THE RESEARCH REPORT

Negotiating Sleep: Gender, age and social relationships amongst couples

Background
Over the last decade a growing body of sociological literature has highlighted how sleep is an irreducible and multifaceted phenomenon (Williams 2002; Meadows 2005), involving both physiological and sociological concerns. Although sleep exists as a near universal biological imperative, issues of sociological importance include the temporal dimensions, social patterning and ‘doing’ of sleep (Williams 2002: 173). When, where and how we sleep are all, ‘to a considerable degree, socio-cultural matters’ (Williams 2002: 178).

Despite this literature ‘waking’ sociologists up to the importance of the topic, prior to October 2003 only one sociologically focused study had been published. This study examined mid-life and older women’s sleep patterns, demonstrating how women ‘negotiate’ between their own sleep desires and expectations, their social role(s) and the social context of their lives (Hislop and Arber 2003). The reality of women’s sleep was shown to be one in which women prioritise their partners’ sleep above their own. The interaction of the physical and emotional labour involved in caring for children and teenagers, and the worries and concerns associated with family responsibilities, work, and caring for ageing parents compromised women’s access to quality sleep (Hislop and Arber 2003). Sleep, it was suggested, offers a ‘window’ onto the gendered nature of our lives (Hislop and Arber 2003: 695).

The present study sought to build on this earlier work in three ways: firstly, to fully understand the extent to which sleep is ‘negotiated’ and the ways in which gender roles and relationships may influence sleep, couples’ sleep and the interaction between bed-partners. Hislop and Arber’s study gained information solely from women aged 40 and over yet when...
investigating gender the relational dimensions should always be kept in view (Carpenter 2000). A focus on couples’ sleep enables the investigation of both men and women’s sleep perceptions, understandings and realities, as well as how these interact within dyadic social relationships. Secondly, as gender and age are intrinsically linked (Arber and Ginn 1995), a life-course approach needs to be adopted. The birth of children and children’s divergent demands as they age, for example, may alter gender relations and dynamics. Finally, an embodied approach enabled investigation of such things as individual desires and motivations, shared understandings, audiences, public morality, skills, power, time and emotions in a way which is sensitive to sleep being both a biological phenomenon and a time of interaction. This embodied approach should be accompanied by a methodological stance which ‘mixes’ physiological measurement with sociological inquiry through a multidisciplinary approach.

Reflecting these three points, the present study had the following objectives:

Objectives

a) To investigate the inter-relationships between the sleep patterns of partners: (i) to identify any differences between partners’ sleep behaviour, (ii) to see how each partner’s sleep affects the other, (iii) to ascertain any differences in perceptions of ‘sleep needs’ and ‘sleep rights’, both their own and their partners’, (iv) to identify how each partner justifies (or not) their sleep reality.

b) To examine how findings under objective (a) are associated with changes across the life course according to chronological age and ‘life events’, such as marriage, ages of children and changing work demands.

c) To understand and explain any gender differences identified under objectives (a) and (b), in terms of modes of embodiment and the nature of roles each partner plays in paid and domestic work.

d) To integrate physiological knowledge about sleep (i.e. actigraphy measurement) with sociological understanding and examine the physiological impact each partner has on the other during sleep.

To achieve these objectives the following methods were employed:
Methods

As detailed in the original application, research was conducted on 40 heterosexual couples aged 20-59, stratified by age and whether children lived at home. The sample design involved recruiting 10 couples in each of the following groups: <40 with children, <40 without children, >40 with children, >40 without children, according to age of male partner.

The sampling strategy that was employed differed from the approach outlined in the original proposal. In the reviewers’ comments on the original proposal, concern was expressed about recruiting participants from two large work places in terms of resulting biases in the sample composition. Therefore, a mixed method of recruitment was employed which identified sample participants from a range of sources. Recruiting methods included hand delivering flyers around estates in the South East of England (eliciting an average response of 1 couple per 100 flyers), mail shots to local groups, such as swimming clubs, and standard snowball techniques. Particular attention was paid to ensuring that the final sample comprised a broad spread of couples in terms of socio-economic status, and employment status of the female partner. Since the data collection was very demanding (as indicated below), an honorarium of £100 was paid to each participating couple.

Following pilot work, the following data were collected from the 40 sample couples:

(i) Qualitative interviews with couples: Tape-recorded, in-depth interviews conducted with 40 couples (married/cohabiting), lasting approximately 90 minutes. Couple interviews were conducted in the couple’s home jointly by a male and female interviewer.

(ii) Audio Sleep Diaries: Individual sleep diaries (N=80) were collected for one week immediately after each couple’s interview. Each partner recorded each morning, on a Dictaphone, a description of the previous night’s sleep, any factors influencing the quality of their sleep, and the way their sleep may have influenced performance during the day.

(iii) Actigraphy: Actigraphic measurements were recorded for each partner during the week immediately following the couple’s interview. The actigraph is a watch-like device worn on the wrist, which generates a signal voltage each time a movement occurs. The data set includes 80 weeks of actigraphy, or 560 nights.
(iv) **Qualitative interviews with each partner** (N=80): Follow-up, tape-recorded, in-depth interviews were conducted (4-6 weeks after the couple interview), simultaneously with each partner within the couple (gender matched).

