Editorial

A reflection on 3 years of MENPA from the editors: Are we achieving our aims?

In 2008 we set up MENPA to achieve a number of aims. At the end of this third volume, we reflect on how we are doing with respect to those aims.

Interest in mental health and physical activity is not limited to one discipline. Our first aim of MENPA is to foster inter-disciplinary development and understanding of the field of physical activity and mental health. We seek to publish manuscripts that draw from a number of disciplines, both within the same study and across different studies. Within Elsevier’s series of journals concerned with Mental Health we are delighted with the range of content published to date, with input from those with primary interests outside the field of clinical psychology and psychiatry, extending to epidemiologists, exercise scientists, neuroscientists, paediatricians, gerontologists, psycho-physiologists, and other specialisms; and with a range of submissions reflecting the work happening in this field internationally. We have been particularly excited by the engaging and provocative commentaries examining genetic (de Geus & De Moor, 2008; Ekkekakis, 2008), neurobiological (Dishman & O’Connor, 2009) and animal model (Remington, 2009) perspectives on the physical activity and mental health relationship. These each capture the truly inter-disciplinary nature of this field. Other authors have brought an even broader perspective to MENPA with a focus on socio-cultural and social psychological perspectives of the physical activity and mental health relationship (e.g., Hefferon, Grealy, & Mutrie, 2008; Ryan, 2010; White, Kendrick, Davies, & Yardley, 2009). We feel that it is a real strength of MENPA to be inclusive of such a diverse range of perspectives, paradigms and methodologies in the same forum, while maintaining depth and quality.

The present issue includes our usual spot for epidemiological research with data from a large scale survey involving objectively measured physical activity (see Hamer & Stamatakis, 2010). These authors report an association between self-rated health and moderate and vigorous physical activity, but not with physical fitness, objectively assessed sedentary time or light activity. Using accelerometers first of all helps us to eliminate the concern for examining associations between two self-reported measures, and secondly permits an examination of different components of physical activity (i.e., sedentary, light, moderate and vigorous) in a way that self-reported measures struggle to do. The paper follows two previously published epidemiological studies in MENPA that have also involved objectively measured physical activity (Janney et al., 2008; Yoshiuchi et al., 2010). This work is in its infancy; while other research also seeks to explore how the volume of sedentary time is associated with and possibly impacts on physical health (e.g., Type II diabetes), the implications for mental health may be intuitively worth further investigation. Indeed, the TREAD intervention described in this issue by Haase, Taylor, Fox, Thorp, and Lewis (2010) includes a focus on trying to break the downward cycle of inactivity, less energy, depression, more sedentary time, and so on, through counselling delivered by a Physical Activity Facilitator.

Our second aim for MENPA is to foster the development of research designs and methods to advance our understanding. In this respect our mission is underway. Including the present issue, MENPA has now published 4 manuscripts (Haase et al., 2010; Hughes et al., 2009; Jung, Fitzgeorge, Prapavessis, Faulkner, & Maddison, 2010; Maddison et al., 2010) which describe the design and/or intervention underpinning large trials to determine the effectiveness (and perhaps the most urgent gap in this field – cost-effectiveness – see Maddison et al., 2010) of potential treatments for different mental health conditions (i.e., depression in adolescents and adults, and nicotine addiction). It is exciting to see, in the same forum, the detailed description of the respective methods and approaches to health behaviour change. While we may accept that physical activity has mental health benefits, how to encourage an increase in physical activity remains the biggest challenge. The prevalence of pharmacological treatments, in primary care for example, is a testimony to the ease with which practitioners and patients turn to such an approach: Becoming physically active is more challenging and designing an off-the-shelf intervention, acceptable to practitioner and patient is a huge challenge. This challenge must be greater for many individuals with mental health problems; for example, patients with higher depressive symptoms may fail to use the appropriate self-regulatory strategies for exercise in comparison to those with no or fewer symptoms (see Pomp, Lipple, Fleig, & Schwarzer, 2010). Critically sharing the key a priori components of what is a complex intervention (see Faulkner & Taylor, 2009) will enable a more open and careful consideration of what works and what doesn’t. Publishing a design and/or intervention paper prior to reporting the findings will enable others to learn much more about the key processes in facilitating behaviour change, particularly if measures of those processes are also captured, and considered in subsequent analyses.

Alongside descriptive papers of methods and/or interventions we have also published findings from a total of seven pilot trials (i.e., Brown et al., 2010; Foley et al., 2008; Hughes et al., 2009; Kerr et al., 2008; Legrand & Mille, 2009; Marzolini, Jensen, & Melville, 2009) including the one by de Zeeuw, Tak, Dusseldorp, and Hendriksen (2010) in this issue. We see such papers as not
simply ‘small-scale studies’ but as providing essential learning opportunities for the scientific community. Assessing the feasibility and acceptability (to practitioners and patients) of all the steps and components of an intervention and trial is vital to fully inform larger scale studies which are adequately powered to detect statistically and clinically significant effects of an intervention compared with usual care (in a treatment setting).

