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Article

Flexible work, temporal disruption and implications for health practices: An Australian qualitative study

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Abstract

Flexible work provisions are justified as enabling workers to manage their personal lives, including their health, around work. This study deploys social theories of practice to investigate how the temporal characteristics of flexible work can produce, alter and disrupt the health improvement efforts of workers, concentrating on healthy eating and keeping physically active. Drawing from in-

depth interviews with 12 Australian workers, the study explores the temporal mechanisms linking flexible work to health practices, focusing on routines, rhythms and rituals (the three Rs). This research finds that work-time arrangements can provide the temporal scaffolding necessary for health practices (through routines, rhythms and rituals), but *only* when there is day-to-day, mid-term, and long-term work predictability. Australia's flexible work policies do not provide this requisite temporal predictability. Health promoting employment provisions would have to reinstate employment standards from the 1970s, providing the desired predictability for flexible provisions to benefit workers.

Keywords

employee health, flexible labour markets, flexible workers, health practices, predictable work hours, preventing chronic disease, public policy, time use, worker health, workplace health promotion

Introduction

There is widespread concern regarding the global prevalence of preventable chronic diseases (NCD Risk Factor Collaboration, 2016), with particular emphasis on the risk factors of poor diets and inadequate physical activity (Gortmaker et al., 2011). In recognition of the amount of time that adults spend at work, governments and employers are introducing a range of workplace health promotion initiatives to encourage workers to attend to their own nutrition, physical activity, smoking, and alcohol use (Sargent et al., 2018). 'Flexible work' is a structural mechanism that is promoted to workers and justified by employers as way to benefit worker health, family, and personal lives (Business Victoria; Waterhouse and Colley, 2010). Flexible work is broadly characterized by the potential for alterations in where, when, and for how long work is performed (Hill et al., 2008). Trends toward work flexibilisation have emerged over the last forty years as part of profound changes to labour markets in many industrialised countries, including Australia (Campbell and Burgess, 2018).

Despite the shift toward flexible work encompassing more Australians, time shortages continue to be a major reason people give for not pursuing the most basic health behaviours (Strazdins et al., 2011). For most working-age adults, participation in the labour market is the major institutionalizing force in their lives (Clancy, 2014); a force that pivots around time-use, time-reallocations from one set of activities to another, and time-strain (Moen et al., 2013). While the impact of new industrial relations policies on work-life balance has been described (Bohle et al., 2011; Prowse and Prowse, 2015; Wheatley, 2017), with no consensus as to the beneficiaries, few attempts have been made to understand the mechanisms by which labour flexibilisation might affect workers' health.

This study aims to contribute to our understanding of those mechanisms by examining the experiences of a small, diverse group of Australian workers who are engaged in flexible working arrangements. Social theories of practice and time (Lefebvre, 2004; Shove et al., 2012; Warde, 2005, 2014) are drawn on to explore *how* healthy eating and physical activity are supported or disrupted by the politics of

time (Clancy, 2014). Social theories of practice are increasingly applied within population health to bridge the conceptual and empirical divide between the structural features of society, including socio-economic conditions and public policies, and individual decisions and routine behaviours (Blue et al., 2016; Cohn, 2014; Delormier et al., 2009). Blue et al. have argued that 'the challenge [for population health] is to establish how certain practices manage to secure the resources, including time, money, etc., required for frequent, recurrent and habitual reproduction' (2016: 44). The challenge is not simply methodological, but theoretical, as social epidemiologists (McMichael, 1998) and social theorists (Warde, 2014) note.

Only by foregrounding the contestation over temporal resources - including quantities and qualities, like synchronous flows - can appropriate interventions to employer-imposed temporal scarcity and pressure be contemplated. To begin, our conceptual approach to understanding the relationship between work and preventable health risks, and our qualitative research methods are outlined. Then, our findings are presented and the implications of our findings are discussed. These reinforce the utility of understanding the multi-faceted role played by social reproduction within social and labour relations (Giddens, 1979; Warde, 2005); and as a result the health gains of the second half of that century are slipping (NCD Risk Factor Collaboration, 2016).