(v) **Questionnaires:** Each partner completed validated sleep questionnaires including the Pittsburgh Sleep Quality Index (PSQI), Horne-Ostberg, and Epworth Sleepiness Scale. These scientifically validated questionnaires measure sleep quality, diurnal preference (morningness-eveningness), and sleepiness.

In addition to the data specified in the original proposal, we extended the study by collecting additional physiological data:

(i) **Buccal swabs** were collected from each participant (N=80), to analyse the association between diurnal preference and circadian genotyping - the clock gene *hPer3*.

(ii) A pilot exercise was conducted with three couples for 3 nights to ascertain the feasibility of couples wiring themselves up with Electroencephalogram (EEG) monitors in the home environment.

These additional data sets were collected in order to strengthen the multi-disciplinary nature of the study and, more specifically, to further address objective d). As an example, a recent article in the journal *Sleep* reported that part of a gene, Per3, can be shown to be linked to delayed sleep phase syndrome and a person’s diurnal preference; that is whether they are a ‘morning’ or ‘evening’ type (see Archer *et al.*, 2003). Around the time of this publication Archer also undertook an outreach project entitled ‘Engagement of the Public in the Discussion and Investigation of the Importance of the Circadian Body Clock for Diurnal Preference and Sleep-Wake Timing in Modern Society’. Adding the buccal swab data (to measure the *hPer3* gene) to the qualitative narratives and diurnal preference questionnaire allows for complex analysis of the ways in which visceral aspects of the body are understood, constructed and experienced by individuals.

**Ethics**

A favourable ethical opinion was obtained from the University of Surrey Research Ethics Committee. In addition, amendments to the protocol were approved which allowed for the collection of buccal swabs and the pilot exercise of home EEG, as detailed above. All
participants provided written informed consent. All data and documentation relating to the study have been stored securely in a metal filing cabinet and will be kept for 5 years. All measures have been taken to ensure anonymity and confidentiality. With respect to the potentially sensitive nature of the topic, researchers sought advice from a couple’s counsellor at the beginning of the study.

Analysis
For the data sets outlined in the original proposal, analysis of the qualitative transcripts (40 indepth couple interviews, 80 individual indepth interviews, 80 audio-sleep diaries) was conducted using Nvivo. As the sociology of sleep is an emerging field, Grounded Theory (Glaser and Strauss 1967) was employed to analyse the qualitative data using the constant comparative method, which requires that data collection and analysis is an interactive process. Analysis of the actigraphic data was conducted using Sleep Analysis 5 software. Two experienced users independently analysed the data. Analysis programmes were also developed in-house (see results section below). Qualitative and quantitative data were integrated by identifying “threads” which were common to both (Moran-Ellis et al 2006). Threads which were different were also explored.

The pilot exercise collecting EEG for 3 couples provided a total of 18 nights of EEG. These were scored by an experienced sleep stager, using recognised and established techniques and software. The buccal swab and genotyping analysis is ongoing and work is being carried out in collaboration with Dr Simon Archer of the School of Biomedical and Molecular Sciences at Surrey.

Methodological innovations
In meeting the objectives outlined above, the present study developed three innovative methodological techniques. Firstly, there was an attempt to acquire 3 nights of unattended home EEG recording, with subjects being taught by Meadows and Venn how to attach the electrodes themselves on night 1. For nights 2 and 3, the couple were left completely unattended (although they could telephone for verbal assistance). On all 3 mornings, the couples used audio diaries to record their individual thoughts about their sleep. Previous studies that have reported unattended home EEG recordings have tended to only collect a single night of recording, with a certified technician attaching the electrodes and checking the signal impedance. Data were obtained from 3 couples, and, of the possible 18 nights of
data, complete data were captured on 10 nights, enabling an experienced scorer to stage
sleep according to the standard criteria; a further 4 nights had partial recordings
(approximately 5 hours duration) and 4 were not able to be staged for the most part. In the
4 records that had partial recordings, the data were lost after the subjects had got out of bed
for whatever reason. The results were published in a letter in the premier U.S. journal, *Sleep.*

Secondly, a novel way of using actigraphy to examine couples’ sleep was developed. Despite
the measurement of activity being used in human sleep research since 1959 (see Stanley
2003), actigraphy had rarely been used to investigate couples’ sleep. This is largely because
of the difficulties of using actigraphic methods to directly compare and contrast two
individuals’ sleep records. It is also because couples’ sleep is an area much neglected within
physiological literature (Strawbridge et al 2004). Several established methods used for
analysing dyadic actigraphic data were examined for accuracy and usefulness against audio
sleep diary data. Through this critical assessment a new method of analysis was constructed.
This method used a validated and established algorithm to identify four states; that is
whether a person was ‘asleep and moving’, ‘asleep and not moving’, ‘awake and moving’ or
‘awake and not moving’. With this information, bed partners’ records could be examined to
see what state one partner was in immediately prior to the other waking and therefore asses
which partner was more likely to disturb the other during the night. This was published in
the *Journal of Sleep Research* and has led to other users (e.g. in Canada) requesting access to the
programmes developed.

