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Introduction

Sleep, culture and health: Reflections on the other third of life

The last 20 years have seen a dramatic rise in clinical, scholarly, and popular interest in the relationships between sleep and health. Insufficient sleep and sleep disorders, for example, have been shown to increase workplace accidents (Lombardi, Wirtz, Willetts, & Folkard, 2012), and impair neurobehavioral performance (Van Dongen, Maislin, Mullington, & Dinges, 2003), memory and learning (Stickgold, 2005; Walker & Stickgold, 2004), immune function (Dinges, Douglas, Hamarman, Zaugg, & Kapoor, 1995; Krueger, Floyd, & Fang, 1999), metabolism (Spiegel, Leproult, & Van Cauter, 1999; Van Cauter et al., 2007), endocrine profiles (Van Cauter, Knutson, Leproult, & Spiegel, 2005) and cardiovascular function (Knutson, 2010). Pharmacological and technological interventions to improve, manage, or "customize" sleep and wakefulness are now widespread, and sleep medicine has become a multi-billion dollar industry. Interest from the general public has increased, in part as the demands of a 24/7 society change how sleep and wakefulness as biological phenomena become culturally considered and managed.

In 2010, the editors of this special issue organized an international panel of scholars from the USA, Great Britain, and Australia at the American Anthropological Association meetings in New Orleans, LA, to bring attention to the growing social science contributions to the study of sleep and health. That session, and ensuing discussions, clarified four central themes shared by our research: 1) The critical relevance of socioeconomic circumstances and cultural norms affecting sleep and health, 2) The interplay of biology, cultural meaning, gender, and medicalization on the interpretation and self-management of disordered sleep, 3) The roles that politics and consumers play in influencing and sometimes compromising health policy concerning infant and child sleep, and 4) The evolving social norms and messages that influence how sleep and sleep problems are perceived across the life cycle.

As the papers in this special issue show, social scientists, particularly those from biological anthropology, medical anthropology, and sociology offer important insights into the social, cultural, and political dimensions of sleep and health. These include exploration of patterns of sleep-related behavior, manifestations of sleep disorders like insomnia, sleep apnea, and sleep paralysis, and multitudinal sleep concerns that evolve across the life-cycle, from infancy and childhood to adolescence and older age. Because cultural constructions of biological events provoke patterned social discourse and behavioral responses, the unique social and cultural manifestations surrounding sleep become amenable to diverse analyses. Though organized by anthropologists, this special issue includes contributions from anthropologists, sociologists, psychiatrists, physicians, psychologists, and professors of social policy.

Over the past fifty years, social scientists have addressed connections between sleep, culture and health, but our work has been scattered across isolated book chapters and journals, published under the auspices of various disciplines. This dispersal has led to a lack of conceptual coherence, shared strategies, and opportunities to offer insight about the social and cultural components that link sleep and health. The two broad goals of this issue, then, are to provide a collective benchmark for the social science study of sleep and health, and to stimulate future social research into sleep, which should provide value both to the field of sleep medicine and to general public health. From social patterns of health interpretation and response, to how medical or therapeutic advice is pursued or selectively ignored, to the roles of globalization, commercialization, and industrialization on sleep-related health and ideology, there is critical work yet to be done.

This special issue includes 14 contributions, divided into three domains: a) The critical importance of sleep, culture and health: biocultural and socioeconomic perspectives, b) Disordered, problematic, and problematized sleep, and c) Sleep, socialization, and health across the life-cycle. This final section is itself stratified into three parts, denoting the unique sleep and health-related concerns that occur across the life-cycle, from infancy and childhood to adolescence to older age. This introduction outlines the main research questions and critical contributions of each domain, then briefly discusses relevant themes that cut across all three domains.

Volume organization

Part I. The critical importance of sleep, culture and health: biocultural and socioeconomic perspectives

Sleep does not simply serve the brain, but can have a profound impact on the whole person, mind and body, influencing mental and physical health as well as quality of life. Impairments in sleep duration and quality have been linked to numerous and varied health consequences such as increased accidents, depression, diabetes and mortality. Considering the critical importance of sleep for health and well-being, a better understanding of the determinants of sleep is needed. The first set of four papers emphasizes the centrality of social and cultural data for understanding variability in sleep characteristics and patterns across populations as well as associations that have been observed between sleep and health in particular populations. Behavioral, social, and environmental influences play an important role in shaping sleep characteristics, but these factors have remained largely unexplored, particularly by clinical researchers. These introductory papers

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approach this void in a variety of ways, including reviewing the sociocultural determinants of sleep, exploring sleep and mental health in disadvantaged neighborhoods, comparing and contrasting the perceived link between sleep, dreams, and health in two radically different samples from across the globe, and examining sleep in parts of the world thus far mostly overlooked by previously published sleep research.

