female maladies' as they became known[16], were believed to be caused by a neurological breakdown of mind and body. The category 'Hysteria', derived from the Greek term *hystera*, meaning uterus, captured a host of symptoms manifest mainly in women's bodies, or in men deemed overly feminine[17] including nervousness, emotional outbursts, and sexualised behaviour. Philosophers and physicians, drawing from wider gnostic views of women's place in the world, affirmed women's reproductive systems, specifically the uterus, as the root of hysteria. Indeed, since Hippocratic medicine, male philosophers and physicians regarded the source of women's weakness, both physical and mental, to be rooted in their reproductive organs. These beliefs intensified in the late-nineteenth-century. A 'prize-essay' accepted by a State Medical Association by Dr Hutchins illustrates these commonly held views:

Woman has a sum total of nervous force equivalent to a man's, but this is distributed over a greater multiplicity of organs and directed to the development and support of special reproductive energies in addition to those of individual nutrition. The nervous force is therefore weakened in each organ,—and the period of resistance of each organ is weakened (1851, p 23, cited in Jacobi[18]).

This naturally more irritable nervous system was thought to be in direct relationship to nature. Women's bodies were tied to the physical world and determined by nature's greater forces. According to Dr Crowninshield, the rise and fall of the tide, "also moved fluids, wherever they were proportioned to the volume upon which the lunar influence was exerted" (Smith, p 71)[19]. It was thus that women's bodies were subjected to theories of lunar cycles. Unlike men, considered to be (rational) animals, women were considered to be influenced by lunar cycles, their reproductive systems regulated by the "moon".

Neurasthenia, identified later as a sub-classification of hysteria, was, by contrast, explicitly attributed to a reflex irritation, "where irritations of the reproductive organs were transmitted electrically via nerve impulses to the brain, causing lesions in the brain cortex"

³ Neurology emerged, particularly in late-eighteen-hundreds America, as a new approach that critiqued traditional psychiatric views that rooted madness strictly in the mind and, instead, it traced madness to the body and nervousness [15].

(Vertinsky, p 212)[13, 20].⁴ Articles published in the popular medical journal *The Lancet* also added to social commentary on neurasthenia and women's mental diseases. The "intimate anatomical relation between the genitalia and the nervous system" meant that female genitalia was supplied "by both spinal and sympathetic nerves" (Pearce & Beyea, p 125) [21]. As such, "any sort of exhaustion may cause neurasthenia" linked to worry, overwork, overexcitement, sexual excess, celibacy, and "a naturally more irritable nervous system in the female" (Pearce & Beyea, p 131)[21]. In a similar vein, in 1879 William Goodell, president of the American Gynecological Society, gave a presidential address entitled "The Relation of Neurasthenia to Diseases of the Womb", indicating that the nervous symptoms of neurasthenia in women were caused by females' biological makeup (Gosling, p 193)[22]. An earlier report in *JAMA* (1891) titled "Can the Gynecologist Aid the Alienist in Institutions for the Insane?" suggested a similar relation, positing that the removal of ovaries could cure insanity in women. This publication was republished in *JAMA*, in 1991 (Stotland & Stewart)[23].

Virgins and widows were also considered predisposed to hysteria[24, 25, 26]. Women who were single were regarded as hysterical since they threatened the necessary patriarchal order of the household. Physicians viewed sexual intercourse as an essential purpose of ordinary domestic life, though, much like exercise, this was to be performed in moderation, to fulfil women's function as reproducers of the nation through maternal roles. Women who had not engaged in sexual relations or had not given birth were 'predisposed' to hysteria because, according to the lingering metaphor of the 'wandering womb', the animal inside them- the womb- had not been satiated and so continued to wander the woman's unruly body (a view held from Platonic times)[27, 28].⁵

Regulating Madness, Regulating Movement

Given that women's wombs were regarded as the source of their problematic mental states, women's reproductive systems and their cycles became a focal point of medical intervention.

⁴ Where neurasthenia was initially viewed as an American disease it was readily adopted by English neurologists who began classifying patients with this condition[20].

⁵ Feminist philosopher, Susan Bordo, explores the embeddedness of gender in Cartesian dualism, whereby women are perceived as bodily and animalistic, while men are "rational"[27]. Thus, corporeality is essentially feminised, while the mind is masculinised. As Shilling writes in his account of the naturalistic body, women have historically been positioned within society as having "'unstable' bodies…dominating and threatening their 'fragile' minds" (p 44) [28].

Reproductive regulation emerged in the form of guidance to women around the management of their bodies for the sake of their minds, through self-care, health and hygiene. Various publications were widely produced from health reformers seeking to spread the message to women about how to manage their health, most of which focused on the regulation of their reproduction. Guidelines directed at women from the upper echelons of society at the time stipulated these women as 'moral guardians of the race'. Women's ill health and manifestations of madness in the form of hysteria and neurasthenia, as diseases of nervousness, were linked heavily to public health and wellbeing. As such, it was popular belief that the 'ill health of women as leading to barrenness' was a cause for national medical and public health concern[29, 30].

The focus on women's bodies as a function of public health brought with it a discussion of not only nutrition, particularly around remedies involving blood (lost through menstruation) such as iron cures, but also, more importantly for this paper, exercise. Health reformers alongside doctors, neurologists and asylum leaders became involved in the contribution of physical movement and exercise towards women's nervous diseases, but also, more sparingly and in moderate forms, they became interested in the possible function of exercise in the treatment and prevention of women's nervous diseases.

Aimed at women, mainly the upper and middle classes, popular guides to good health were widely published and circulated in households. These guides were regarded as useful preventative tools that could ensure women could correct and manage their behaviour through caring for their physical and mental health to offset the risk associated with being a woman and having one's mental health dictated by one's reproductive system. Indeed, popular guides were published for women and their husbands, as well as for mothers raising daughters, with the view that women ought to take active measures to ward off their predispositions to madness. Public health guides thus extended the medical gaze into the spaces of the home, where women could internalise advice about good healthcare and in turn could embody this medical advice through the appropriate regulation of their own movement.