Social theories of practice and time

Social theories of practice are useful for understanding the interplay of work with health activities. Social practices have been described as 'the situated activities of social actors which happen in the flow of daily life or in context' (Delormier et al., 2009:218). Early practice theorists, notably Giddens (1979) and Bourdieu (1977), were interested in the non-causally linked, but strongly inter-dependent, relationship between structure and agency: how people's actions reflected prevailing social and economic conditions and how those conditions were challenged or reinforced through actions. Gross (1982) notes that Giddens was keen to reinstate the social stasis-social change dialectic, by returning to the Marxian notion of social reproduction, as a way of investigating 'how acts, once begun, tend to be repeated, thereby normalising and sustaining routines of everyday life' (1982: 83). Bourdieu, too, made practices central to his theory of social reproduction, incorporating the notion of habitus or 'dexterity' to capture: 'competence and know-how', a 'state of readiness', and a 'flexible disposition' (Crossley, 2013). For Bourdieu, a social group's habitus both reflected the social structure responsible for the distribution of various forms of capital (time included) and was a vehicle for groups to mobilise their competencies to convert one form of capital for another more valued form, thereby facilitating a restructuring of the social system (Emmison, 2003).

These structure-agency tensions became highly relevant to the work of a second wave of practice theorists, most notably Schatzki (1996); Shove (2009; 2012) and Warde (2005, 2014). Each has different emphases. Schatzki focuses on

practices as constituting the nexus between understandings of the right thing to do, explicit rules and principles, and structures, pointing to how to feel (1996: 89). Warde reinforces the centrality of doing (over thinking) within a context of institutional forces, with the latter prevailing and impeding structural change (2005, 2014). Shove and coauthors provide the concept of interlocking practice sets competing for temporal resources (2009, 2012). Their arguments coalesce around the proposition that individuals are constrained in their choices through a need to comfortably exist within societies that elevate the economic realm, including paid employment.

Time sits at the heart of theories of practice, with three Rs being prominent themes: rhythms, routines and rituals. Individuals' experiences of everyday life are entangled with rhythms that are linked to everything from work schedules and store operating hours to the body's hunger (Lefebvre, 2004). Rhythms shape everyday routines, understood as 'procedural sequences which reliably and regularly fulfil purposes without deliberation' (Warde, 2014: 293). Rhythms can nudge or even propel certain activities forward so they are performed with ease or stifle them to the point of a daily struggle (Lefebvre, 2004). Most routinised practices involve coordination with, and accountability to, others, and daily rhythms are a reflection of the performance of multiple practice sets as they align with social interactions, space, and time (Southerton, 2009). Also central to cultural life are rituals, or deeply felt and highly symbolic activities (Fiese et al., 2002: 382). Unlike malleable routines, rituals are enduring performances of belonging and are strategically defended when under threat, securing the resources for habitual reproduction (Blue et al., 2016).

Adopting these insights, workers' health-supporting routines can be understood as embedded within the rhythmic (dis)coordination of multiple practice sets, including those belonging to employment. It follows that when individuals endeavour to adopt health recommendations (e.g. fewer high processed foods, daily moderate to vigorous activity) their routines may be forced to shift (Jastran et al., 2009: 135), and to confront the structural force of work schedules which can steal available time, disrupt temporal flows and challenge the saliency of rituals. By foregrounding the temporal politics underpinning both working lives and healthy lives, a conceptual orientation toward practices can contribute to our understanding of the barriers to health promoting employment conditions.

Conflicting accounts of the health promise of flexible work

A raft of studies highlight the temporal aspects of employment policies that mediate health outcomes (see summary in Venn et al., 2016). Like these studies which have focused on non-standard work conditions, long hours and employee control over work time, studies on the impact of work-time flexibility on health have reached conflicting conclusions (Malbon and Carey, 2017). For example, flexible work has been associated with reduced absenteeism and stress (Halpern, 2005), and healthier lifestyles with improved work-life balance (Grzywacz et al., 2008). Conversely, work-life conflict has been found to be more likely when employees

have flexible work arrangements (Allen et al., 2013); and flexible work may discourage undertaking physical activity (Kalenkoski and Hamrick, 2013; Kirk and Rhodes, 2011) and maintaining a healthy diet (Devine et al., 2007; Venn et al., 2017). Flexible work arrangements also encourage long hours (Dixon et al., 2019), which Australians have reported as a barrier to adequate health practices (Australian Bureau of Statistics, 2011; Bittman et al., 2019). The nature of much of this work is to isolate behavioural variables from one another, rather than as interdependent. From a social theories of practice standpoint, healthy eating and physical activity have to be understood as socially-embedded, patterned, and yet malleable to social conditions (Blue et al., 2016), instead of being viewed as isolated actions performed by individual actors.