Finally, the use of audio diaries was further evaluated and developed. Considered a non-
conscious activity, sleep takes place in most cases at night within the private domain of the
home and is thus generally inaccessible to the social researcher and outside the conscious
reality of the sleeper. In exploring the social aspects of sleep, we rely primarily on
respondents’ interpretations of the sleep period given retrospectively in focus groups and in-
depth interviews, distanced from the temporal, spatial and relational dimensions of the sleep
event. A systematic review of audio data from this study (and another) led to the conclusion
that the use of audio diaries is a viable means of capturing and understanding experiences of
sleep, enabling the researcher entry to an otherwise hidden private phenomenon. Through
audio diary narratives, respondents not only provide factual information about their sleep
patterns and the quality of their sleep, but ‘paint’ pictures of their lives. Seen through the
frame of reference of the respondents, audio diaries provide insights into roles and
relationships, and life events and transitions which impact on everyday life. In the absence of 'real time' access to and observation of respondents' sleep, audio diaries provide an invaluable resource for the researcher through which to interpret the experience and meaning of sleep in its social context. This article on the use of audio diaries was published in *Sociological Research Online*.

**Key substantive findings**

Since the research objectives are inter-related, the following discussion is framed around a series of key themes and findings which have emerged from our ongoing analysis of the data.

*Gendered understandings of sleep*

In many respects men and women defined sleep in similar terms. However, residing alongside these shared understandings was the suggestion that some aspects of sleep are distinctly male and other aspects are distinctly female. For example, both men and women suggested that women ‘sleep lighter’, and are ‘programmed’, because of their nurturing role, to view sleep as more essential. Men on the other hand, especially according to women, ‘need to sleep longer’. These differences were presented by the respondents as ‘neutral’, biological fact. However, at times they appeared overtly bound up with the reproduction and sustaining of social meaning (‘women don’t sleepwalk, they’re too considerate’).

*Gendered attitudes towards sleep*

Men and women differed as to why they considered sleep as an important part of their lives. Women were more likely to discuss sleep in terms of ‘corporeal pleasure’, feelings and emotions. ‘I like sleep’, without sleep I ‘am half a person’ and ‘I really enjoy it!’ were sentiments commonly expressed by the women. For the large majority of men sleep was deemed important because of its perceived relationship with *function*. Men more often than not offered discourses such as ‘If I don’t have a good night’s sleep, I know it at work’ or ‘[sleep is] critical for functioning in my job’. Framed around the schema outlined in the original proposal, men appeared to be considering sleep at the level of *Pragmatic embodiment* and intrinsically linking it to the maintenance of a normal, functioning, everyday body.

Women also appeared to more proactively care about their sleep. A large proportion of the women gave lucid and lengthy descriptions about how to improve their sleep, discussing such things as lighting exotic candles, utilising relaxation techniques and enjoying hot bubble
baths. When asked to rank sleep, work and leisure in order of importance women were almost eight times more likely than men to list sleep first. Despite viewing sleep as important, many of the men suggested that ‘there are more important things to worry about than your sleep’. They also struggled to think of ways that sleep could be improved, suggesting that they had rarely considered or cared about their dormancy.

Men were able to reconcile these two disparate claims (sleep=important; sleep not cared about) because, for them, sleep is perceived as a biological imperative which resides within the body. Although it was believed that this biological drive could be manipulated or moulded to a certain extent, the men stated that sleep will inevitably occur no matter what, creating a situation where the body cares (or should care) about whether the ‘correct’ (healthy) amount of sleep is obtained, and the ‘I’ does not necessarily have to.

Sleep timing
Results from the Horne and Ostberg questionnaire, which measures diurnal preference (eveningness/morningness) suggest that the large majority of couples do not want to go to bed at the same time. Women’s desired bedtime was earlier than their male partner’s. However, the magnitude of this difference between partner preferred bedtimes depended on differences in diurnal preference. Despite this difference in preferred bed times, analysis of the actigraphy data suggested that male and female partners usually go to bed at similar times, especially on weekdays. Lights were usually switched off, ready for sleep, together. Thus at least one person in the partnership is going to bed at a time that they do not wish to.

In couples with similar diurnal preference, the female partner initiated the bedtime routine. In couples with different diurnal preference women, to a much larger extent than men, were going to bed later than they actually wanted to. With respect to waking, in the majority of cases male partners rose before their female bed fellows; regardless of diurnal preference.