Exercise was not simply prescribed to women for their mental health in these good health guides in blanket terms to offset nervous states. Prescriptions for appropriate exercise for women's nervous dispositions were complex and were outlined for *all life stages* for women, chiefly in close association with their reproductive cycle. Women's movement was to be

controlled cyclically – monthly, but also over the course of their lives – divided into premenstruation (before 15), during menstruation (15-45) and post menstruation (45 onward) (see, for example, Crowninshield[31]; Jacobi[18]; Napheys[30]). Before menses, girls were rarely inclined towards nervousness and madness, these medical and health practitioners argued. Girls were thus to engage in 'healthy forms' of exercise and play athletics and sport, particularly in the outdoors. This was a shared view amongst most health practitioners. Little mention in these good health guides was given to nervous disorders, suggesting the onset of such nervousness was associated with menstruation. Indeed, the overwhelming, united message was that girls should develop healthy bodies through physical exercise. Dr MacDonald[32] (M.D), publishing in the popular British "Health Lectures for the People", for instance, clearly makes this point:

If more attention were paid to the physical development of our girls, we should have fewer delicate wives and daughters and the whole race would be stronger and healthier. I do not wish them to engage in football, or in cricket, but I do contend for more use of the skipping-rope and of their legs, and for much more out-of-door amusement, so that girls' muscular systems should be better developed, their blood better aired and richer (p 118).[32]

Growing girls, then, should exercise, albeit only in appropriate, feminine forms, to strengthen their bodies. Exercise was an important function for the individual, but equally, it was important for the vitality of the race and nation (terms often used interchangeably) in this biopolitically pregnant time of the late-nineteenth-century during which ideas about race and nation were bound to evolutionary biology and species health (Foucault)[33]

"The appearance of the monthly period" (MacDonald)[32], however, changed the advice given to young women and exercise. Once women had reached childbearing age, reproductive health became a focus for women and this shifted the appropriate modes of exercise that women could engage with due to their dispositions to nervous tendencies, madness, hysteria and neurasthenia. Such a focus on the regulation of women's movement was rationalised based on the synergy between the body and mind: physical rest was necessary because the womb could not cope with the stressors of movement. This advice was delivered amongst broader concerns regarding women's fertility. Equally, mental rest was considered significant given that mental strain, perceived to be due to nerves, was also linked to the body and its ability to bear children

(Vertinsky)[13,47]. The notion that women must rest to preserve their energy for more important social responsibilities, then, became a dominant view amongst many medical practitioners.

Menstruation and Vital Energy

If mental ill-health and nervousness were associated with overuse of energy elsewhere that drained the brain, this was explained by the dominant Vital Energy Theory (VET) in circulation at the time. Medical men such as Edward Clarke in the United States and Henry Maudsley in England believed that energy conservation seemed like a sensible explanation for women's ailments. If mental and physical energy were "finite and competing", and if women's energy must necessarily focus on her reproductive role, then mental exertion along with exercise must be approached with caution. Women's principal role and duty were to be maternal.

Belief in VET permeated medical rationalities: "Their [women's] ductile minds are developed prematurely, to the positive injury of their bodies", stated physician Dr Crowninshield (p 92)[31]. One such 'positive injury' was sterility, which was a real concern at the time: "What Nature spends in one direction, she must economise in another direction," Maudsley wrote. A young woman who would sacrifice her body for learning would lead to barrenness and sexlessness (Maudsley)[34]. Intellectual pursuits, for example, were to be limited as they might drain the reproductive system.⁶ In the field of physical education, as with education more broadly, theories of vital energy were also perpetuated. Swedish-born Pehr Ling was the father of medical gymnastics, a movement form that he grounded in assumptions taken from VET. Ling stipulated that energy used in one area of the body would limit that which could be used in another. Exercise had to be regulated such that it did not impact on energies vitally needed elsewhere. If exercise were to be undertaken, it must be done in mild forms outside of vital times when the body must focus all its energies on reproduction (menstruation, pregnancy). Competitive sport was ultimately ruled out[13]. Doctors theorised that loss of blood during menstruation also meant that women would be exhausted and more predisposed to physical as well as mental diseases such as nervousness. In healthcare guides such as Dr George Napheys's

⁶ Interestingly, a correspondence on medical gymnastics was published in the *British Medical Journal* in 1936, from Bronwen Lloyd-Williams, a Member of the Ling Association for Teachers of Swedish Gymnastics based in London, asking the British Medical Association to continue its "support" for Physical Educationalists as they continued to promote its medical importance for all, especially girls.

guide to 'The Physical Life of Women: Advice to Maiden, Wife and Mother', the advice during menstruation was generally to rest:

At first the monthly loss of blood exhausts the system. Therefore, plenty of food, plenty of rest, plenty of sleep are required. That ancient prejudice in favor of early rising should be discarded now, and the girl should retire early and, if she will, should sleep late. Hard study, care or anxiety should be spared her. This is not the time for rigid discipline (p 243)[30].^{7,8}

The function of women's bodies in preparing for motherhood meant that there was a greater impetus for women to preserve their much-needed energies. Menstruation was a time for rest, such that the body could prepare itself for more essential tasks; a point that was as important for the nation, as much as it was for the individual woman. It was also clear from these guides that the impetus to procreate was regarded as a woman's natural, and thus uncontestable, biological destiny. Over-exercise, much like over-education, could thus lead to physical breakdown, which could lead to a breakdown of the brain and thus cause excessive-nervousness. Where intellectual pursuits could drain women's bodies and detract from their more critical reproductive functions, exercise, too, could play a role in causing problems for women's reproductive cycles, draining other areas of the body that needed it of energy and thus contributing to nervousness and acting as a precursor to madness and the confines of asylum life[35]. Risks of sterility, however, were not, once again, framed simply as problems for the individual woman. Instead, these issues were far more wide-reaching: they were problems for the nation. Within broader concerns about birth rates, women's bodies were effectively policed through the medical gaze in public and in private. Education and exercise — the latter of which might also encourage physical strength and

⁷ Elsewhere, in his guide "The Physical Life of Women: Advice to Maiden, Wife and Mother," Dr George Napheys (1869) noted that "remedies must be addressed to the nervous system", and that nervous ailments most commonly caused by "anxiety, home-sickness, want of exercise, or over-work at school" could be prevented by "a hygienic mode of life", "...a change of air and scene, cheerful company, a tour to the mountains or some watering place, and regular exercise" (p. 27-28)[30]

⁸ Women were also advised on 'flooding' (perimenopause) regarding their menstrual cycles: "We have known such functional disturbances to be mistaken by physicians for signs of some grave disease, and an incalculable amount of mental misery thereby inflicted on the patient. A little judicious treatment and some candid advice, founded on a thorough appreciation of the case, relieve the distress of mind and body very readily". (p. 243)[30] "This treatment – frequently rest in bed and avoidance of active exercise are sufficient to restrain it; but when these do not suffice, advice should at once be sought" (p. 243)[30].

⁹ During this era, little was known about ovulation, only 'discovered' in the early 1900s. Psychiatric theories of 'mental' illness remained in the background, with neurology's influence leading to views of hysteria and neurasthenia still located in the nerves. Theories stipulated that nervous illnesses could, therefore, easily be caused by a lack of reservation of vital energy for women's basic biological health needs: reproduction.

competition in 'inappropriate' and unfeminine forms, had to be limited. The medical gaze permeated deeply into women's lives.