Rather than replicate surveys of association between flexible work arrangements and health risks, this study was designed to identify the temporal resources which maybe responsible for any associations. To this end, this research is informed by a Belgian study which focused on the multiple temporal and social structural dimensions embedded within flexible working arrangements. In that study, Mark Elchardus (1991) contrasted the 'time sovereignty' of workers who negotiate their start and finish times and task autonomy with various forms of employer-imposed (un)predictability that affects the length of the working day, notification of rosters, sociability of work hours, and the nature of the employment contract, whether temporary or permanent. Elchardus (1994) argued that flexible work conditions required certain classes of employees to themselves become more flexible, and that this was particularly so for those in low status jobs, with low levels of education and who occupied a weak labour market position (women and young people). He found that those who enjoyed time sovereignty, or control over working time, could maintain what he termed 'cultural rigidity', including attitudes and what amounts to routines and rituals. His was a study of the interplay between structure and agency, as mediated by time; and he concluded that far from being a progressive trend, flexibility has manifested itself to 'lessen the predictability and controllability of life' (1994: 466).

Elchardus (1991) produced a useful framework for identifying four non-exclusive temporal aspects of flexible work arrangements: 1) freedom-of-timing; 2) day-to-day predictability; 3) mid-term predictability; and 4) long-term predictability (Box 1).

This study examines workers' eating and physical activity practices according to these four temporal dimensions of working arrangements. It aims to provide a nuanced account regarding how global trends toward work flexibilisation influence the degree of worker time sovereignty necessary to pursue healthy ways of living.

Box 1. Four non-exclusive temporal aspects of flexible work arrangements, adapted from Elchardus (1991).

1. **Freedom-of-timing** – worker capacity to negotiate their start and stop times. This can vary from negotiating an ongoing work schedule at the time of hire, to deciding when to work on a day-today basis. Shift workers on fixed rosters often have little to nil freedom-of-timing.

2. **Day-to-day predictability** – the degree of certainty the worker experiences regarding the length of their working day. When an employer asks an employee to work late, or conveys the expectation that the worker will work at home in the evening, day-to-day predictability is reduced. By contrast, many shift workers know exactly when they will 'clock off'.

3. **Mid-term predictability** – the notification of work rosters, including which days of the week will be worked. Some employers provide mid-term predictability by notifying their workforce of rosters months in advance.

4. **Long-term predictability** – the nature of the employment contract, whether temporary or permanent. Long-term predictability is provided by permanent and ongoing contracts whereas casual positions provide no long-term predictability.

Study context: Australian labour market

Flexible working arrangements have become increasingly common in Australia. In 2007, the Australian Labor government established the Fair Work Agreement meant 'to assist workers to balance their work and family responsibilities by providing for flexible arrangements and rights for workers with caring responsibilities' (Gillard, 2008: 11190). This led to the 2009 Fair Work Act, through which workers have the 'right to request' flexibility in the location or hours worked (specifically start and stop times, part-time hours). These flexible work provisions are available primarily to workers in secure, permanent employment, particularly for those with parenting responsibilities (The Australian Government FairWork Ombudsman, 2010). The Act has been criticised because employers have the penultimate decision when considering 'reasonable' requests (Pocock, 2003). As elsewhere (Wheatley, 2017), the rate of request for flexibility is highly gendered. Australian women's participation in the labour force has increased dramatically in the last several decades to over 60% (Workforce Gender Equality Agency, 2020). Women with caring commitments are more likely to work part-time and negotiate flexible work arrangements (Skinner et al., 2012). Requests decline with age, with higher rates of request by young people likely a reflection of their study commitments and/or caregiving responsibilities for young children.

Research methods

For their diverse work-time arrangements, a small, relevant group of participants were purposively recruited for in-depth interviews to investigate experiences with their various forms of working arrangements. The study was based in the Australian

Capital Territory (ACT), Australia, which has a population of just under 400,000 people and is home to the Federal Parliament of Australia, associated government departments, three universities, and a commercial sector. The ACT offers a diversity of workplace arrangements. Although the population in the ACT is on average slightly better educated and remunerated than other parts of Australia, the sample included insecure workers (casual, on-call, day labourers) and recently immigrated workers. Full-time and insecure workers were the most challenging to recruit, likely due to their temporal work demands. This research received approval from the Australian National University Human Research Ethics Committee (ANU HREC protocol 2014/044). Informed written consent was obtained prior to participation.

Two to four participants from each employment arrangement were recruited– full-time, part-time, permanent and casual employment – as well as two who were self-employed. Participants were identified through authors' and participants' personal and professional networks. They were informed about the study by the initial contact person, and asked permission to be contacted by the interviewer. Following permission, participants were sent an information sheet. Recruitment continued until 12 participants were reached. While this is a small sample size by quantitative research standards, studies have shown that purposively recruited small samples can supply sufficient data from in-depth interviews to address empirical research questions and advance theory (Vasileiou et al., 2018).