Sleep disruption: snoring
Snoring was a topic frequently raised by one or both partners within a couple and the way it was raised was itself instructive. Whilst the men openly discussed their own snoring, the women who snored appeared embarrassed to reveal it and did so either reluctantly, only when asked directly, or not at all. In the latter cases it was left to their partners to reveal their snoring for them, which caused the women considerable embarrassment.
Many women felt stigmatised by the label ‘snorer’. Where the male partner had revealed his wife’s snoring, this sense of being stigmatised was often accompanied by a feeling of betrayal. In essence, snoring was not compatible with women’s notion of acceptable femininity, in part because it conflicted with their ideals concerning appropriate female bodies. Contrary to this, male snorers were often blasé about their snoring, perceiving it as something they could do little about. Implicated within this was men’s understanding of sleep as a biological imperative and as something akin to a ‘pre-social’ phenomena. These gendered conceptions were, in many respects, shared understandings. The majority of men reinforced their partners’ embarrassment about snoring, whilst many of the women justified their husbands’ snoring through redress to biological imperatives and a lack of control: ‘he can’t help snoring’; ‘he is oblivious to it all’.

There was also a difference in the ways in which the male and female participants dealt with their partner’s snoring. Women who suffered disrupted sleep due to partner snoring developed three strategies for dealing with this: ‘prodding and nudging’; ‘passivity’ and ‘relocation’. A key aim within all three strategies was the desire not to disturb their male partners’ sleep. For example, ‘prodding and nudging’ involved moving the partner off his back or manipulating him so that he entered a lighter stage of sleep. This could be a time consuming tactic, actually prolonging women’s own wakefulness and consequently subjugating their own sleep needs. These tactics were also temporally specific and reactionary, giving the impression that the issue was being dealt with, but doing nothing to actually prevent the problem. In this respect women’s strategies essentially played a role in perpetuating their own sleep disruption. Men, on the other hand, were more intent on finding strategies which did not disturb their own sleep: ‘I actually feel that prodding her wakes me up more’. The men’s responses to their partners’ snoring were often more ‘violent’, a word that they used themselves.

Sleep disruption: the fourth shift

As expected, children impacted negatively on parental sleep. Young children woke at night largely as a result of physical needs, such as hunger or illness, with a gender divide in the way mothers and fathers responded to this wakefulness. A majority of the mothers with younger children continued at night to undertake similar physical activities to those they undertook
during the day. For example, they changed children’s duvets and settled upset children back to bed.

However, it was not only physical caring activities that continued at night for the women in this study. Building on Mason (1996) and Hochschild (1989, 2001, 2003) we propose that a ‘fourth shift’ can be said to exist, where the previous two shifts of paid employment/ household duties and child care, and a third shift of caring, or ‘sentient activity’ (Mason 1996), are continued at nighttime. At night, mothers are hearing, noticing and being attuned to the needs of their children, often leaving these women with significantly disrupted sleep.

For the mothers, the physical demands made on them at night declined as their children grew older, but the sentient activity they undertook did not. Those mothers with older children were, at best, as likely as the mothers of young children to be listening out for them in the night, and, at worst, considerably more deprived of sleep than when their children were younger. For example, mothers were kept awake worrying about their children’s financial difficulties, when they are coming home and who they were with.

In direct contrast, the fathers of young children were much less likely to be as intensely involved in nighttime sentient or physical caring activities, with most of them sleeping through nighttime disturbances. The only notable exception to this was when the children were older and more independent. At this point several of the fathers engaged with a sense of responsibility for safety of their young adult children when they were out late at night, linked to their self perceived role as family protector.

Sleep disruption: work stress and work constraints

The discussion above of snoring and the fourth shift is not meant to suggest that men never experience disturbed sleep. Within the present study, 25% of the men indicated on the Pittsburgh Sleep Quality Index Questionnaire that they had ‘fairly bad’ sleep in the month preceding the interview. This could not be explained either by their age, or by their number of children: for example, the largest proportion of ‘very good’ male sleepers was in the <40 with children category.
Rather, the primary cause of these men’s broken or intermittent sleep was work constraints and/or work stress. The relationship between perceived sleep quality and work needs to be situated alongside men’s understanding of sleep as necessary for functioning. Linking sleep and function creates a complex relationship which manifests itself in several ways. For example, the men felt they needed enough sleep to enable functioning but not so much that it infringed upon the time dedicated to ‘doing’. Likewise, many of the men believed that they needed more sleep when performing certain aspects of paid labour, but the timing, scheduling and demands of this paid labour could be the very thing reducing their hours of sleep. Returning to the schema outlined within the original proposal, the only possibility of experiencing the physical self open to some men may be at the margins and interstices of working life.

Reflecting these men’s belief that sleep was a ‘biological imperative’ which could be moulded to some extent, solutions to these sleep difficulties included ‘trying to relax’, ‘simply getting used to it’, and ‘making up for it the following night’. Their orientation was to usually attempt to remedy their daytime tiredness and not the actual cause of their sleep disturbance (work stress and/or work constraints). For example, one male attempted to alleviate his daytime somnolence by drinking Red Bull. When this failed, he visited his G.P., primarily because he believed that his daytime tiredness may be linked to diabetes. Finally, he found that ‘keeping active’ was the answer. Although female partners were undoubtedly aware of the men’s disturbed sleep, they were rarely mentioned or implicated within the men’s narratives about their ‘fairly bad’ sleep.