In women who had already suffered nervous diseases, it was easy to see why these views of VET informed neurologist's discussions about the appropriate balance of exercise and rest. However, wider social beliefs about the value of exercise on good health, particularly in youth and males prevailed. Anecdotal evidence from health reformers and physicians acting as asylum superintendents suggested it was common sense that exercise – particularly exercise outdoors – was positive for good health and wellbeing, and that exercise, therefore, served as a natural remedy for insanity. These views also extended from youth and men to women, with some health reformers and physicians arguing that it was actually a lack of exercise that could act as a precursor to women's predisposition to madness and nervousness. Indeed, women, particularly those in the upper and middle classes, were often regarded as idle; therefore, on doctor's accounts, such women suffered from mental troubles because of their "decline to an abyss of chronic indolence" Crowninshield (p 71)[31]. While women of lower classes who worked frequently moved their bodies, women in the upper echelons were more restricted, with servants moving for them¹⁰. For physicians and health reformers it was no wonder that women's nervousness was so prominent. Women ought to enjoy the delights of movement as much as men, believed many physicians like Crowninshield: "If men delight and enjoy pleasant walks, why should not women? (p 71)[31]. Others asserted similar beliefs; Dr Angus MacDonald, in his paper 'Hints to Women Regarding their Health, Habits and Occupations' published in *Health* Lectures for the People (1881-2), for instance, suggested the following:

We cannot alter a woman's inborn temperament, but we can train up a girl by physical and moral means so as to educate her whole being properly, in order that she may possess a sound mind in a sound body, and by avoiding all causes of over-excitement and nervous

While hysteria was certainly viewed as a bourgeoisie problem, lower-class women were not immune from diagnosis. As Showalter notes, most girls and women that Charcot treated were from poor backgrounds; they certainly were not idle nor were they mothers but, instead, they were deprayed and exploited (p 305)[50].

He continues, "...Alternately balancing the weight of the body on one foot and then on the other, brings every muscle to its full bearing. Each of them has an antagonist, and thus tension and relaxation create a demand for nutrition, proportioned to the force they may be called upon to exert. An appetite is created to meet the wants of each and every tissue; and in providing for a hungry stomach, we simply feed each one of those muscular threads which assisted us in" (p. 71)

exhaustion, we may take all possible precautions that, at this particular and all-important period of her life, she may meet the struggle with as little morbid nervous action as possible. It is not well-developed, strong, healthy girls that give way to these disturbances in the region of the nervous system. It is your puny, unhealthy, ill-nourished ones. Among the classes of society, in which life is easier, these sufferers read novels of an exciting character, are highly aesthetic, much given to music, and but little to healthful exercise and bodily exertion. Among the classes of society where such nonsense is not allowed, the sufferers are the ill-nourished, puny, ill-housed, self-willed, over-excited, and frequently over-worked (p 121)[32].

For Macdonald, exercise could not change a woman's hard-wired nervous system towards morbid thought and action, but it could indeed have a corrective moral function that could calm this tendency. The social setting that encouraged women of higher classes to engage in practices that other doctors also labelled 'idle' was to be mitigated through the encouragement of appropriate forms of movement. Such an elite, indolent social setting was also to blame for women's indulgence in immoral, fantastical books and their excessive and ill-placed focus on appearance. [12, 36]

Similar positions on exercise's preventative importance featured in the *British Medical Journal* through discussions of the role of Physical Education for women. Delivered in the Harveian Lectures of 1899, for instance, Dr W.M. Ewart commented on the "spreading cultivation of Physical Education by women", suggesting that while the initial "outcry against its detriments" was waning, "favourable results" included "young women...growing up to a greater stature and weight, with better complexions and healthier nerves than had been witnessed before" (p 1805)[37]. Nevertheless, despite the optimism towards exercise, its benefits were still to be balanced with the vital role of women in their domestic place and their task of reproduction. Even female doctors at the time continued to prescribe rest for women during menstruation to deal with pain associated with mental symptoms. Dr Mary Putnam Jacobi, for instance, suggested in her text 'The Question of Rest for Women During Menstruation' that,

In a word, when-ever women exhibit mental irritability and consequent weakness, at or before menstruation, it is a proof that the resistance of their nerve centres is weakened

¹² Doctors such as Cunningham did comment on the relationship between women's health and their fashion, noting the damaging fashion of corseting for women's bodies despite their popularity (1882, p. 32)

below the normal standard, sometimes congenitally and by inheritance. If the impairment be sufficiently extensive, mental action will be rendered unreliable, and the woman be subjected, therefore, to periods of temporary incapacity, of varying degrees. In certain such cases, the attempt to force mental action would interfere still further with the nutrition of nerve tissues, and hence aggravate the original difficulty. In these cases rest is desirable during whatever period of the month the nervous excitement may be experienced...(no page)[18].

Jacobi, however, was cautious in prescribing rest for "slighter cases" or even for those "more severe". For the latter, in particular, she noted its uselessness, suggesting alternative cures for "the disease":

In those cases of congenital hysteria where a cure cannot be effected, it is evident that the women are permanently unfit to bear severe responsibilities, or to undergo mental strain. Of their mental action it must be said, as we have said in regard to muscular action in weak subjects, that at any time it tends to exhaust the small reserve of force accumulated by the feeble nutritive capacity of the tissues. Thus, if beyond the individual capacity at an intermenstrual period, it will inflict an injury that cannot be repaired by rest during menstruation (no page)[18].

From Jacobi's a view, women who were predisposed to hysteria had to be extremely careful in the regulation of their movement: rest was a preventative measure but if it were not taken then the mental condition would be irreversible. Women were, after all, still the fairer sex.

Against Exercise: The Rest Cure

If women's weak minds were weakened even further by physical movement, then women ought to be confined to rest, so said logic. These theories on rest for women were bound together within what was known at the time as the 'rest cure', the design of which was more widely attributed to the then-famous Dr Silas Weir Mitchell, which comprised not only of rest but also of seclusion and excessive feeding[38]. Mitchell's physical solution to treat nervousness sought to provide the positive benefits of exercise without the associated problems. Treatment thus was framed around other corporeal solutions that did not invoke physical movement, including massage for up to an hour/day as well as electricity therapy[39]. Milk and fattening foods were also prescribed, followed by re-education, to gain control over one's emotions:

The patient was taught not to yield to hysterical behavior but to display order, control, and self-restraint. She was expected to become 'less hysterical and more obsessional', and perform her female role in a structured manner with dutiful attention to rules and detail'. In short, the rest cure was a behavior modification treatment designed to make nervous, overactive and dissatisfied women more passive, feminine and healthy, and to help them learn that domesticity was the cure, not the cause, of their problems. The female neurasthenic was thus 'returned to her menfolk's management, recycled and taught to make the will of the male her own' (p 213)[13].

