

**A Mixed Methods Analysis of Australian Women's Reported Intentions to Use Paid
Menstrual Leave**



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Table of Contents

List of Tables.....	5
Abstract.....	6
Declaration.....	7
Contributor Roles	8
Introduction.....	9
Overview.....	9
The Case for Menstrual Leave	10
<i>Menstrual Symptoms and Workplace Effects</i>	<i>10</i>
<i>Current Leave Provisions.....</i>	<i>10</i>
Concerns About Menstrual Leave.....	11
<i>Stigma and Concerns for Disclosure</i>	<i>11</i>
<i>Biological Essentialism.....</i>	<i>12</i>
Context of Menstrual Leave.....	13
<i>International Government Legislation.....</i>	<i>13</i>
<i>Company Policy.....</i>	<i>13</i>
Theory and the Current Study	14
Method	15
Study Design.....	15
Terminology	16
Procedure	16
Sampling	17

Analysis.....	17
<i>Preliminary Analysis</i>	17
<i>Power Analysis</i>	17
<i>Testing Assumptions</i>	18
<i>Binary Logistic Regression</i>	18
<i>Conventional Content Analysis</i>	18
Participants.....	19
Measures.....	19
<i>Outcome Variable: Reported Intention to Use Menstrual Leave</i>	19
<i>Independent Variables</i>	20
Attitudinal Characteristics.....	20
Demographic Characteristics.....	20
Menstrual Health Characteristics.....	20
Results.....	21
Participant Characteristics.....	21
Aim 1: Proportion of Participants Who Would Use Paid Menstrual Leave.....	23
Aim 2: Characteristics Associated with Reported Intention to Use Paid Menstrual leave ..	23
Aim 3: Reasons Participants Would or Would Not use Paid Menstrual Leave.....	25
<i>Reasons Participants Would Use Paid Menstrual Leave</i>	29
<i>Reasons Participants Would Not Use Paid Menstrual Leave</i>	31
Discussion.....	31
Overview.....	31
Summary of Findings.....	32

<i>Reported Intention to Use Paid Menstrual Leave</i>	32
<i>Characteristics Associated with Reported Intention to Use Paid Menstrual Leave and Reasons Participants Would or Would Not Use Paid Menstrual Leave</i>	32
Support for leave.....	33
Debilitating pain and skipping work for menstrual pain.	34
<i>Other Qualitative Results</i>	35
Implications.....	36
Strengths	36
Limitations and Recommendations for Future Research.....	37
Conclusion	38
References	39
Appendices	51
Appendix A. Relevant Questionnaire Items to the Current Study.	51
Appendix B. Content Analysis of Reasons Participants Would Use Paid Menstrual Leave With Less Than 15% Frequency	54
Appendix C. Content Analysis of Reasons Participants Would Not Use Paid Menstrual Leave with Less Than 15% Frequency	58

List of Tables

Table 1. Descriptive Characteristics of Participants and Proportion of Sample Who Report They Would or Would Not Use Paid Menstrual Leave.....	21
Table 2. Binary Multiple Logistic Regression of Attitudinal, Demographic and Menstrual Health Characteristics Associated with Women’s Intention to Use or Not Use Paid Menstrual Leave.....	24
Table 3. Content Analysis of Reasons Participants Would Use Paid Menstrual Leave	26
Table 4. Content Analysis of Reasons Participants Would Not Use Paid Menstrual Leave .	30

Abstract

Menstrual leave provides paid or unpaid leave for those whose work is considerably affected by menstrual symptoms. While many individuals support it, others voice concerns, and in nations with established legislation, employee uptake is seemingly low. Due to the recency of the idea in high-income countries, limited studies on menstrual leave exist. This knowledge gap was addressed using online questionnaire data from 554 Australian women in a concurrent embedded mixed methods design utilising binary logistic regression and conventional content analysis. Participants were primarily recruited via women's health organisations and menstrual health forums. The aims included examining the proportion of participants who would or would not use paid menstrual leave, characteristics associated with reported intention to use it and reasons participants would or would not use it. Overall, 83.6% (95% CI [80.2, 86.6], n = 463) of women reported they would use paid menstrual leave compared to 16.4% (95% CI [13.4, 19.8], n = 91) who reported they would not. Those who supported menstrual leave, had experiences of debilitating pain and have skipped work for menstrual pain showed 2.7, 5.6, and 8 times increased odds, respectively, of reported intention to use menstrual leave. Correspondingly, debilitating symptoms was the most endorsed reason by those reporting intention to use menstrual leave, while low need was most endorsed by those who reported they did not intend to use it. Findings can inform Australian policymakers, lawmakers, unions and workplaces. Future research should extend to additional stakeholders and examine if intentions correspond to genuine usage.