Knutson (2013) points out that laboratory and epidemiological studies increasingly demonstrate that sleep deficiency, which includes either insufficient sleep, impaired sleep quality or a sleep disorder, is associated with heightened risk of obesity, diabetes and cardiovascular disease. However, improving understanding of the role sleep plays in cardiometabolic disease risk requires detailed analyses of the connections between deficient sleep and risk factors within the social and cultural environment. Knutson's review fills this gap with a comprehensive assembly and analysis of literature comprising demographic, gender, socioeconomic, racial/ethnic, and psychosocial variables. This review has critical applied significance: if the mechanisms underlying the increased risk of sleep deficiency in certain populations can be identified, interventions could be developed to target these mechanisms, increase healthy sleep behavior, and potentially reduce cardiometabolic disease risk for these groups.

Socioeconomic disparities in health, including increased risk of impaired mental and physical health, are pervasive despite over 20 years of effort to reduce and eliminate them. A novel explanation for some of this increased risk may be impaired sleep quality in disadvantaged neighborhoods. In a sample from the U.S. state of Wisconsin, Hale et al. (2013) test this assertion by examining whether subjective sleep quality is associated with self-rated health and depression. This paper demonstrates that sleep quality may indeed play a role in lower self-rated health and higher rates of self-reported depression. Hale et al. call for, and we echo, the need for identification of mediators of socioeconomic disparities in health outcomes, including sleep characteristics. Identification of these mediators represents a next step to reducing known disparities in health.

There has been relatively little research specific to health and sleep outside the industrialized world. The third and fourth papers in Part I of this special issue help to fill this gap. First, Hollan (2013) compares cultural ideas about sleep and dreaming in two disparate groups: a rural Indonesian society and a small group of urban middle class people seeking psychotherapy in the US. He contrasts their beliefs regarding the meaning of dreams and beliefs about the implications sleep and dreaming have for one's health. His work suggests that there are substantial cultural differences in these beliefs. This work highlights the need to understand better the cultural differences in beliefs about sleep and their potential impact on sleep behavior and health in a more diverse range of societies around the world.

Most research on habitual sleep patterns has focused on nocturnal sleep duration, but napping can be an important contributor to total sleep duration across a day. Furthermore, when and with whom one sleeps could impact how much sleep is obtained. The final paper in this section by Worthman and Brown (2013) explores the cultural norms for napping and sleeping arrangements among a sample of Egyptian households from both urban and rural areas. This paper demonstrates that there are important cultural determinants of sleep that could help to ameliorate or diminish sleep duration and quality. It further demonstrates that the characterization of normative sleep behavior is not universal and can vary significantly among different societies and cultures.

This section of papers demonstrates the broad range of sleep research topics that are required to understand better the impact of sleep on health across the globe. Important topics include consideration of all the sociocultural factors that influence sleep behavior, sleep duration, sleep quality and risk of sleep disorders. Many of these factors have been identified and discussed by these papers, but other important factors likely remain to be identified. Moving forward, social scientists need to document sleep in greater detail among different cultural and social contexts, including various regions of the world as well as among diverse sociocultural groups who share the same geographical locale. Such comprehensive information about sleep will describe the degree of human variability in sleep behavior that exists and, critically, how this variability impacts the association between sleep and health. For example, the nature of the association between sleep deficiency and risk of disease may differ among populations, and if so, the underlying reasons for differential associations should be explored as they may provide clues about mechanisms linking sleep to health as well as reveal behaviors that are protective against the deleterious effects of sleep deficiency. These behaviors could be used to develop non-pharmacologic behavioral interventions to promote health and reduce disease risk. Moreover, the practice of napping, which varies greatly between sociocultural groups, has important implications for sleep behavior and the associated health consequences. For example, napping may compensate for insufficient nocturnal sleep periods, but this needs to be explicitly tested. Furthermore, the distribution of sleep across a 24-h period may also vary between cultures but little is known about the effect of different sleep schedules on health. Finally, practices and beliefs about sleep, which are inexorably linked with cultural practices and beliefs, will partially determine sleep behavior, but it is not known how dynamic these practices and beliefs are within a population or whether they can be modified to improve health. Clearly, there remain many unanswered questions about the role of sleep in human health, and social scientists are particularly well poised to address them due to theoretical foundations that emphasize the importance of varying cultural and social contexts.