Feminists such as Charlotte Perkins Gilman, an advocate and follower of Blaikie's guide to exercise, found herself treated with Mitchell's rest cure, after which she penned the fictional short story, *The Yellow Wallpaper*, documenting the diary of a woman, like her, confined to rest, only to turn towards insanity[40]. Where Gilman herself had been treated with the rest cure, she had turned away from it towards exercise and writing, the latter of which was also considered to be damaging to women's nervous systems. Indeed, Gilman regarded the rest cure as the cause of her mental ailments rather than as a cure. She intended *The Yellow Wallpaper* as a political fiction which she sent to Mitchell to convince him to change his practices that were deeply embedded in asylum treatments[41]. Like many feminists of her era, Gilman regarded Mitchell's common cure as an inhumane, oppressive practice towards women that subdued the fairer sex into domesticity; the rest cure was a practice of male physicians who wanted to keep women in their place[13, 21]. The notion of women as Ophelias, predisposed to madness and in need of rest and domestic treatments through indoor activities that replicated domestic work such as needlepoint, was symptomatic of patriarchy so intense that it was utterly inscribed in women's corporeal selves through medical intervention[21].

Exercise as an [Adjunct] Cure for Insanity

While rest was undoubtedly the dominant medical discourse in circulation, other outspoken physicians, professors, and asylum leaders such a Blaikie also debated the use of exercise as a potential cure. In his work 'Affections of Women' (1851), John Epps, for instance, a doctor of homoeopathy and domestic medicine, wrote of the benefits of exercise – specifically walking, or medical gymnastics – for women during menstruation. "The influence of the mind on the body is an established fact", he wrote: "...its influence on the uterine system is a fact, recognised by all

experienced medical practitioners". From Epps's vantage, mental strength and willpower to rise early out of bed were key: without such mental strength, one was predisposed to poor mental health. Such poor mental states in women would almost certainly lead "to induce neglect of bodily exercise, and with such neglect the consequences associated have been already stated. The wise man's axiom should ever be remembered, 'A merry heart doeth good like a medicine' (p 43)[42]. Mental willpower was linked to good physical health, and thus the ability to exercise appropriately flowed naturally from the latter. Contextually, however, Epp's views were controversial, not only because he advocated for exercise during menstruation, which countered much other medical advice at the time, but also because his medical reputation as a well-known physician was lost when he converted to homoeopathy, despite having a broader social reputation with patients such as the Brontë sisters.

One of the most sustained discussions of exercise and rest in the treatment of mental disorders can be found in 1895 edition of the *British Journal of Psychiatry* which published a review of the Annual Meeting of the Medico-Psychological Association that comprised of two talks from doctors Thomas Clouston and Batty Tuke on the topic "Rest and Exercise in the Treatment of Nervous and Mental Diseases" [43], followed by responses from a series of physicians also involved in this area of work with asylum patients. This discussion was not gender specific, though there are some comments here worth noting in the narrower context of gender and treatment for mental ailments. Within this documented discussion, led by physician Thomas Clouston, was a debate over whether exercise and rest were "antagonistic modes of treatment" (p. 40)[43], or whether exercise may restore the body and therefore the health of the mind. From Clouston's perspective, while "insanity" was once treated with rest by keeping people still, chaining them up, or drugging them with opium, "These had their day, and they had a fair trial as attempts to still morbid muscular exercise and give rest, nervous and muscular; but they were not found curative" (p. 601)[43]. Rather,

The idea of using normal muscular exercise in walking, working, dancing, massage etc, as a direct means of producing subsequent brain rest and quiet and "distraction" of the mind from morbid ideas, is really of modern growth. It is undoubtedly to a large extent

¹³ These shifts in thinking away from Mitchell reflected a reform almost a decade earlier from the 'other' Tuke – this time William, the Quaker reformist in the late 1700s in response to Pinel, during the transition towards the view of asylums as 'hospitals' that cured rather than punished and corrected subjects. This also sets the stage for later reforms such as those driven by Enoch Powell in 1960s Britain that saw the closing of asylums and a transition to "care in the community".

the foundation of the modern asylum routine system...Speaking for myself, I have preached exercise in season and possibly a little out of season. One is apt to become prejudice to its almost universal applicability but I have seen exercise of body, combined with that sensory mental exercise 'distraction' of the mind, obtained by new scenes, pleasant surroundings, new work, new amusements, do immense good in early and later stages of insanity (p 601-2)[43].

Numerous benefits could be derived from exercise: improved sleep; calming; improved functioning of secretory and excretory glandular systems; healthy metabolism; improved nutrition; stimulation of blood-forming glands; and distraction from depression and delusions (p 602)[43]. Unlike previous medical discussions that dominated, including the rest cure that focused on vital energy, Clouston's emphasis, interestingly, was on a theory of social distraction that hypothesized that exercise would enable the mind to quieten.

Engaging in this conversation regarding exercise and madness, another physician, Dr Robertson, agreed with Clouston on the benefits of exercise. Rather than merely regarding exercise as providing a cathartic effect, as an outlet for pent-up excitement, exercise enabled the brain to rest. Contra to the Vital Energy Theory, Robertson viewed physical movement as that which provided a distraction to the person such that "During muscular exercise mental exercise is at a minimum" (p 261)[43]. Dr Urquhart, another contributor to the discussion, also agreed: "I am quite sure that Dr Blandford looks upon this as a sort of counter-irritant, so that instead of the higher centres remaining active, they may have rest; while the lower are employed by such means as golf or shooting or fishing" (p 619)[43]. According to Dr Urquhart, this is "a fact well known in daily life" (p 621)[43]. Dr Blandford, for example, claimed "It seems to me that walking in the fresh air (I do not lay stress upon violent or prolonged exercise) surrounded by objects of interest, even asylum objects, is more likely to distract the patient from his morbid thoughts than being shut up in a room in bed" (p 615)[43]. This distraction hypothesis, introduced by both Clouston and Robertson, thus posed an alternative to VET. Rather than

What is interesting, then, in these physiological discussions is how the body can be used as a source of "distraction" whereby it prevents mental exhaustion. While the brain is considered physiological, it is nonetheless a higher faculty than the body and, therefore, to provide mindful rest, working one's body takes away from stimulating one's mind—the two do not occur in unison.

¹⁵ The notion of distraction, "by breaking into his morbid train of thought and dispelling ideas tending to become fixed" is particularly interesting given its seeming shift away from a fixation on neurology as a rationale for exercise. However, it is possible that this was still connected to views of neurological bases for nervousness such that distraction quietened the nerves.

damaging a person's mental health by exercising them, the latter was instead seen to be true: exercise could cure mental health. Under these assumptions, mental healthcare took on a more psychological, rather than biological, function: these doctors were inclined to view the patients' 'morbid thoughts' as psycho-social behaviour, rather than that which could be reduced to, and thus cured by, the bio-physiological function of movement. Interestingly, this psychosocial view seemed the dominant one in this particular issue of the *British Journal of Psychiatry*.