Non-negotiation, power and an agreed hierarchy of sleep rights

Couples rarely explicitly talked through or ‘negotiated’ aspects of their sleep. Instead shared assumptions existed which meant that dialogue was either unnecessary or minimal. A key component of these shared assumptions was an agreed hierarchy of ‘sleep rights’. Although many of the men and women differed in their attitudes towards sleep, it was universally agreed that sleep linked to function, and especially paid labour, was most important. This was even the case where the female partner strongly discussed the importance of sleep in terms of corporeal pleasure, feelings and emotions.

Thus, the ‘negotiation’ that led to mothers taking on the role of having sole responsibility for the fourth shift of nighttime care (see above) was, for the most part, implicit (‘there is this
understanding that I have got a lot of travelling to do’). Even where the couples suggested that there had been a discussion, this was framed around these agreed assumptions (‘it was accepted he is the one that works all day, so he is the one that needs his sleep at night’).

These assumptions could become blurred, for example, when both partners worked full-time. However, when women returned to work, there was seldom ever a re-negotiation of nighttime responsibilities by the women, leaving them continuing to undertake both aspects of the fourth shift (physical and sentient). This often led to frustration and resentment among the women in this study. In an attempt to justify this situation many of the men referred back to the ‘biological fact’ that women sleep more lightly than men. Similarly, the disruptions of being woken by their partners’ alarm clock were largely accepted by women. Female respondents suggested that being woken by their male partner is ‘legitimate’ or ‘justified’ if linked to the process of getting up for work.

However, the right afforded appeared restricted to a ‘reasonable’ amount of nocturnal sleep. For example, more vocal conflict could arise where the male partner naps during the day. Paradoxically, many men also see their napping as undesirable, as it conflicts with the assumptions inherent within their sleep/function construction. However, men often attempted to legitimise their napping by suggesting that they had been over exerted at work.

Reflecting Gramsci’s notion of hegemony, through accepting the primacy of paid labour these women are ‘consenting’ to being subjugated rather than being coerced. Yet paid labour is also the primary cause of men’s sleep disturbance.

**Dissemination activities**

A key priority of this project was to disseminate findings to both social scientists and practitioners, as well as the general public via the media. Over 40 papers have been presented at national and international conferences and journal articles have been published in both sociological and sleep science journals. A special issue of *Sociological Research Online* is being edited on ‘Sleep, Gender and the Life Course’ containing 3 articles based on the project. See Appendix A to C for full details of dissemination activities.

The results of the research have also been disseminated through the ESRC seminar series on ‘Sleep and Society’, which is jointly organised by Simon Williams, Warwick, and Sara Arber (2004-2006). Six seminars have been held with a final seminar on 8th December 2006. These
seminars have attracted a range of non-academic users. A one day seminar was also organised in conjunction with the British Sleep Society on ‘Reconceptualising Sleep: The Contribution of the Social Sciences’ at Surrey, 15th June 2004, which included presentations on the ESRC research. It was attended by a range of non-academic users

**Impacts**

One of the most significant impacts of our project has been to increase awareness of the issues surrounding shared sleeping environments. Following discussion with the project team, the British Sleep Apnea and Snoring Association (http://www.britishsnoring.co.uk/), devised an on-line questionnaire examining the impact of snoring within couples. The project has stimulated an interest in studying ‘normal’ sleep in everyday social contexts, with invitations to give talks on this topic to doctors and sleep specialists, including anaesthetists, clinical pharmacologists and ENT specialists.

The project has led to a growing interest in the use of qualitative methods in sleep research, particularly in insomnia research and management.

**Conclusions and future research priorities**

Through the investigation of couples’ sleep the present study has added to empirical understandings of the social aspects of sleep. It has reinforced the notion that sleep offers a window onto the gendered nature of our lives and is, therefore, both a topic of interest in itself and a resource for investigating wider sociological issues.

The project has also confirmed the value of multi-disciplinary research. This is being taken forward in two projects currently being led by Professor Arber: 1) an E.U. Marie Curie Research Training Network which trains new and experienced researchers in sociological and biomedical aspects of sleep research (2005-2009); 2) a collaborative project as part of the New Dynamics of Ageing programme which addresses ‘optimising quality of sleep among older people in the community and in care homes’ (2006-2010). The latter project will extend and ‘join up’ strategically targeted areas of sleep research relevant to understanding and improving autonomy, active ageing, and quality of later life, through an interdisciplinary research team comprising academic partners from six disciplines and four institutions.
References


Appendix A

Publications and Conference Presentations

Journal articles


Book chapters

Letter to journals

Special issue of journals
Special Issue of Sociological Research Online on ‘Gender, Sleep and the Life Course: A Sociological approach’, edited by Sara Arber, Jenny Hislop and Simon Williams. This Special Issue, comprising an Editor’s Introduction and 14 articles, is scheduled for publication in July 2007. Articles by project team include:

Hislop J. ‘A bed of roses or a bed of thorns? Negotiating the couple relationship through sleep’