As editors, we are reluctant to publish manuscripts reporting on randomised trials which do not follow CONSORT guidelines. This includes the reporting of reach (see Glasgow, Vogt, & Boles, 1999) and details of those who do and do not come into a study. Hypothesis testing is a great temptation, to determine if an intervention has been effective, but in many cases may not be appropriate: The simple reporting of effect sizes may be sufficient. Let us take the example of where resources have been scarce for conducting a randomised trial, or where recruitment has been a struggle. In the field of physical activity and mental health research this is very common: The number of funded trials on the effects of physical activity on mental health outcomes is outnumbered by those investigating the effects of cognitive therapies and pharmacological interventions, and studies often lack the desirable quality (see Blumenthal & Ong, 2009; Mead et al., 2009). So, if a small scale trial shows no statistically significant effects of an intervention there is a temptation to reluctantly return the data to the filing cabinet, never to be seen again. This of course leads to bias in systematic reviews, with an inflation of intervention effectiveness.

Far from seeing the limitations of small trials as insurmountable, we openly encourage authors to publish their studies, warts and all. Only by sharing the challenges faced in conducting such research and by reporting the effect sizes from those studies can others learn about best practice and draw on data to calculate sample sizes for larger studies. The study described by de Zeeuw et al. (2010) in this issue reported, with the aid of a CONSORT figure, the numbers engaged at invitation (n = 1075) through to completing assessments at follow-up (n = 27). While no doubt the researchers expected a much greater uptake, the paper provides future researchers with important information about the challenges they may face in studies that focus on reducing sub-threshold depression and preventing the onset of depression in the workplace. We also encourage authors to draw on mixed methods to inform future researchers, including qualitative data drawn from interviews with participants (and practitioners) regarding acceptability and feasibility, for example.

We are increasingly assured that MENPA is filling an important niche among journals reporting studies on mental health and physical activity, and this addresses our aim to bring together shared experiences, for the common good of those able to conduct large rigorous trials. However, it is important that authors, particularly of pilot studies, contextualise their studies within a framework of steps from exploratory to tackling the larger definitive study (e.g., MRC Guidelines for complex interventions; see MRC, 2008). As editors we want to maximise the potential contribution of a manuscript and authors should ideally set out at the beginning of any study (no matter how small or large) with the intention of discovering and reporting processes and outcomes to inform the next level of enquiry. All too often researchers leave data unreported, forced to move quickly onto the next study, which could be seen as an ethical issue: We are bound to maximise outputs from data provided by participants who have given their time to take part in research studies.

The third aim of MENPA is to promote the publication of high quality research on the effects of physical activity (interventions and a single session) on a wide range of dimensions of mental health and psychological well-being. Another important role of publishing details on study design and intervention in MENPA is that there are clearly many opportunities to learn across research that focuses on different outcomes. For example, among the four papers published to date that report on the rationale and design of trials and/or interventions, two have been concerned with depression (Haase et al., 2010; Hughes et al., 2009), and two with nicotine addiction (Jung et al., 2010; Maddison et al., 2010) as the primary outcome. Increasingly, there is interest in moving away from simply sending someone to an exercise facility for structured exercise, perhaps lasting 10 weeks, with a shift towards exploring how best to facilitate increases in sustainable physical activity for enhancing mental health. As this happens, it is imperative that researchers delineate their physical activity counselling interventions from traditional cognitive-behavioural therapies, to avoid utter confusion for those conducting reviews in the future on the effectiveness of physical activity (exercise) and other talking therapies. Certainly, MENPA is fulfilling its aim to bring together members of the scientific community who are independently conducting research on the effects of physical activity on a range of mental health outcomes, but there is scope to involve researchers working with populations across the lifespan. We have received few submissions that specifically focus on children and youth (Azar, Ball, Salmon, & Cleland, 2008; Moksnes, Moljord, Espnes, & Byrne, 2010; Pesce, Crova, Cerrettini, Casella, & Bellucci, 2009; Rodriguez, Dunton, Tscherner, & Sass, 2008) and older people (Legrand & Mille, 2009; Moonen, van Boxtel, de Groot, & Jolles, 2008; Yoshiuchi et al., 2010) and welcome further submissions addressing physical activity and mental health during these age periods.