Part II. Disordered, problematic, and problematized sleep

This next set of papers demonstrates wide conceptual breadth, though all focus on the interaction of biology and culture within "sleep disorders," problematic sleep, and alertness. Topics examined in this section include sleep paralysis, sleep apnea, sleep-related aspects of fetal alcohol syndrome, Sudden Unexplained Nocturnal Death Syndrome, and insomnia. For social scientists, the study of "disordered sleep" is set within three broader cultural critiques; 1) the rise of sleep and sleep disorders as objects of scientific and technological inquiry (Wolf-Meyer, 2012), 2) the expanding medicalization of sleep, along with public health alarms about the implications of deficient sleep (IOM, 2006), and 3) political and moral concerns about workplace safety, productivity, and individual performance (Doi & Minowa, 2003; Hancock, Williams, & Boden, 2009; Williams, 2011). Though many of our nosological categories about disordered sleep are centuries old, disordered sleep as an object of medical and scientific concern is relatively recent. Kroker (2007) traces this rise of interest in part to the creation of the electroencephalogram (EEG) in 1925, which demonstrated the utility of observing and monitoring sleep and establishing "normal" (and therefore "abnormal") sleep patterns. Sleep and wakefulness have thus gradually become subject to increasingly technical laboratory testing, measured and indexed scoring systems, a highly specialized medical vocabulary, and ensuing professional associations.

Williams, Coveney, and Gabe (2013) set the stage for this section by using research on napping and wakefulness to challenge what they cast as the overly simplistic assumptions about the increasing medicalization of sleep. While medicalization has typically referred

to processes of ever-expanding medical control over problems with large social components, problematic sleep may be more complicated, as difficulties with sleep are often self-diagnosed and self-treated. In addition, patients may commonly alter medical advice about sleep to suit themselves. The authors instead call attention to "customization," or the myriad of ways in which sleep may be reconfigured to improve, enhance, or optimize bodily productivity for health, safety, or workplace performance. All of these are part of efforts to capitalize on sleep as a bodily process, where "corporeal needs and corporate demands" may intersect and sometimes challenge each other (Williams, 2007: 152). Their discussion raises important questions about the implications of forcing one's sleep–wake cycle to fit into the constraints of social and work demands as well as the values and perspectives that lead to the prioritization of wake and alertness over sleep.

In a critique of the social science of health literature, Henry and Rosenthal (2013) point out that research advocating or utilizing the elicitation of explanatory models remains dominated by individualized, personal accounts or patient–physician interaction. This is problematic for some sleep disorders, in which a spouse or bed partner may often be the primary person responsible for the initial diagnosis and push to seek medical advice. In sleep apnea, for example, an apnea patient's understanding of their own illness is less shaped by their personal direct experience of symptoms, and more by how someone else comes to experience, understand, and interpret them. Because people are often partnered, men and women/patients and partners may differ in their decisions as to if, when, and how to seek care. Henry and Rosenthal argue that it is critical to understand the give and take of sleep health decision-making between partners, including gendered components of these decisions.

Young, Xiong, Finn, and Young's (2013) construction of a "sleep disorders profile" among Hmong immigrants in the U.S. demonstrates the central relevance of collecting cultural, historical, and sociodemographic contexts in order to understand sleep disorders. In this case, Hmong immigrants suffer a significant amount of culturally relevant nighttime stressors that interface with high rates of sleep apnea, sleep paralysis, nightmares, and other REM-related sleep abnormalities. As the authors point out, if one can understand the interactions of sleep disorders with the cultural mechanisms that trigger or condition responses to them, this could provide a basis for screenings or interventions designed to reduce adverse health effects in this population.

For most working adults in Western society, the workplace and family constitute two primary domains that structure life's routine. When one domain clashes with the other, both sleep and health can become problematic. For many in the West, that means turning to pharmaceutical or over-the-counter medication as a first line of recourse. Lallukka et al. (2013) examine the association between sleep medication use, an indicator of poor sleep quality, and both work-to-family conflict and family-to-work conflicts. They emphasize the importance of understanding the relationship between work and family responsibilities and their impact on problematic sleep and health. As the authors point out, realistic strategies to cope with these conflicts could prove to be an effective, non-pharmacological method to improve sleep.