Keywords: mixed methods; menstrual leave; menstrual health; binary logistic regression; content analysis

Declaration

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made.

I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

██████████

25 September 2023

Contributor Roles

ROLE	ROLE DESCRIPTION	STUDENT	SUPERVISOR 1	SUPERVISOR 2	CONTENT ADVISOR
CONCEPTUALISATION	Ideas; formulation or evolution of overarching research goals and aims.	X	X	X	
METHODOLOGY	Development or design of methodology; creation of models.	X	X	X	
PROJECT ADMINISTRATION	Management and coordination responsibility for the research activity planning and execution.	X	X		
SUPERVISION	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.		X	X	
RESOURCES	Provision of study materials, laboratory samples, instrumentation, computing resources, or other analysis tools.		X	X	X
SOFTWARE	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code.	NA	NA	NA	NA
INVESTIGATION	Conducting research - specifically performing experiments, or data/evidence collection.		X	X	X
VALIDATION	Verification of the overall replication/reproducibility of results/experiments.	X	X	X	
DATA CURATION	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later re-use.	X			
FORMAL ANALYSIS	Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesise study data.	X	X	X	
VISUALISATION	Visualisation/data presentation of the results.	X	X	X	
WRITING – ORIGINAL DRAFT	Specifically writing the initial draft.	X			
WRITING – REVIEW & EDITING	Critical review, commentary or revision of original draft	X	X	X	

Introduction

Overview

Experienced between menarche and menopause, menstruation is the regular shedding of the uterine lining in an ovarian cycle (Reed & Carr, 2000). During menstruation, it is common for many women to experience debilitating menstrual symptoms such as pain and heavy bleeding. Less commonly, severe symptoms are indicative of reproductive health issues such as endometriosis (Critchley et al., 2020). Furthermore, menstrual stigmatisation can result in negative self-esteem and body image (Johnston-Robledo & Chrisler, 2020). This contributes to a greater psychological burden, with many women reporting increased stress, vulnerability, mood disturbances, anxiety and depression due to their menstrual cycle (Vora, 2020). Consequently, menstrual health, which aims for physical, mental and social wellbeing related to the menstrual cycle, has been gaining currency in Australia (Hennegan et al., 2021). This has led to the proposal of menstrual leave, aiming to increase menstrual health in the workplace (Barnack-Tavlaris et al., 2019).

Menstrual leave is a paid or unpaid leave entitlement that allows workers to take additional time off if they cannot attend work due to their menstrual symptoms (King, 2021). In Australia, this has often been proposed as one day's paid leave per month annually (Golding & Hvala, 2021). Reactions to the policy vary, with some emphasising the need for menstrual leave and others concerned about its consequences. Discourse surrounding menstrual leave has become prevalent in the media, particularly since Spain introduced legislation in 2023 (Bello & Llach, 2023); however, limited research has been published. The current study aims to address this gap by exploring whether Australian women would be willing to use paid menstrual leave. Paid leave was the sole focus as forms of paid leave have been associated with increased wellbeing, improved use of healthcare services and financial security. Meanwhile, unpaid leave has shown similar effects to not using any leave

(Goodman & Schneider, 2021). However, the terms “paid menstrual leave” and “menstrual leave” will be used interchangeably throughout for clarity of expression.

The Case for Menstrual Leave

Menstrual Symptoms and Workplace Effects

While menstrual symptoms are diverse, common symptoms include dysmenorrhoea or menstrual pain (16-91% prevalence), heavy bleeding (20-30% prevalence) and premenstrual syndrome (20-40% prevalence; Gao et al., 2022; Hapangama & Bulmer, 2016; Ju et al., 2014; Ponzo et al., 2022; Schoep et al., 2019). A range of menstrual health literature suggests that these menstrual symptoms significantly impact workplace absenteeism and presenteeism (Armour et al., 2020; Grandi et al., 2012; Heinemann et al., 2010; Sims & Singh, 2023). In a cross-sectional study of 1867 users of a menstrual app, 45.2% of respondents reported average absenteeism of 5.8 days within 12 months (Ponzo et al., 2022). A similar study on 32,748 women recruited from social media, showed that 80.7% of respondents reported mean presenteeism of 23.2 days annually. Presenteeism occurs when employees attend work while unwell, resulting in decreased functioning (Schoep et al., 2019).