Within the context of trying to facilitate increases in daily physical activity (rather than structured exercise) there is a need to understand the minimal doses of physical activity that enhance dimensions of psychological well-being. For example, is a daily dose of three 10 min brisk walks, a behavioural goal which is potentially more sustainable, equally effective as the more traditionally investigated block of 30 min or more of structured exercise? To date only two papers (Everson, Daley, & Ussher, 2008; Pesce et al., 2009) have been published in MENPA which involve what might be described as pre-clinical research (in the laboratory), involving the effects of a single session of exercise. We encourage submissions of this nature as long as there is a clear conceptually-driven choice of outcome measures (see Ekkekakis, Hall, & Petruzzello, 2008) and there are clear translational implications for clinical populations.

The fourth aim of MENPA is to promote high quality research on the biophysical and psycho-social mechanisms involved to help our understanding of the link between physical activity and mental health, and guide intervention development. The dose of physical activity that mediates change in mental health outcomes is an important issue, and without an understanding of how such changes occur, then interventions may not be sufficiently sophisticated to optimize any effects. A number of manuscripts published in MENPA have involved mediation analysis to unpick how physical activity impacts on mental health outcomes (e.g., Foley et al., 2008; Opdenacker, Boen, de Bourdeaudhuij, & Vanden Auweele, 2008; Rodriguez et al., 2008). While the mediating processes that are involved in changing physical activity behaviour have been considered (see Cerin & Mackinnon, 2009), we are not aware of any methodological paper on how best to conduct mediator analysis to aid our understanding of what biophysical and psycho-social processes mediate the link between physical activity and mental health outcomes. We expect the invited tutorial (see Cerin, 2010) in this issue to be an extremely useful guide for future researchers, and we have already referred authors submitting to MENPA to this paper. You may well have other ideas that would help MENPA to achieve its aims, and we welcome reader proposed tutorials or commentaries on any topic.

We expect that many of the papers we publish in MENPA will adopt a quantitative approach with authors working within a positivist paradigm. However, we have already published one qualitative paper (see Hefferon et al., 2008) and in the current issue we publish...
MenPA's first book review (see Gorczynski, 2010). The book by Carless and Douglas (2010) provides an excellent opportunity to assess the contribution of qualitative research in understanding the potential of physical activity to enhance mental health and to explore how this happens across a range of mental health conditions. As the commentary by Whitelaw, Teuton, Swift, and Scobie (2010) reminds us, it is best not to see the relationship between physical activity and mental health as a ‘given’; rather, it may only be realised in association with a series of conducive ‘change mechanisms’. This is in line with recommendations to adopt a process-oriented approach to understanding mental health benefits through physical activity participation (Faulkner & Carless, 2006). Qualitative approaches may be particularly well-suited for such investigations.

Our final aim is to provide an evidence-based source for professionals working in the field of mental health. Our publication of systematic reviews (e.g., Azar et al., 2008; Wright, Everson, & Taylor, 2009) is an obvious start in addressing this aim in providing transparently executed syntheses of the research literature on specific questions of relevance to practitioners, researchers, and policymakers. MenPA supports several initiatives to enhance the reporting of biomedical research. Authors are directed to checklists for a number of study designs, including randomised controlled trials (CONSORT) (http://www.consort-statement.org/index.aspx?o=1031), systematic reviews (PRISMA) (http://www.prisma-statement.org/) and how to conduct a systematic search (see the Cochrane Reviewers’ Handbook (http://www.cochrane-handbook.org/) and meta-analyses (MOOSE) (http://www.consort-statement.org/resources/downloads/other-instruments/). Authors can also refer to the EQUATOR network website (http://www.equator-network.org/index.aspx?o=1032) for further information on reporting guidelines for health research. We will also continue to disseminate relevant reviews from the Cochrane Library (http://www.mrw.interscience.wiley.com/cochrane/) as part of our Cochrane Corner series.

Overall, we are satisfied with our progress in addressing our initial aims in establishing MenPA and excited by the journal’s potential to achieve its aims. We invite proposals for guest-edited, special issues of MenPA. Potential contributors to MenPA are also always welcome to contact us directly to discuss the suitability of a manuscript before making a formal submission. We believe in a triage approach to editorial work — in simple terms, we will only send out submissions for review that we consider have a strong probability of being published — in terms of quality, but also in relation to the mandate of MenPA as described in our first editorial (Taylor & Faulkner, 2008).

As always, we remain indebted to our editorial board members and reviewers for their careful and timely contributions that are essential to the progress of MenPA. In looking to the future, we thank Stuart Biddle (Loughborough University, UK), Jennifer Etnier (Loughborough University, USA), and welcome aboard Ester Cerin (The University of Hong Kong), Stephen Graham (University of North Carolina, USA), and Suptendra Sarbadhikari (PSG Institute of Medical Sciences and Research, India) for their involvement with our progress in addressing our mandate of MenPA as described in our first editorial (Taylor & Faulkner, 2008).

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