Despite Clouston and Robertson's preference for the social distraction hypothesis in the treatment of men, Clouston appeared to revert to a different epistemology of care for women. In one particular case of a female suffering from "chronic mania", Clouston documented the importance of exercise in her restoration to normality. Her "ordinary routine of exercise", he stated, "...had got into a static condition of moderate quiet"; however, because of a strangulated hernia she was kept in bed rest. After the series of rest, she returned to her previous manic state. It was apparent for Clouston that this chronic mania resumed due to a lack of "physiological outlet for her muscular and nervous morbid energy, so that the excitement was...bottled up in the brain cortex" (p 602)[43]. "That, I think, was an illustration of the good effects following exercise" (p 602)[43], Clouston concluded. Arguably, on this occasion Clouston used a rather different, albeit on the surface similar, rationale for exercise: exercise was not simply rationalised as a distraction from morbid thoughts, but instead it was regarded as a necessary outlet for energy that caused damage to the brain. In this regard, one might infer that the social distraction hypothesis took different, gendered, forms: men's troubles, not regarded as deeprooted, could be cured through simple distraction, whereas women's troubles, grounded in problematic biology, required physiological explanation.

Discussions of the utility of exercise for women was also framed around particular sporting pastimes. Golf, shooting, or fishing, pastimes that were mentioned earlier in discussions from Drs Urquhart and Blandford, would have been practices pursued chiefly by men. There is little mention in this broader debate as to whether these forms of exercise were equally regarded as helpful for women. For example, in the majority of texts from health reformists the necessary balance between femininity and exercise was clear, and it was obviously important, as indicated elsewhere in this paper, that modes of appropriate exercise for women remained focused on feminine activities such as walking, medical gymnastics, and sometimes horse-riding. While not explicitly stated in the dialogue of this 1895 edition of the *British Journal of Psychiatry*,

physicians did subtly differentiate exercise types. For instance, while not openly critical of the different forms of exercise suitable for women, comments were raised regarding women's interest- or, in fact, their ability to *become interested*, in a sustained manner, in engaging in exercise forms. Dr Cooke, for instance, expressed a less optimistic view than Clouston in his comments directed at women and exercise: "I have been very much struck with the greater advantage the male patients derive from their exercise, in which they have occupation and interest, over that of the female patients" (p 616)[43]. Cooke's message thus suggested that while exercise might be useful for the cure of mental ailments, women might not benefit in the same way as men given an inability to shift their focus and interest. In short, even under newly emerging social-psychological models of mental illness, women continued to be feminised. Women's enmeshment within corporeality thus lingered within shifting epistemologies of madness.

Promising beliefs regarding the positive benefits of exercise for both sexes on madness was, however, moderated by cautionary views. If implemented incorrectly, exercise could cause more damage than good. In cases where the insane were overexerted, Clouston asserted that "muscular and nervous exhaustion" was a concern (p 602)[43]: "I have no doubt we shall have vigorous defenders of the plan of putting patients to bed; but I most strongly object to the proceeding as a routine measure in any asylum, and maintain that it is a backward, unscientific, and in many cases a hurtful measure" (Clouston, p. 602)[43]. Others continued to disagree entirely with new hypotheses regarding exercise and distraction. Dr Batty Tuke's response heavily reinforced the dominant Vital Energy Theory at the time, thus opposing Clouston's view: "If we exercise a patient under these circumstances [that is, impaired brain function due to overexertion of the brain cortex] we are asking his system to undertake recuperative work which it is not in a condition to perform...Such a patient requires conservation of all the nervous energy of which he is still possessed" (p 611)[43]. For Tuke, then, exercise of bodies – whether male or female- would take away vital energy from mental healing. For women, the message was twofold: exercise would not only take away from crucial mental healing but exercise also threatened an already fragile system. Emerging as a common point of debate was whether exercising the muscles allowed the mind to rest, or whether exercising the muscles took away vital energy from the brain and other physical parts of the body. Women's reproductive roles thus continued to lurk in the background of these discussions.

The conclusion more generally drawn from this meeting with all parties in accordance besides one (Dr Tuke) was that exercise was an integral component of treatment for insanity given the necessary distraction it provided—because "to put to bed a patient who has morbid ideas does not remove these ideas, or give them a chance of removal. It rather favours their persistence" (p 61)[43]. Despite this distraction hypothesis, the psychology of morbid thoughts was also said to have a physiological manifestation – that is, morbid thought as a matter of the brain was thus also a matter of the body.

Discussions in other asylums continued to hold the view that what might distract women from their decline into madness should come in forms different to men, mainly in line with women's biological destinies, also shaped by their social destinies. While men could be engaged in manly pursuits and should exercise outdoor, women ought to be kept in more feminised, domestic labours, distracted by needlepoint or laundry. Views of where women ought to be kept busy in their treatment were divisive. Where some arguably more progressive views expressed the benefits of unrestricted outdoor movements ¹⁶[44], the benefits and appropriateness of restricting women to indoor modes of treatments dominated. At Severalls asylum in Essex, segregated views of exercise treatment were enacted into the early-twentieth-century. All asylum patients were put to work that would replicate that which they might do on the outside world. For women, this meant domestic labour, such as running the laundry and needle-point rooms. Traces of Mitchell's rest cure thus remained embodied in asylum practice. Even when women were able to participate in light movements such as gymnastics or movement to music, unlike men who were encouraged to play sports, as Gittins wrote in her narrative of Severalls, women's activities were "...confined to the private realm of indoor sports", much like in the outside world. (Gittins, p 127)[45]. 17,18

Physician's theoretical discussions in journals and health guides were, therefore, not confined to paper; they were integrated into practice and these practices, in turn, became the object of medical reflection within asylum reports. Dr Robertson's ideas, for instance, frequently made their way into asylum management[46]. Some of these asylum reports reveal the arguably

¹⁶ Some, like Easterbrook (1907), for example, emphasised rest in the outdoors, referred to as the 'outdoor rest cure'.

¹⁷ The story here at Severalls was not so simply gendered, however. Use of even more extreme forms of rest cure for men returning from the war in the 1930s that used modified narcosis to put men to sleep for weeks at a time was also used to rest the brain (Gittins, p 191-192)[45]. Women's bodies were thus not the only ones confined and regulated through movement, but the assumptions behind this regulation differed significantly. Women's bodies continued to be regarded as domestic, reproducers of the nation-state.