The first author conducted semi-structured, in-depth interviews in locations chosen by participants. Most were conducted at the university. Interviews lasted between 45 to 70 minutes. The interviewer used open-ended questions to elicit a dialogue about the temporal sequencing of participants' work and non-work days. Participants' eating and physical activities were probed in depth. Closed-ended questions collected participant socio-demographic characteristics. Interviews were recorded, professionally transcribed, and uploaded into Atlas.ti. Pseudonyms were used to protect participant anonymity.

The first author wrote a short reflection and vignette and all authors met regularly to discuss each transcript and coding. An iterative deductive and inductive thematic analysis was employed to develop themes and revise coding (Bradley et al., 2007). Deductive codes were based on an a priori framework of flexible work-time arrangements and health practices (Dixon et al., 2014). The first author coded all transcripts. The authors discussed coded transcripts until consensus was reached on the importance of the themes and their interrelationships.

Nine women and three men participated in the study. Eight lived with children (Table 1). No two participants had identical work-time arrangements, reflecting the fact that fewer than 50 percent of the population work standard working arrangements (Venn et al., 2016). Work-time arrangements ranged from secure work over standard work hours five days per week, to self-employed workers who worked irregular hours seven days per week, to on-call and casual workers. All had flexible working arrangements, whether of their choosing or not.

Table 1. Participant characteristics.

Participant pseudonym	*Gender and age (years rounded)*	*Reported routine health practices*	*Children*	*Current work-time arrangements*	*Other adult household members and their work-time*
Susan	Female 30	Nil	Nil	Full-time, standard business hours, 5 days, casual (no tenure) 3 weeks with current employer. Some freedom-of-timing	Husband, permanent position, works rotating shift roster
Frances	Female 40	Healthy eating and physical activity	2 children, 1 and 4 years old	Permanent part-time, 3 days per week, standard business hours (some extra hours), 16 years with current employer. Used freedom-of-timing to negotiate a predictable weekly schedule of work hours	Husband, permanent, part-time (4 full days, standard business hours)
Robyn	Female 40	Healthy eating and physical activity	1 child, 5 years old	Permanent part-time, 3 days per week, standard business hours (some extra hours) 17 years with current employer. Fixed days and times negotiated through Freedom-of-timing, but work extended hours when required.	Husband, permanent, full-time, 9 days/fortnight
Jenny	Female 40	Physical activity	4 children, between 7 and 13 years (2 at boarding school)	Part-time self-employed (own business for 4 years), variable extended business hours. Schedules service provision around family commitments. Doesn't schedule work in holidays	Husband, self-employed (separate business) long hours (7am to 9pm) 5 days.
Ruth	Female 40	Healthy eating	2 children, one and four years old	Permanent part-time, 4 days (27 hours) with extra 10 planning towards being self-employed. Used freedom-of-timing to negotiate weekly schedule for work hours (different each day of the week)	Husband studying full-time (PhD candidate), but with full salary
Sally	Female 40	Physical activity	2 children, two and three years old.	Part-time, casual and short-term contracts (no leave provisions). Freedom-of-timing over when hours are worked. Hours vary day-to-day and week-to-week.	Husband self-employed, 5 days (including weekend day), works long-hours and on-call.
Jodie	Female 30	Healthy eating and physical activity	2 children, five and eight years old both at school	Permanent, full-time, business hours, same employer for five years. Uses freedom-of-timing to negotiate working 2 long and 3 three short days. Often works extra hours at end of day at short notice	Husband full-time, starts at 6.30am and leaves 4.30pm 3 days, 2.30pm 2 days.
John	Male 20	Physical activity	Nil	2 jobs, one is permanent full-time (regular early shift), the other casual 2 hours per day (5 days, weekly roster), total 44.5 hrs/wk. Same employers for 3 and 4 years respectively	Lives with parents who complete all the household responsibilities
Barbara	Female 50	Healthy eating and physical activity	2 at school	Permanent full-time, long-hours, unsociable hours, rotating roster of 48 hours over 4 shifts in 8 day cycle, 20 years with same employer. No freedom-of-timing. Frequently extra hours at the end of shift	Husband has worked 9-5 standard working week for 7 years. Some overnight travel and unpredictable hours.
Geoff	Male 20	Physical activity	Nil	Casual, on-call (notice day before), getting part-time work (but available full-time). If work, then knows the shift is 7am to 4 or 5pm	Lives with parents
Janet	Female 30	Physical activity	Nil	Casual, on-call (on the day). If has work, then less than 1 hour notice, but knows the shift will be 8am to 4pm	Husband works 8-5 Monday to Friday, has just had 2 year contract renewed.
Paul	Male 50	Physical activity	1 teenage child	Full-time self-employed, on-call, schedules according to priority. Works hands-on 7-3 Monday to Friday with some after-hours and weekends for 2 weeks, then 2 weeks in the office	Wife works full-time Monday to Friday and evenings 2 days.