Meadows R. ‘Male bodies and sleep quality’

Venn S. “It’s Okay for a man to snore’: The influence of gender on sleep disruption among couples’
National Conference and Seminar presentations

‘Negotiating Sleep: Gender, Age and Social Relationships Among Couples’, Surrey Sleep Research Centre Seminar Series, University of Surrey, December 2003 (Meadows)

‘Researching the Real World of Women’s Sleep’ Surrey Sleep Research Centre Seminar Series, University of Surrey, February 2004 (Hislop)

‘Sleep in the real world: A Sociological Perspective’. Invited presentation to Department of Sociology, University of Swansea, February 2004 (Hislop)

‘Integrating the Physiological and the Social: Couples’ Sleep’, British Sleep Society Special Interest Group Seminar, University of Surrey, June 2004 (Meadows)

‘Understanding Sleep in Everyday Life’ British Sleep Society Special Interest Group Seminar, University of Surrey, June 2004 (Arber)

‘Negotiating Sleep Amongst Bedpartners, Invited speaker at British Sleep Society Annual Conference, Cambridge, September 2004 (Venn)

‘Male Bodies and Sleep: Sleep Hygiene messages and pragmatic concerns’ British Sleep Society Annual Conference, Cambridge, September 2004 (Meadows)

Invited Expert member of panel Discussion on Sleep, Dana Centre, Science Museum, London, October 2004 (Arber)

‘The trajectory of women’s sleep across the life course’, British Sociological Association Annual Conference, University of York, March 2005 (Hislop)

‘A gendered exploration of night time caring within couples’ British Sociological Association Annual Conference, University of York, March 2005 (Venn)

‘Getting at men: Engaging and Grappling with sleep’, ESRC ‘Sleep and Society’ Seminar Series, University of Surrey, April 2005 (Meadows)

‘Gender by Night: The Social Context of Women’s Sleep’, ESRC ‘Sleep and Society’ Seminar Series, University of Surrey, April 2005 (Hislop)

‘Gendered approaches to sleep disruption in couples’, ESRC ‘Sleep and Society’ Seminar Series, University of Surrey, April 2005 (Venn)

‘Understanding the social context of “normal sleep”’. Invited presentation as part of National Stop Snoring Week, British Medical Association, London, April 2005 (Arber)

‘Sociological research on sleep: New insights and approaches’. Invited speaker to Institute of Social and Economic Research, University of Essex, June 2005 (Arber)

‘Sleep Narratives, the body and (positioned) masculine identity’, *British Sociological Association Medical Sociology Conference, York*, September 2005 (Meadows)

‘Oxymoron, paradox and the bleeding obvious: do we need a sociology of sleep?’ Invited speaker at *University of Surrey, Department of Sociology Research Seminar Series*, October 2005 (Meadows)


‘Negotiating Sleep: Gender, age and social relationships amongst couples’, *British Sleep Society Annual Conference, Cambridge*, September 2005 (Meadows)

‘Sleep, health and gender inequalities – a new perspective’. Invited speaker at *Gender Inequalities in Ageing Societies conference, Queens’ College, University of Cambridge*, October 2005 (Arber)

‘Lay understandings of Sleep (Hygiene): A gendered phenomenon?’ Invited speaker at *Sleep and Society Seminar Series, Sleep and Health, Warwick*, December 2005 (Meadows)


‘The impact of teenagers in the family on parental sleep’, *British Sleep Society Annual Conference, Cambridge*, September 2006 (Poster presentation: Venn)


‘Sleep and health: Gender and inequalities in sleep’. Invited keynote to *British Society of Rehabilitation Medicine Annual Conference, Loughborough University*, November 2006 (Arber)

‘Mixed Methods or Mixed Messages: Combining actigraphic and qualitative data in sleep research’. Invited presentation to joint *University of Oxford, Oxford Brookes University* seminar series on ‘Methodological issues in qualitative research on health’, May 2007 (Meadows)
International Conference Presentations

‘Research approaches to the sociological study of sleep’. Invited presentation to Department of Sociology, University of Victoria, British Columbia, Canada (Arber)

‘Understanding women’s sleep management: A sociological perspective’. Invited presentation to Satellite Symposium on ‘Sleep and Aging Women’, European Sleep Research Society Conference, Prague, October 2004 (Hislop)

‘Assessing couple’s sleep: the use of actigraphy with and without audio sleep diaries’, European Sleep Research Society Conference, Prague, October 2004 (Poster presentation: Meadows)

‘A gendered perspective on snoring in couples’, European Sleep Research Society Conference, Prague, October 2004 (Poster presentation: Venn)

‘Researching sleep among couples across the life course’. Invited presentation to Social Policy Research Centre, University of New South Wales, Sydney, February 2005 (Arber)


‘Gender, caring and power influences on the approach to sleep disruption within couples across the life course’, European Sociological Association Research Network on Sociology of Families and Intimate Lives, Lisbon, March 2005 (Venn)

‘Negotiating sleep among couples across the life course’. Invited presentation to Sleep-Wake Research Centre, Massey University, Wellington, New Zealand, March 2005 (Arber)