¹⁸ See also Showalter p 75-76[25] who discusses feminised activities in asylums.

progressive views of some asylum leaders who were inclined in practice to push not only for outdoor exercise for women but also beyond the confines of 'airing courts' as they were called, which regulated movement to small spaces, not permitting engagement in free movement practices. Commenting on Northumberland, the reporter noted the following practice:

As in former years, exercise beyond the airing courts, in the grounds and surrounding country, lias been accorded to almost all who are rit to enjoy it. The lame and such like cannot join the walking parties, and only about six patients of each sex are denied the privilege of walking beyond the airing courts. These exceptional cases are restricted in their exercise because of their violence, indecency, or persistent efforts to escape. Especially among women, exercise in airing courts is not conducive to health and good conduct, and it is my present intention that there shall be no exercise ground within walls or railings in the new wing for female patients. When they are permitted to exercise in the open country they enjoy their liberty, very seldom abuse it, and those in charge are more impressed by the responsibility of their work[45].

Little in these reports are indicative of the type of exercise women here were to 'enjoy', but it is clear that commentary regarding women's 'natural predisposition' away from violence and indecency, or even efforts to escape, suggest they were treated differently to men. As such, in feminine forms, most likely walking outside in fresh air, exercise was considered beneficial.

Moderation of Exercise, Morality and Maternal Duties for the Nation

As I have noted throughout, where women were encouraged to exercise, even by health reformers and sympathetic physicians and asylum superintendents, generally this exercise was in moderate forms. Walking and gymnastics, as well as dancing and horseback riding, provided these were engaged in outside of the monthly cycle, were encouraged to build the body for maternal duties. Exercise was moderated through feminised activities: sports and other activities deemed overly masculine were always to be avoided. Exercise, then, was associated with morality, as well as physicality[47, 48]. Women's predisposition to insanity – the notion that women were not sanitised, and therefore were not pure of mind, or body, due to their reproductive systems – clearly meant that medical control needed to find ways to correct women's behaviour and their predispositions. Natural modes of hygienic intervention were, consequently, different for men and women. As rational animals, men had greater potential for

morality, and exercise was a mode of purification of mind and body. Women, by contrast, were immoral subjects from birth, their bodies binding them to nature[49] and, as such, exercise could only exacerbate this nature. Morality and the hygienic movement to sanitise women was such that it had to enable them to fulfil their natural, biological, domestic duties. Exercise, historically, was only regarded as a function to meet these responsibilities in limited, moderate form. Even changing, progressive attitudes such as those from Blaikie as well as others in the medical profession saw exercise as a means to encourage physical strength, so long as it was rationalised through the wider nation-state that saw its benefits in producing healthy, childbearing women. From the moment of childhood, women's destinies were inscribed in their bodies through the regulation of movement:

...it is of as much consequence that our girls and young women should have gymnastics and other exercises. I should wish to see some hall or gymnasium established where, under proper super-intendance, our girls and young women would have regular and proper exercises, so as to develop their figures, strengthen their bones and muscles, improve their health, and fit them more thoroughly in the future for the important duties which, as wives and mothers, they may be called upon to fulfill (MacDonald, p 110-11)[32].

Movement had to be regulated given women's predisposition to madness. While general attitudes changed, expressed as a transition from the view of exercise as an overt 'cause' of women's nervous disposition (as in the case of dominant views of those who advocated the 'rest cure'), towards those who saw exercise as a possible 'cure' for madness (considered amongst various health reformists, neurologists and asylum superintendents), nevertheless the message was mixed, and women could not escape their reproductive nature as the rationale for movement regulation, either through exercise, or through complete restriction and rest. Unruly minds were to be controlled by correctly governed bodies. Movement management figured as a necessary modality of this corrective treatment.

Contemporary Rationalities, Body Management and the Turn Towards Exercise

From the late nineteenth-century onward women's involvement in exercise saw a steady increase. Medical knowledge, largely restricted to that of exercise's positive impact on the body (as opposed to the mind), began to match with the vision of physical education reformists who

sought to encourage and embed women's activity in national curriculums and education[50]. The surge of support for women's involvement in physical education intersected with growing beliefs that women's bodies needed to be strong for childbirth so that they could better reproductively support the nation. As the two world wars came and went, women's role in society slowly changed[51]. Sexuality was no longer repressed in the same forms as it was in Victorian England and "hysteria waned as feminism was on the rise" (Showalter, p 327[52]). Likewise, the wars saw more men diagnosed with nervous dispositions, many of whom were given the rest cure, a treatment that had previously been reserved for hysterical women. Feminist historians like Vertinsky[13] regarded this new found freedom and rise of women's physical activity as celebratory: it was evidence of a shift in thought and a turn towards women's liberation – proof that views of women's necessarily medicalised and fragile bodies were being replaced with divergent perspectives that rendered women able to be physically active.

Feminist scholars, however, suggest that such alleged women's freedom regarding mental health ought not to be celebrated[53,54] and one can arguably say the same for women's liberation regarding exercise. The Ophelias of history and the physicalist worldview have arguably morphed into a modern materialism that continues to give credence to those disciplines that treat the mind and body as unified: biology, physiology, neurology, and genetics. Shifting discourses of physical activity, and organic and essentialist theories of hysteria and neurasthenia, both of which had dominated medical texts on women's mental ailments and were considered to be caused by women's biological makeup, slowly mutated into other theories of gender difference that could account for women's predisposition to forms of madness and mental illness. Such mutations took two principal forms, first in the emerging discipline of psychoanalysis and, second, in another medical sphere, that of endocrinology and its associated theories of hormones

¹⁹ The rise of the 'new woman' and influences of women's movements and suffrage were not without resistance. Hysteria was indeed linked with suffrage for some time, "as women made their first inroads into public and professional space, a fascinating alliance of artists, traditional women, and neuropsychiatrists like Charcot united in a campaign to celebrate maternity and the interiority of Woman" (Showalter, p. 306)[51].

This expansion of the rest-cure's recipients was not without criticism. As Showalter[51] recounts, "G. Elliot-Smith and T. H. Pear reminded doctors that such a cure had been developed in civilian life for 'well-to-do women living in the lap of luxury' and could not be good for hardy military men" (Showalter, p, 323[51]). Those men who were given the rest cure in English military hospitals were not reported to have improved (Showalter, p, 323[51]). Some of these war neuroses were attributed to latent homosexuality and childishness, and shell shock was a regarded as a lack of masculinity and an inability to deal with war as a man. As H. Crichton-Miller advised, "Rest in bed and simple encouragement is not enough. . . . Progressive daily achievement is the only way whereby manhood and self-respect can be regained." [cited in Showalter, p, 323[51]). The medical man's reinforcement of masculinity was as overt as the medical interventions on women's femininity, despite changing attitudes towards women in other areas of society such as education and public service.

in the early-nineteen-hundreds. The latter of these mutations shifted the perception of women's madness away from the lingering metaphor of the wandering womb towards theories of bodily chemicals and tropes of surging hormones that themselves were tied to new metaphors of 'imbalance'. The former of these mutations, by contrast, was grounded in notions that women had repressed desires that could be cured through medicalised psychoanalytic procedures that would enable a scientific, logical narrative to be constructed to the patient around her femininity[51]. Women who would previously have been diagnosed with hysteria thus later saw themselves diagnosed with new DSM-III criteria as a histrionic personality disorder, based on their inability to master oedipal tasks[51]. These mutations in thought, then, were not formed around a clear break with previous medical views of women's essentialised bodies but instead were socio-political reconfigurations of a shared gender myth.