The analysis explored the temporal interplay of the four dimensions of flexible working arrangements (Box 1) against how they supported and/or disrupted their eating and physical activity. Following our interest in the temporal scaffolding to practice sets, the focus was on whether routines, rhythms and rituals were apparent in their description of daily life. Four major themes were identified and are explored below.

Findings

Freedom-of-timing supports episodic health practices

Participants' experiences with freedom-of-timing ranged from those who could choose '*when I want to work'* and how many hours in total they worked over any week, to those who had no control over their start and finish times and weekly work-time duration. Participants with the most freedom-of-timing were the self-employed, followed by those with workplace contracts regulated by the Fair Work Act.

The self-employed participants, Jenny and Paul, described how their high levels of freedom-of-timing were typically enacted through making decisions as to whether to accept work requests on a day-to-day basis. Paul, a tradesperson, summed up the situation: *'Every day is different, you may start the day with one job, and then they'll roll in … … If you don't want to work, you don't have to'. His freedom-of-timing allow*ed him to run for fitness, albeit on an ad-hoc basis. He usually ate take–away food when working, but his family meal practices at home were fitted around the children's extracurricular schedules. He gave his apprentice the freedom-of-timing to work from 7am to 3pm, enabling his apprentice to be at sport training sessions daily at 4pm. The apprentice's regular and predictable work-time schedule contrasted with Paul's.

Sally worked under short-term contracts at a university. She likened her working arrangement to self-employment given that she only accepted project contracts if they gave her hours that were compatible with her child-care arrangements. She attempted to confine working in the office to two routine days per week, but was compelled to work at home on other days when child illness or other circumstances interrupted her nominal work days and ability to meet deadlines. She had no routine health practices. She characterised her eating habits as 'grazing' while tending to her children, and felt she had no exercise routine, but received a lot of exercise running after her children.

Women are perhaps doubly disadvantaged given women's greater uptake of flexible work arrangements thought to entrench gender inequities in the labour market (Skinner and Pocock, 2014). They also have the potential to drive health inequalities because of the differential performance of health practices. Supporting her husband who was doing his PhD, Ruth reflected: '*The current situation is a continual compromise with an exhausting schedule which would be untenable if it were longer term*'. As a permanent part-timer, her still high level work commitments were spread over set days but variable hours which she set, especially when working from home, which made scheduling and synchronising practice sets difficult: '*Every week we make it work but if anything else has to be*

fitted in or doesn't go to plan, my chance to exercise and thereby have some private time is usually the first thing to give'. Freedom-of-timing had not been sufficient to support her previously established running practice

Day-to-day and mid-term predictability supports the establishment of rhythmic practice sets

The four public sector participants had freedom-of-timing to negotiate their start and finish times using the right to request provision of the Fair Work Act. Frances, Robyn and Ruth worked part-time and Jodie full-time within a standard working day (7am to 7pm Monday to Friday). These women have used their freedom-of-timing primarily to schedule the demands of caring for their children, rather than to accommodate health practices for themselves. Unlike Ruth and Jodie, Frances and Robyn had negotiated their weekly working schedule to fixed days and times. Elchardus identified predictability of work schedules, manifest as fixed working hours, as an employer-controlled form of flexibility. In this study, however, there were examples where workers rather than employers enacted fixed working hours, providing both day-to-day and mid-term predictability. Their predictable work schedules provided the rhythmic scaffolding around which work and non-work practices could become routinized. As others have noted, a rhythmic interplay between practices reduces the effort required in planning and performance (McQuoid et al., 2015; Schubert, 2008; Shove et al., 2012; Warde, 2014). Work-time predictability for some affords a stable temporal and spatial structure for everyday lives, allowing workers to build and maintain health practices as part of a diurnal rhythm.