Ipsiroglu, McKellin, Carey, and Loock (2013) illustrate the value of a mixed methods, multidisciplinary team approach that spans social work, medical anthropology, and developmental pediatrics. The majority of children who have Fetal Alcohol Syndrome (FAS) also suffer insomnia, and concomitant daytime problems like the inability to concentrate, sleepiness, and hyperactivity. By combining comprehensive clinical assessments with in-depth interviewing of both parents and health care providers, the authors discover that providers often wrongly focus exclusively on daytime presentations of behavioral and emotional problems, rather than investigating the underlying nighttime problems that are ultimately of more concern to parents. The authors then apply the concept of "therapeutic emplotment" to develop a protocol for enhancing clinician-parent communication and collaboration, thereby reframing descriptions of symptoms into larger explanations that commit parents and providers into practical action.

The social science scholarship on disordered sleep is still relatively nascent, and there remains much that is still poorly understood. Further research is needed on the determinants of help-seeking behavior, including how patients decide when their sleep is problematic enough to seek help, how they go about finding a provider to help them with sleep issues, or how they choose among a vast array of options available to treat themselves, including naturopathic supplements, over-the-counter medications, and complementary and alternative medicine (CAM) therapies or interventions like hypnosis, acupuncture, or relaxation. To some extent, these are problem-specific. Only a small proportion of adults with insomnia, for instance, currently see a physician for care; motivations for, and methods of, self-treatment are diverse and common (Henry, Rosenthal, Dedrick, & Taylor, in press). Perhaps because the field of sleep medicine itself is still relatively young, there is tension and flux in many of the medical nosologic categories, and their corresponding social constructions (e.g. "shift work disorder") present new conceptions of reality and new forms of suffering for those affected by them. Cross-culturally, there may considerable social stigma surrounding sleep concerns like insomnia, narcolepsy, snoring, delayed sleep phase disorders, night terrors, and apnea; these can be attributed to personal or moral failings, social disorder, or even spiritual or supernatural intervention. The issues that arise around problematic and problematized sleep all confront perennial issues in medical anthropology and sociology at large, including the creation of normal vs. abnormal conceptual categories, medicalization and the body, illness management and therapeutic choice, consumerism and communication, social policy and public health.

Part III. Sleep, socialization, and health across the life cycle

While researchers in the sleep science community recognize that sleep timing and quality change across the life cycle, few attempts (with the exception of Ball and McKenna's continuing work on mother–infant co-sleeping (Ball & Moya, 2009; McKenna & Volpe, 2007)) have been made to investigate the social and cultural factors that shape sleep during infancy, childhood, adolescence, and older adulthood. Despite known links between sleep and health discussed above, messages about sleep may be difficult to communicate to individuals and social groups because of pervasive cultural ideas about appropriate sleep timing, quality, and location at various ages. Sleep messages may also be obscured by a lack of knowledge by individuals and a lack of consensus from scientists about the function or functions of sleep.

In infancy, discourses about infant sleep intersect with discourses of risk about Sudden Infant Death Syndrome (SIDS). In the first paper in this section, Ball and Volpe (2013) bring a fresh perspective to the debate over factors that increase the risk of SIDS. Bed-sharing is often at the top of the list of risky practices, and education of parents is the generally accepted way to reduce this risk. Ball and Volpe point out that bed-sharing choices may reflect strongly-held cultural or personal views about infancy and parenting, and therefore may not be easily modified by educational campaigns. They argue further that bed-sharing recommendations are transferred inappropriately from one setting to another without consideration of context. The authors provide two examples of culturally appropriate practices that encourage safe sleeping

locations for infants, and encourage detailed research on infant care to aid public health workers in developing effective interventions to reduce SIDS risk.