‘Sleep as a social act: A window on gender roles and relationships’. Invited presentation to Alma Unit for Research on Ageing, Wellness Promotion Unit and School of Social Sciences, Victoria University, Melbourne, Victoria, Australia, March 2005 (Arber)

‘A bed of roses? Negotiating the couple relationship through sleep’, European Sociological Association (E.S.A) Conference, Torun, Poland, September 2005 (Hislop)

‘Men’s Health and Sleep: Lessons from sociology?’ Invited speaker at 5th Ageing Male Congress, Salzburg, February 2006 (Meadows)

‘Methods for analysing intra-individual and couple stability and inter-individual and couple variation in dyadic actigraphic data’, European Sleep Research Society Conference, Innsbruck, Sept 2006 (Poster presentation: Meadows)

‘Exploring the nighttime world of teenagers’, European Sleep Research Society Conference, Innsbruck, Sept 2006 (Poster presentation: Venn)

‘Sleep and Health: Gender, socio-economic circumstances and inequalities in sleep’. Invited keynote for *European Public Health Association (EUPHA) Conference, Montreux, Switzerland, November 2006* (Arber)
Appendix B

Special Issue of Sociological Research Online

‘Gender, Sleep and the Life Course: A Sociological Approach’.

Guest Editors: Sara Arber, Jenny Hislop and Simon Williams

Forthcoming in July 2007

Editor’s Introduction by Sara Arber, Jenny Hislop and Simon Williams
(University of Surrey, Keele University and University of Warwick)

1: Jan Pahl
(University of Kent)
Sleep, power and inequality within families

2: Sara Arber, Marcos Bote and Rob Meadows
(University of Surrey)
Gender and quality of sleep across the life course

3: Simon Williams, Pamela Lowe and Frances Griffiths
(University of Warwick and University of Aston)
Embodying and embedding children’s sleep: some sociological comments, connections and reflections

4: Luci Wiggs
(Oxford Brookes University)
Are children getting enough sleep: Implications for parents?

5: Jo Moran-Ellis and Susan Venn
(University of Surrey)
Populated night worlds: Children, teenagers and sleep

6: Jenny Hislop
(Keele University)
A bed of roses or a bed of thorns? Negotiating the couple relationship through sleep

7: Susan Venn
(University of Surrey)
‘It’s Okay for a man to snore’: The influence of gender on sleep disruption among couples

8. Pam Lowe and Simon Williams
(Aston University and University of Warwick)
Who are you sleeping with? The construction of heteronormativity in stories about sleep in the British Newspapers
9. Sharon Boden, Clive Seale, Deborah Steinberg, Simon Williams  
   (Keele University, Brunel University and University of Warwick)  
   Sleep, gender and consumption; Contradictions of the bedroom as a commercial space

10. Rob Meadows  
    (University of Surrey)  
    Male bodies and sleep quality

11. Eileen Fairhurst  
    (Manchester Metropolitan University)  
    Theorising sleep practices and later life

12. Emanuela Bianchera, Jenny Hislop and Sara Arber  
    (University of Surrey and Keele University)  
    Sleep, women and ageing: A comparative study of Italy and the UK

13. Brooke Davis, Bernadette Hood and Dorothy Bruck  
    (Victoria University, Australia)  
    Understanding good sleep in ageing: The attribution of meaning.

14. Wendy Martin and Helen Bartlett  
    (University of Reading and University of Queensland)  
    Sleep, risk and dementia in different care settings
Appendix C

Media Dissemination

SARA ARBER

International Media activity in Australia and New Zealand

TV appearances
Today, Channel 9 National News, 22nd February 2005
Mornings with Kerri-Anne, Channel 9, Australia, 3rd March 2005

Radio interviews
ABC Melbourne, 21st February 2005
ABC South Australia, 21st February 2005
ABC Canberra, 21st February 2005
ABC Sydney, 21st February 2005
ABC Newcastle, 21st February 2005
ABC Highlands FM, 28th February 2005
The Morning Show, ABC Tropical North, 28th February 2005
Nine to Noon, Radio New Zealand, 8th March 2005 (20 minute interview)

Newspaper articles
Sydney Morning Herald, 19th February 2005 (front page article, continued on p 4)
The Age, Melbourne, 19th February 2005
The West Australian, 21st February 2005
Sunshine Coast Daily, 27th February 2005
Sunday Star Times, New Zealand, 6th March 2005
The Dominion Post, New Zealand, 10th March 2005
The Australian, 18th March 2005
Massey News, New Zealand, 18th March 2005

JENNY HISLOP

TV appearances
July 2004-Feb 2005: Consultant to BBC Science Unit production team for program on sleep: How to Sleep Better (presented by Professor Robert Winston), including appearance on program (BBC One, 2 February 2005)

Radio interviews
27 July 2004: Interview on BBC Radio Newcastle Drive Time about couples’ sleep

8 September 2004: Live in-studio interview with Jenni Murray BBC Radio Woman’s Hour: Sleeping problems: Re-thinking our attitudes towards sleep in later life. Panel included Dr Anne McPherson, an Oxford GP. Program repeated 11 September in ‘This week’s highlights’,
and as part of follow-up program on listener’s views on sleep 14 September.