Robyn provided a pointed example of the importance of work-time predictability in supporting health practices. She conducted a series of health practice routines each day to manage a chronic health condition. She was strongly motivated to stay healthy for her child and spoke about her working schedule as a key support. Robyn outlined how she and her partner balance work, her exercise practices and care-giving for their young child:

> *'The attitude of my work is so helpful to me… if I was in a more traditional working environment… I think I would be in big trouble… I would have probably had to quit my job to do what I'm trying to do… that flexibility has been so fantastic. So, yeah, it's so important for people, especially once they have kids, you just don't have time, you need some give. And then over the long term you're less cost to the system.*
>
> *So I drop my son off at nine, get to work at 9:40, because I drive to [location], and then I park 15 minutes away from work, because that's where I'm guaranteed a spot, but I don't mind it because then I get a bit of exercise. So it's 15 minutes to work, 15 minutes back. And then I have an hour lunchbreak… and there's a 15 minute walk, and a 15 minute walk back, exercise – that's my exercise.'*

This reliance on temporal and spatial structures to support routine health practices is consistent with other studies on chronic illness management in everyday life (e.g., McQuoid et al., 2015). By contrast, Janet, a casual teacher, embodied the extreme end of unpredictable work arrangements (day-to-day, mid- and long-term unpredictability) and she had little freedom-of-timing. In the six

months Janet had been on a casual register and available five days a week, she had been employed at the most for three days a week and some weeks she had no work. There is no retention wage to compensate for the many days she is prepared to work but is not needed. Her account shares features of what Harvey et al. (2017) call 'neo-villeiny,' in that her work is hyper flexible, precarious, yet bound to one organization with no guarantee of any income. Janet waited daily (Monday to Friday) for a call between 7.00-8.30am:

> *'I just take my mobile just beside my bed and then I have to be alert. I have a call and then I have to get ready quickly… One day it happened like 8.30 I got the call, and they said [I was] supposed to come by 9.00 and it was a long way.'*

In the face of her own lack of predictability, Janet had established a health practice routine around her husband's more predictable work routine. They had moved to an apartment with a gym facility and went to the gym together two to three days per week, when he returned after his work; thereby establishing a rhythm that was highly enjoyable for Janet.

In order to protect his availability for his on-call job, Geoff had established and maintained a fitness routine of boxing on Tuesday and Thursday evenings outside work hours with a friend. This routine was ritualised, based around the highly valued practice of friendship. However, the unpredictability of Geoff's job had disrupted the healthy eating routines he had established around his education schedule the previous year. Although he was able to devise a food preparation routine that would provide him with healthy lunches at work, the unpredictability of being on-call made maintaining the routine difficult.

Long-term work predictability supports health practices maintenance

Long-term job security appears to be a protective factor for maintaining fitness and eating health practices. This was evident for the shift worker who had non-standard work hours, and for three of the four public servants with permanent contracts. Job security not only gave them certainty over their income, which is important for health, it also provided a future-orientation in terms of the temporal demands of their jobs.

Barbara, an emergency services worker, had no freedom-of-timing over her rotating shifts. Nevertheless, her roster provided day-to-day and mid-term predictability, working four rotating shifts every eight days: two 10 hour day shifts, two 14 hour night shifts, then four days off. Even though it rotated, her permanent position enabled her to plan non-work activities months, even years, in advance. She described the rhythmical predictability, albeit unsociable, nature of her work-time:

> *'If one week it starts on a Monday, the next week it'll start on a Tuesday, the next week will be a Wednesday, then a Thursday, so it just moves around all the time. So it involves weekday work, and it also involves weekends. And it just constantly flows on like that over the years. The good side of it is that it's easy to predict what's happening in the future for me, because it doesn't change, so I can look at [two years time], and be able to work out on a particular date what shift I'll be on….. The*

disadvantages are, that you're working weekends, you know, I work nights, so there's things that I miss out on at home.'

Despite her lack of freedom-of-timing, long unsociable hours and shift work roster, Barbara is one of the few participants who had been able to establish and maintain routines for physical activity. She described how these health practices were structured around the cyclical rhythm of her work schedule

'Like there's that exercise the day between my nights, I always try and do that, and then on my days off I'll try and exercise two or three times as well. So, I run a bit, I've got exercise equipment at home.'

Barbara's routine food practice was facilitated by work-time predictability across day-to-day, mid- and long-term time scales. Barbara had been in her job for 20 years. Although her schedule did not synchronise with her partner's full-time, standard working week schedule, the regularity of their schedules had also enabled them to establish over several years a food preparation routine for the family that was coordinated between them:

'Mostly it's home prepared stuff that we eat... The days that I'm on shift he does most of it [meal preparation]. Before that first nightshift ... I will generally prepare them a meal, so that it's done for when they come home, or... So we do about 50/50.'