Complementing this broad review is an article by Volpe, Ball, and McKenna (2013) that focuses on direct observation of individual mothers with their four-month old infants. While public health campaigns designed to encourage supine sleeping in infants have decreased SIDS rates, no studies have examined how nighttime parenting behaviors may increase or decrease SIDS risk for particular infants. To fill this gap, these authors present four case studies based on direct behavioral observations of nighttime care of infants in a sleep laboratory setting. They found that strategies to minimize maternal sleep disruption, efforts to provide a warm and comfortable sleep environment, the presence vs. absence of breastfeeding, and the reasons behind the selection of a sofa as a sleep site may be particularly relevant in understanding sleep-related risks to infants. As with the Ball and Volpe article discussed above, these authors stress the importance of personalizing risk reduction, specifically engaging parents in a discussion of costs vs. benefits of changing behaviors around infant sleep environments.

With work on infant sleep often focused on safe sleeping locations, interactions between mothers and infants may be minimized. In the third paper in this section, Goldberg et al. (2013) report results of a study designed to clarify the direction of associations between maternal mental health, specifically anxiety and depressive symptoms, and infant sleep. Previous studies have shown that depressed mothers report more sleep problems in their infants, but these have not looked at infant sleep at multiple time points, nor have they examined symptoms of anxiety. These authors found that mothers with poorer mental health reported more infant sleep issues and were more bothered by these issues. Both high stress and culture/ethnicity moderated the association between infant sleep issues and maternal mental health. This paper provides important context for maternal reports of infant sleep problems, and suggests examining infant bedtime and night waking behaviors separately, as well as examining cultural and ethnic background as contributors to mental health and sleep issues.

The fourth paper addressing sleep across the life cycle investigates adolescence, a developmental stage characterized by both physiological and social changes that both promote sleep loss and associated daytime sleepiness. To begin to address why adolescent sleep is generally poor and hard to improve, Orzech (2013) identifies the most salient sources of information about sleep for a population of adolescents in Southern Arizona, including parents, teachers, friends and the media. Close examination of sleep information sources illuminates the adolescents' perspectives on sleep and its importance for health. She further identifies American cultural values, such as alertness, health, and achievement, which inform messages sent and received about sleep. Given the potential consequences of sleep loss for school performance, safety, and health among adolescents, it is critical to gain a better understanding of the social and cultural determinants of sleep in adolescents.

In the fifth and final paper in this section, Venn, Arber, and Meadows (2013) note that poor sleep among older adults has been linked to a number of health problems, such as coronary heart disease and stroke. While medical treatment for sleep problems among older adults almost uniformly involves prescription sleep medication, very little research has actually looked into the ways that older people differentially approach sleep, how their perceptions of problematic sleep are shaped by their position and activities in life, and how strategies for problematic sleep management vary between older men and women. Venn, Arber, and Meadows tie these influences on self-treatment and help-seeking behavior to differential, gender-specific perceptions of the body and bodily function relative to the aging process.

Social science scholarship on connections between sleep, culture, and health across the life-cycle still contains a number of large gaps. While the work of Ball, McKenna, and colleagues has addressed interactions of sleep and infant well-being, further research is needed to extend study of sleep and well-being into childhood, adolescence, and adulthood. In addition, only a few researchers consider perceptions of sleep as part of understanding sleep behavior as whole. This omission is a critical one for public health, as a better understanding of how individuals and populations perceive sleep is needed before the implementation of effective interventions to improve sleep can be achieved. As has been alluded to in several parts of this introduction, much of the published sleep research has focused on individuals in highly industrialized nations. To improve understanding of sleep across the life-cycle, more work is needed on individuals of different ages in populations around the globe. Such research would add to our understanding of cultural diversity in approaching health behaviors, and also could address areas we currently believe are biological "universals," like adolescent phase delay (Carskadon, Vieira, & Acebo, 1993). In addition, research on sleep, culture and health across the life cycle would benefit from a less individual approach, discussed further below under cross-cutting themes. Especially for infants, children and adolescents, sleep behavior is something that is heavily shaped by others, and this reality is not well addressed in the existing literature. Biological anthropology, medical anthropology, sociology, psychology, medicine, and public health could all benefit from additional research on sleep across the life-cycle. Such research would ideally integrate sleep perceptions and behaviors in a robust theoretical model, leading to practical information useful for understanding and improving sleep.