Despite being epistemologically divergent, medical practitioner's views, purporting either of these psychological and endocrinal theories, were not in direct conflict with one another. As Rose and Abi Rached recount, when practitioners of these different perspectives did come together they viewed physiological treatment based on hormonal intervention as a useful primer for better cognitive therapy work (see p 36)[5]. In short, even with epistemological differences, the notion that women's mental disorders were regarded as essential and organic remained static over time. Women's predisposition to abnormality and 'madness' emerged from either sex organs (from wandering wombs to imbalanced hormones), lesions in the brain (neuroscience), or repressed female desires (psychoanalysis). In more recent years, these value-laden knowledges have grown to be increasingly complex and interwoven. Neuropsychiatrists, for instance, now conceptualise the interlinkages between genomics, hormones, the epigenetics, neuroplasticity (Rose & Abi Rached p 139)[5], arguably capturing women's embodied selves in an even more entangled, biologically, psychologically and culturally feminised web from which they cannot easily escape.

Emerging in the 1960s alongside these divergent epistemological views on mental health were new models of care. Asylums closed as the United Kingdom's government Minister for Health, Enoch Powell, famously introduced the community care model, viewed as a more humane form of treatment of the mentally ill. This coincided with the advent of psychotropic drug treatment that took off in the 1950s and was in mass circulation from the 1960s onward, which has been linked to the decline of psychiatric hospital treatment (Rose 2003, p 48)[55],

alongside a wave of new forms of treatment such as behaviour therapy, family therapy, and counselling that Rose describes as "therapies of normality" (Rose, 1986, p 80)[56]. Interestingly, paralleling these new treatments, was a generation of interest in sport and exercise science research on the role of exercise for mental health, which, before the 1960s, had only received minor attention[57, 58, 59, 60, 61]. One can, thus, witness a gradual transition towards new ways of treating mental illness, from juridical models of power apparent in the late-nineteenth century in which medical men and asylum superintendents framed women as being predisposed to madness and imposed treatments onto them, towards new, disciplinary models of power that sought to individualise and inculcate within subjects the desire to govern and manage themselves through the internalisation of the medical gaze[62]. These juridical and disciplinary modes of power overlapped in some spaces, such as through the nineteenth-century healthcare guides that found themselves in the homes of women who could learn from them to efficiently manage their bodies and minds; however, a more intensive transition towards individualising power evident in the 1960s with the closure of asylums and the advent of community treatment models placed individuals in increased positions of responsibility for their own management of mental health risks[63].

The issue of gender in relation to mental health and exercise in this individualising model of care has not disappeared. While mental illness is still regarded as a biomedical phenomenon, much as it was in the late-nineteenth-century, changing times and equal rights discourses have enabled new subtle ways of constructing different mental health ailments as either a masculine or as a feminine issue[64]. For example, depression, described as the primary cause of disability for individuals aged between 15 and 44, is now regarded as an epidemic[65]. In the United States alone, approximately 14.8 million Americans over age 18 are diagnosed with chronic depression or major depressive disorder per annum, part of the 121 million people worldwide and women are considered twice as likely as men to experience this[2]. These statistics highlight the gendered and embodied nature of depression and illness, particularly when contrasted to statistics that frame men as less likely to be diagnosed with depression but more likely to commit

²¹ Although as Leith (2010)[53] identifies, the first empirical study into the effects of exercise on depression was carried out in 1905 by Franz and Hamilton (finding a 'retarding' effect), this research area was not resumed until the 1960s (e.g. Cureton, 1963; Layman, 1960; Morgan, 1969)

suicide.²² One must pick apart how these scientific knowledges come to have a normalising impact on the lived experiences of individuals as these stereotypes are reified and embodied.

Women have also not escaped the association, evident in the texts from the latenineteenth-century, between their mental health and their reproductive systems. Diagnosable
mental issues such as premenstrual syndrome (PMS) and premenstrual dysphoric disorder
(PMDD) remain bound to women's menstrual cycles and continue to emphasise women's
biologically determined nature, their hormones stirring up madness from inside their rogue
bodies. Scholars such as Paula Caplan[53], for instance, have reported on the means by which
depression comes to be overtly feminised by relying on strictly female discourses of menses and
childbirth. For example, Caplan claims that PMDD was added to the American diagnostic
manual of mental disorders illegitimately. This convoluted history of mental health tied to power
and knowledge, however, is often overlooked, particularly in medical discourse whereby an
"illness" such as depression is considered a deeply entrenched and long-standing objective truth
that is knowable and governable through a variety of techniques and therapies. The material
nature of the mind is accepted axiomatically; the historical contingency of such fixed scientific
knowledge, then, is absent. It might be remembered why feminist, Jane Ussher, for example,
names depression the "daughter of hysteria." [54]

Shifting discourses of mental health diagnosis and treatment towards individualised models of care are also reflected in new public health advocacy groups that promote various practices to encourage self-regulation and control such (bio-medically framed) phenomena. Gardner, for instance, regards the emphasis on biopsychiatry as a "cultural obsession with self-management" (p 541)[66]. The turn towards self-management has emerged with late modernity, in which a rise in epidemiological analyses has led to sectors of the population categorised as "high risk"[67, 68]. Women as subjects "at risk" of mental health issues are, therefore, encouraged to self-manage their behaviour effectively. The individualisation of risk enables such self-management to be regarded not as repressive but rather as productive[69]. Arguably, exercise emerges here within the context of mental health management as a fitting model of care and as a useful tool for self-regulation. Arguably, the transition from exercise perceived as a

²² See the Mental Health Foundation statistics discussed with reference to gender: https://www.mentalhealth.org.uk/statistics/mental-health-statistics-men-and-women

"cause" of female neuroses towards exercise being widely regarded as a 'cure' for women's mental health can, then, be reframed within this wider critical worldview.