The importance of long-term predictability for health practices is also reflected by Susan, a newly 'casual worker', who was made redundant from her full-time, permanent, standard business hours job with day-to-day, mid- and long-term predictability. The rhythms and regularity provided by her previous job had enabled her to establish and maintain a weekly routine of grocery shopping and food preparation which were central to her health practices. Her husband had predictable, rotating shifts across a six-day cycle. They were both familiar with the rhythms involved, based on a joint routine which fitted in health practices around their respective work demands. When Susan was made redundant (a disruption to long-term work predictability), her health practices and the rhythms built around her work schedule were destroyed:

'I was doing a fair bit of physical exercise, I was eating right, I was doing all the right things.... when I stopped working I had no routine, so my routine just totally went out the window and I just didn't do anything [health practices].'

Susan described how, since she had new casual employment, she has begun to re-establish an activity routine, based entirely on her husband's work schedule. Her story resonated with Janet's described earlier.

Rituals may protect health practices from temporal disruption

Resilience to disruption was highest in participants with long-established or ritualised health practices, where the practice itself has become imbued with meaning beyond the instrumental function of the activity. Family meal times, especially in the workday evening, were highly valued events among participants and great effort went into maintaining them. As a result, parents of young children reported healthier food practices than other participants. The assistance of

partners, and occasionally parents and parents-in-law, features strongly in accounts of family meal time rituals.

Failing to acknowledge the importance of 'co-presence' of family and friends for such activities suggests a lack of appreciation for the temporal complexity of people's lives, particularly now that dual earner households are the norm (Skinner et al., 2012). Reflective of social reproduction processes, Woodman has argued, 'Increased variability in the rhythms and schedules of daily life potentially reshapes personal relationships, as the synchronization of timetables with significant others, for example around meals, shifts from an institutional given towards a challenge demanding active efforts of coordination' (Woodman, 2012: 1075).

Ritualism in physical activity was evident for only two participants: Geoff gave an example of meeting with a friend to play sport (described earlier) and Jenny, described daily dog walking. Jenny took up self-employment in order to become the primary care-giver for her four children. Her husband was also self-employed, working long hours. While her work was very irregular, her freedom-of-timing meant she rarely took on work with less than a week's notice: '*If the kids have got a sports day on,* [I say] *I'm terribly sorry I'm booked out for that day, I can't help you'*. This gave her some mid-term predictability, but as her work-demands were set by customer demands, there were weak boundaries around when she worked. She attempted to cook from scratch, but given the day-to-day unpredictability of her work she resolved that '*it's okay to cheat' by using pre-prepared ingredients*. Her main physical activity was walking the family dog at 5am each day for an hour. For Jenny, dog walking had become a ritual associated with 'me-time'. However, she felt that she had to tell her family that the practice is primarily for the dog's health benefit, because she reasoned that using time for her own health was self-indulgent. For women in particular, health practices become displaced by their own and their partner's work schedules and caring duties.

Discussion

This study aims to extend the understanding of the mechanisms by which the temporal features of labour market arrangements influence workers' health practices, thereby impacting population health. It is anticipated that this will shed light on the deficiencies in the Australian government framing of flexible work. In relation to our first aim, social theories of practice with an emphasis on the politics of time (Blue et al., 2016; Elchardus, 1991; Shove et al., 2012) are particularly well-suited to illuminate the complex interplay between work and other life commitments. While Elchardus argued there was a need 'to distinguish between flexibility *for* the worker… and flexibility *of* the worker' (1991: 702) - in terms of which party benefits from the right to negotiate various aspects of work schedules (work hours, patterns), and autonomy over which tasks to perform and when – he also highlighted how employment arrangements draw on and redefine the socio-cultural dispositions and temporal resources of workers. Resonating with theories of social reproduction, Elchardus found that flexibility of the worker enhances the employer's control over production but 'complicates the organization of everyday life' for workers (1994: 702).

Participants in this Australian study provide numerous examples of how work arrangements that are characterised by flexibility without predictability undermine

the stabilising rhythmic foundations of their everyday routines, and thus their ability to establish and maintain practices of healthy eating and being physically active. They also reveal how unpredictable work schedules interact with the temporal demands of other practice sets to further disrupt health practices. Putting on-call workers aside, unpredictable work-times are largely due to employer requests to vary previously negotiated work schedules with little advanced notice; leading to employees extending their hours to finish a task. In these accounts, time for health practices are reduced or eliminated to absorb unpredictable paid work as well as caring work, which has a palpable impact on women.