Radio interviews on sleep research findings associated with promotion of BBC One How to Sleep Better TV program 1-4 February 2005:
- BBC Radio Kent (Julie Maddocks afternoon program 1/2/05)
- BBC Radio Jersey (Murray Norton afternoon program 1/2/05)
- BBC Radio Oxford (Ann Diamond breakfast program 2/2/05)
- BBC Radio Stoke (Stuart George morning program 2/2/05)
- BBC Radio Humberside (Richard James Drive program 2/2/05)
- BBC Southern Counties Radio (Dominic Busby Drivetime program 2/2/05)
- BBC Radio York (Elly Fiorentini morning program 4/2/05)

8 March 2005: Live interview with BBC Radio Guernsey with Jenny Kendall-Tobias ‘Studio One’ program

2 May 2005: Live interview with ABC Radio National, Australia, ‘Overnights’ program with Ingrid Just (aired 2-6am, Tuesday 3 May Australian time). Program included talkback segment giving advice to people with insomnia.

5 May 2005: Live interview with ABC Radio National in Australia, ‘Life Matters’ program with Julie McCrossin (aired 9-10am Friday 6 May Australian time)

16 August 2005: Interview with Raj Persaud for BBC Radio 4 All in the Mind about snoring. The panel included Robert Royston, Chief Clinical Scientist at the Royal National Throat, Nose and Ear Hospital, London

Newspaper articles
23 July 2004: Showcasing Sleep Research at Surrey, media presentation at Science Media Centre in London; including one-to-one interviews with Nicole Martin (The Daily Telegraph), Robin Yapp (The Daily Mail), Steve Connor (The Independent), and Luisa Metcalfe (Sunday Express)

24 July 2004: article The Daily Telegraph: Older women prefer separate room to close encounters (Nicole Martin) - also appeared in The Telegraph Online, and Shropshire Star (Mid Wales) on same date

24 July 2004 article in Daily Mail: Why we’re a nation in need of a proper night’s sleep (Robin Yapp)

20 March 2005: article in The Independent on Sunday: Q: Are you getting enough sleep. A: Yes (if you’re him). No (if you’re her) by Sophie Goodchild (page 3 of News section)

21 March 2005: article in Daily Mail: Worried women lose more sleep than their men by Andy Dolan

23 March 2005: article referencing our research in Yorkshire Evening Post ‘Women’s Post’ section To sleep, perchance to dream: ay, there’s the rub
17 April 2005: article in Features section of The Independent on Sunday: Life etc: Spirit to sleep, perchance to dream…. Sharing a bed with your partner may seem like a good idea, but, says Hugh Wilson, it could mean the end of a happy relationship

26 April 2005: article in Lifestyle section of Ash & Farnham Mail: Do you dream of a good night’s kip? by Samantha Chapman

3 May 2005 article in Yorkshire Evening Post Living section: Sleep talking by Jayne Dawson

Magazine articles
October 2004: article on sleep written for You & Your Health magazine (a patient magazine distributed in GP surgeries throughout the UK), published in Issue 5, Spring 2005

March 2005: interview with Annette Shaw for insomnia feature in Optimum Nutrition magazine

SUSAN VENN

Radio interviews
Radio Mercury, 13 March 2005
Radio Beat 102103 – Live, 15 March 2005
Radio Dublin 1FM – Live, 16 March 2005

Radio interviews (international)
Radio Sevenoaks in South Africa – Live, 14 March 2005

Newspaper articles
News – Medical.Net, 11 March 2005
The Times, 12 March 2005
Daily Mail, 13 March 2005
Evening Standard, 13 March 2005
Weekly News, Edinburgh, 14 March 2005
BBC News Online, 14 March 2005
Observer, 10 April 2005
Western Daily Press (Bristol), 09 April 2005
PressText Austria, 13 April 2005
Badische Zeitung Online, 16 May 2005
Der Standard Online (Germany), 14 May 2005
News Online (Germany), 13 May 2005
Web Online (Germany), 13 May 2005
Krone Online (Austria), 16 May 2005
Wall Street Online (Germany), 16 May 2005
Brennessel Online (Germany), 16 May 2005
Aertze Zeitung Online (Germany), 18 May 2005
TiroI.com (Austria), 27 June 2005
Catholic Herald, 6 September 2006
Web Salud Online (Spain), 8 December 2005
DERF Agencia de Noticias Online (Spain), 8 December 2005
El Confidencial Online (Spain), 13 December 2005
REFERENCE No RES-000-23-0268.

InfoBAE Online (Argentina), 21 December 2005
Pittsburgh Post Gazette Online (USA), 27 April 2006

Magazines
Women’s Weekly, 24 May 2005 and 6 September 2005
Mallorca Online Magazine, 10 June 2005
Grazia, 07 August 2006