Cross-cutting themes

Though we have chosen the three organizational domains above, several cross-cutting themes exist. We consider the topic of sleep (and its opposite, "alertness") to be a kind of prism through which a myriad of social forces and relationships are refracted. For example, several papers in this issue address how one's ethnicity and ethnocultural background, including where and with whom one lives, can have a significant impact on sleep behavior and potentially the associated health consequences. In that sleep and sleeping styles are so distinctive among societies, Worthman and Brown argue for comparative sleep ecology with greater attention to variability in sleeping conditions, and greater sensitivity to locally relevant indicators; this has important implications for our understanding of variability in sleep and consequences of this variability. Papers by Knutson, Hale et al., Goldberg et al., Hollan, Worthman and Brown, and Young et al. address sleep in diverse populations, from ethnic minorities in the United States to Egyptians on different sides of the urban/rural divide that represents differences in livelihoods and socioeconomic status. By understanding what sleep means in diverse populations, both objectively (by use of common instruments to measure sleep behaviors) and subjectively (by including detailed questions on personal and cultural meanings associated with sleep) we will be better able to address the sources of sleep difficulties in populations of non-European origin.

Despite the fact that most sleep research occurs at the level of the individual, the papers by Williams et al., Henry and Rosenthal, Venn, Arber, and Meadows, Goldberg et al., and Ipsiroglu et al., (2013) demonstrate how sleep is a thoroughly social and political enterprise, where perceptions and practices are encountered, experienced, and negotiated through the media, bed partners,

community deliberations, and night–time interactions between parents and their children. As Williams et al. point out, it is also an area where a biological event becomes subject to multi-level manipulations designed to enhance work and productivity, where people (aided by a vast array of biomedical, corporate, and pharmaceutical entities) attempt to control and compartmentalize their sleep, and yet find complete control elusive. In that the boundaries between personal and political domains seem to overlap, it may be overly simplistic to talk about the "medicalization" of sleep; these authors instead focus on the diverse sources of knowledge and the range of strategies and motivations that seem to direct behavior. All speak to the communal nature of sleep, evident when closely examined in the West, but perhaps even more overt in non-Western societies where study of sleep behavior is just beginning.

A third and related cross-cutting theme addressed in the papers by Henry and Rosenthal, Venn et al., Lallukka et al., and Knutson, is that significant gender differences exist in the practice of sleep and the experiences surrounding disordered sleep. Men and women vary tremendously in how we learn about sleep, and how our assumptions about the body and health affect how we perceive the need for sleep. We tend to utilize different strategies to engage with problematic sleep and use different criteria to evaluate the efficacy of treatment. As these authors all point out, a gendered approach to sleep must also be informed by an analysis of the varying cultural norms about the proper sleep of women and men, by different gender roles that can directly impact sleep behavior (e.g. childcare), by the differential strategies that men and women adopt to deal with a problematically sleeping spouse, and by the diverse communication styles that men and women deploy to discuss sleep problems and engage in treatment seeking behavior. A careful analysis of gender is critically important especially to understanding how problematic sleep as a symptom of ill-health gets recognized, internalized, reported, and acted upon.

Finally, much of the work presented in this issue has potentially important policy implications. For example, messages about the association between infant cosleeping and SIDS risk may need to be reevaluated and corrected, as discussed in the paper by Ball and Volpe. Another example concerns early high school start times, which run counter to what we know about circadian biology in adolescence. This disregard for appropriate sleep for adolescents, which has become internalized in highly industrialized nations, results in dangerously sleep deprived adolescents who do not recognize the extent of their impairment, as explored by Orzech. Hale et al. raise the issue of neighborhood-level risk factors that impair sleep and health; these neighborhood characteristics are often a result of disparities in infrastructure and resources, requiring policy change to improve sleep quality. Finally, the structure of the workplace is demonstrated to impact sleep, including increasing conflict which can impair sleep as described by Lallukka et al., and by leading to attempts to restructure sleep through medication use or napping in order to accommodate the desired work schedule as discussed by Williams et al., 2013

To sum, the topics of the papers in this special issue are interconnected in many ways, and all raise important issues about how we, as humans, perceive, experience, and practice sleep, as well as the health consequences of these varied sleep behaviors. Given the expanding expertise of the field of sleep medicine, and the increasing concern among the general public about sleep and health, it is safe to say that there will be a continued expansion of social science research into the nexus of sleep and health. It is hoped that this special issue, then, may provide a window into future trans-disciplinary directions. As editors and researchers, we are adamant that the study of sleep does not simply provide a case study or avenue to explore theoretically relevant praxis; it drives new research, stimulates new methodological creativity, and generates new insights into how a bodily event interacts with society and culture to produce discourse about the human condition.

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