It is clear that the temporal demands of family care duties interacted with work demands to disrupt women's health practice routines; but equally, when care schedules are predictable (e.g., regular school drop-off and pick up times), they serve to stabilise multi-practice rhythms including time for health. Children's schooling constitute a ritual that can be health protective but typically under conditions of a part-time, shorter working week. When a health crisis is present, like diabetes, greater effort might also lead to ritualising health practices. However, from a public health standpoint this is too late.

Social historian Graeme Davison's (1993) characterization of the late 20th century Australian economy as 'fluid' captures the socially disruptive nature of flexible labour market policies. These policies lead to a 'floating sociality', as contrasted with the 'fixed sociality' provided by earlier, more regulated work regimes (Laermans, 1993). Flexibilised workers, it seems, are engaging in fluid everyday practices as a way of surviving working life. Precariousness and fluidity amount to uncertainty, which hampers the rhythmic interplay of work-life routines and multiple practice sets. As labour markets are flexibilised, the collective capacity for negotiating employment conditions that support health-supporting practices is eroded.

Conclusion

An increasing number of studies highlight the time-shifting that is underway, among contemporary workforces in Australia and beyond, between personally valuable activities and activities that are economically valued by governments and businesses. Despite flexible employment policies, work-life balance remains hard to achieve; parents are struggling to manage caring practices, including self-care, alongside work schedules. This study proposes an explanation for this experience: flexible work schedules upset the stability of routines and the maintenance of rhythms across practice sets. This research suggests that rituals – based on strongly-held values - can be a counterforce to routine disruption, but even here work-time demands can upend rituals. While these three Rs – routines, rhythms and rituals – are the outcome of the relationship between labour force structures and employee agency, they also mediate that relationship. These three Rs constitute the temporal scaffolding essential for a healthy population. The positing of this particular socio-temporal mechanism is novel.

At a more theoretical level, the study also engages with the debate around whether a flexible disposition is a reflection of agentic power or powerlessness. Bourdieu (1977) suggested that such a disposition belongs to groups who have

acquired through the class system competencies to better deal with change. Elchardus (1994), by contrast, argued that a flexible disposition signalled powerlessness due to an inability to retain rituals. Our findings align with Elchardus – flexibilised workers abandon protective health practices under the weight of employer demands – both explicit and implicit. Constantly accommodating work-place demands – especially unpredicted long hours and intense work – is a recipe to forego healthy eating and physical activity.

In terms of policy implications, Australian government mandated flexible work encompasses a narrow range of characteristics - start and finish times and shorter working weeks for carers. Other temporal work conditions that are crucial for health practices, including intensity, rosters and security of tenure, lie outside the mandate and require constant negotiation between the employer and worker within the confines of an economic system based on capital's need to override temporal constraints (Gross, 1982). In the case of the self-employed, who have greater control over such matters, ruthless competitive markets compel many to dedicate long and intense hours to work (Dixon et al., 2019). Moreover, flexible work policies that attempt to accommodate caring work by providing rights to carers, but lack a strong commitment to gender equity, end up reinforcing existing divisions within the labour market (Heron and Charlesworth, 2012).

There is a strong push by the business sector to amend the Fair Work Act to deregulate labour conditions further (Campbell and Burgess, 2018) – that is, to consolidate the flexibilisation of the labour force – with no regard to healthy workers and their families. From a national productivity perspective (Organisation for Economic Cooperation and Development [OECD], 2010), it makes little sense to ignore the temporality of social reproduction practices like health and family care in the regulation of employment conditions. Our findings stress that the important structural feature at play in the work-health practices nexus is whether or not predictability is prioritized in how work is organized. Workers need to experience confidence in how the temporal boundaries of their work will unfold; they need to know when they will be working, with what intensity, when they will have breaks, and how long their contract will go for.

Australia's current employment system permits employers and employees, at the enterprise level, to negotiate over an extremely narrow set of temporal conditions. This study suggests that a wider set of temporal features need to be incorporated into industrial relations frameworks: maximum and minimum working hours; the time-limiting of casual contracts to minimise casualization; strengthening the award system based on industries rather than enterprise level agreements, with the lifting of restrictions placed on unions in terms of strikes, workplace entry. These provisions existed in the 1970s and 1980s before deregulation and flexibilisation took hold. Of recent urgency, is the need to tighten up employee status definitions for workers with ambiguous status such as agency workers, labour hire and subcontractors. For flexible work provisions to support worker health they must incorporate predicable work schedules at multiple time levels.

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