Where "exercise as medicine" discourses[12, 13, 70, 71] might appear to have liberated women from dominant views that their bodies and minds were too weak and fragile, one might pose the critical question: have women instead been subjected to a similar dominant discourse that frames their biological bodies as "at risk", with exercise simply emerging as a convenient, individualising tool to manage this risk? Indeed, one could go further and suggest that this "exercise as medicine" discourse implies that a *lack* of exercise places women's bodies "at risk" of health-related diseases, one of which is depression. For Peterson and Lupton, focusing on the social construction of risk "...is not to argue that there are no real dangers and threats to which humans may fall prey, causing ill health, pain, or death, but rather to contend that our understanding of these dangers and hazards, including their origin and their outcomes, are constituted through social, cultural and political processes" (p 18)[68]. Women's risk of depression and the exercise prescriptions that follow, then, is perhaps best understood as bound up within this system of self-management for mental health in contemporary times, in line with broader socio-political agendas from which we cannot escape.

Conclusion

This paper provides only a glimpse into an otherwise long and complex history of the relation between madness, women and the regulation of exercise. In today's society, women's exercise industry is booming. Expert knowledge on the relationship between exercise and mental health significantly changed in the 1960s with the advent of various sport and exercise science studies taking root after a slow increase since the early nineteen-hundreds. This rise of knowledge alongside various social reforms including the women's movement, as well as the increase in critical genealogies that have fought back against biologically reductionist views of women's brains and bodies, has sought to "level women out," so to speak, amongst men in both healthcare more broadly, and in sport and exercise sciences more specifically. Today, the UK's National Health Service (NHS), along with clinical and charity campaigns, actively champion exercise for mental health. Exercise is presented as a viable adjunct treatment and mode of prevention for today's "women's conditions" such as depression and anxiety, despite research remaining uncertain and suggesting that the link between exercise and mental health is

inconclusive, and despite doctors today generally feeling reluctant to recommend exercise as an effective mode of treatment[72,73].

While women, like men, may acquire pleasures from exercise and movement that is associated with elevated mental wellbeing[74], today, knowledges about women's minds and the appropriate regulation of movement are by no means free of wider socio-political implications, as they were also not free in the late nineteenth-century. Where the regulation of exercise for madness was tied to dominant views of women's gender roles in the late-eighteen-hundreds, current exercise prescriptions for women's mental health remain conflicting amongst other consumer discourses and views of women's bodies and minds. Women continue to be regarded as predisposed to mental health ailments based on their biological makeup, as well as their social condition[52]. Where moral choices emerged in Victorian Britain to discipline women into conforming with wider social norms, today's women are arguably no less exposed to wider socio-political influences[75].²³

Following feminist analyses, I draw two tentative conclusions in this paper. The first is that women's bodies, while seemingly liberated from governance and power, instead continue to be embedded in wider power relations [76, 77, 78, 79, 80]. This seems fairly obvious from the host of feminist analyses that have documented the role of power and patriarchy, and the continued influences of control and regulation on women's bodies and minds in the contemporary society [52, 81, 82]. The second, which has not yet been adequately explored, is women's relationship to exercise, and the regulation of women's movement through wider social-political and historical modes of governance whereby women's bodies remain both a subject but also an object of power. While women might appear to have new-found freedom in movement, one might be cautious of the exactitude of this freedom. Inevitably exercise, as a modern prescription, must be examined critically rather than be celebrated without caution. Exercise is not politically neutral: within what has been declared a "risk society" exercise ought to be examined critically as a new potential mode of self-regulation. Exercise is a cost-effective mode of treatment because it does not burden the state and individuals themselves can manage their involvement in order to assuage their "risks" of mental illness. Likewise, because exercise is highly gendered, it can also be used as a conformance mechanism to reproduce social norms of

²³ For example, appropriate and recommended exercise for women is often framed around femininity (see Markula)[65].

the body. That is, exercise has a normalising effect. Despite women's increased involvement in sport and exercise, for instance, the choice of exercise for women continues to be deeply normalised and embedded with gendered assumptions. Mindful forms of exercise, for example, are increasingly promoted for women's depressive states. Although yoga originated as a practice for Indian men, 75% of yoga practitioners in North America are women. While scholars have been quick to identify the gendered nature of fitness practices like aerobics that perpetuate dominant female bodily norms (toned, thin, beautiful), less attention has been paid to the normative dimension inherent in practices that present themselves as specifically useful for women's "emotional" ailments and "mood disorders" such as depression. Are we, therefore, neglecting to mention that women are normalised in more ways than just their physical appearance through exercise practices (see, for example, Heyes[71])? For instance, Rodney Yee, a well-regarded "yogi" answered the question: "Why do you think more women practice yoga?" with the response: "Women are open. They're more willing to go into their emotional state, in their own minds". "A Women's natural ties to the emotive self prevail as a norm.

Hopefully, these tentative conclusions might be convincing for future studies to take up this call to look at exercise prescriptions, whether medically delivered or those prescriptive norms promoted through charity or local campaigns for women to "exercise for depression", with caution rather than with blind optimism. Exercise prescriptions levelled at the mind do not necessarily challenge these dated views of women's emotional natures- as Ophelias. Rather, they enable women to internalise norms and govern themselves more effectively[83]. These prescriptions continue to re-inscribe the view that "mental issues" are, in fact, deeply rooted, highly gendered, and are, ultimately, matters of the female body, which can be cured through normalising, corporeal practices[84, 85]. Likewise, these exercise prescriptions may also be harmful in other ways. As women's medicalised bodies are also tied to consumer narratives around the body beautiful one ought to be cautious of the problematics of over-exercise and body dissatisfaction that may result from such prescribing mental health models. ²⁶

²⁴ See Mindful magazine's interview with Yee: https://www.mindful.org/more-than-just-this-body/

I am indebted here to Simone Fullagar's suggestion that one ought to cautiously celebrate the focus on 'body studies', or 'physical cultural studies' that celebrates the renowned focus on the body, in response to the view of the mind as the privileged partner in the mind-body dualism. From a feminist lens, one might regard the materialisation of women's minds problematic as it binds them to the biological. One must, therefore, separate out the material from the discursive and show how bodies themselves are culturally shaped.

²⁶ I would like to thank the anonymous reviewer for this helpful and insightful point.

In sum, focusing on the different knowledges that have emerged surrounding exercise, madness, and women reveals the rationalities that supported and continue to support physician and wider public health agendas regarding women's exercise prescriptions for mental health and illness. These exercise prescriptions for mental health are profoundly shaped by wider social agendas and views on women's bodies and minds. Even today in the advent of extensive support for exercise for women, views on the role of exercise for the benefit of women's minds and mental health are not simply to be celebrated but rather should continue to be cautiously and critically analysed within socio-political logics of governance. While the discourse may have overtly shifted from 'cause' to 'cure', the subtle message that women's bodies remain a technology of wider public health ought to be critically challenged.²⁷

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