Current Leave Provisions

Consequently, it might be assumed that current leave entitlements may be adequate for addressing menstrual symptoms in the workplace. Section 97 of the *Fair Work Act 2009* (Cth) allows employees to take personal or carer’s leave, if “the employee is not fit for work because of personal illness or personal injury” (Fair Work Ombudsman, n.d.). From a legal perspective, women experiencing adverse menstrual symptoms in the absence of menstrual diagnoses are not considered ill or injured. However, they rely on personal leave if they experience severe symptoms, which some argue leaves little paid leave left over for genuine sickness (Golding & Hvala, 2021). It also has been voiced that the entitlement of 10 days of annual personal leave for full-time employees is inadequate for use pertaining to menstrual

symptoms. Those adversely affected every period can quickly deplete their leave and then require medical certification to access additional leave, or must use annual or unpaid leave (Moradi et al., 2014; Munro, 2022). Furthermore, diagnoses of menstrual illnesses are often delayed. Endometriosis takes 6.7 years on average to diagnose, resulting in sufferers not having the documentation needed for additional paid personal leave (Nnoaham et al., 2011). Scholars suggest that menstrual leave may reduce these burdens by providing time to recover from menstrual symptoms in the absence of, or while waiting for a diagnosis. It may also supply time to seek professional care for abnormal symptoms (Barnack-Tavlaris et al., 2019).

Moreover, while many women with diagnosed menstrual illness may benefit from menstrual leave, for others, debilitating symptoms are a normal part of their menses (Golding & Hvala, 2021). Menstrual health scholars argue that establishing a leave separate from personal leave, which is intended for illness, may prevent the medicalisation of menstruation, where women's natural reproductive systems are conflated with disease (Barnack-Tavlaris et al., 2019). Similarly, some argue that menstrual leave could lessen menstrual stigma. There are reports that women have been viewed as lazy or have had their employment threatened due to frequently using personal leave for menstrual reasons. This contributes to stigmas around women being weak or incapable (Golding & Hvala, 2021). There are suggestions that a separate menstrual leave entitlement may contribute to the normalisation of menstruation and the act of taking time off work for menstrual reasons (Baird et al., 2021; Barnack-Tavlaris et al., 2019).

Concerns About Menstrual Leave

Stigma and Concerns for Disclosure

Contrastingly, other scholars, journalists and the general public have expressed concerns that menstrual leave may instead contribute to menstrual stigma. In a thematic analysis conducted via an online survey of 600 American individuals, a third of the sample

reported that they would not support menstrual leave, citing concerns such as unfairness for men, exacerbation of the gender divide, hiring discrimination and workplace stigma (Barnack-Tavlaris et al., 2019). Social psychological research has found that menstruation is often stigmatised, and participants tend to rate women more negatively when they believe they are menstruating (Forbes et al., 2003; Roberts et al., 2002). Scholars voice concerns that if employees use menstrual leave, supervisors may know that they are menstruating, which can lead to embarrassment or discrimination (Levitt & Barnack-Tavlaris, 2020). In the Australian Department of Health's Menstrual Health Survey of 360 staff members, only one-fifth reported telling their manager when their menses was adversely impacting their productivity, citing feeling uncomfortable or that the manager would not understand (Munro, 2022). There are additional concerns for menstruating employees who cannot disclose their menstruation status due to culture or gender identity. These individuals may avoid using the leave altogether (Levitt & Barnack-Tavlaris, 2020; Munro, 2022).

Biological Essentialism

In addition to concerns for increased menstrual stigma, feminist perspectives express that menstrual leave may reinforce ideas of biological essentialism; the idea that women's natural biology is a problem that needs a solution (Baird et al., 2021; Goldblatt & Steele, 2019). They argue that it may promote medicalisation of menstruation by pathologising women's bodies and undermining genuine menstrual illness. Similarly, some menstrual health scholars suggest that menstrual leave does not make managing one's period at work easier, but instead encourages women to stay hidden at home. There is discourse surrounding making workplaces more period-friendly and flexible first, rather than immediately resorting to menstrual leave (King, 2023).

Context of Menstrual Leave

International Government Legislation

Currently, menstrual leave is offered in Japan, select Chinese provinces, South Korea, Taiwan, Indonesia, Vietnam, Zambia, Spain, and previously in the former Soviet Union. Historically, most menstrual leave legislation was allegedly implemented to protect women's reproductive functions or address unsatisfactory workplace sanitation (Baird et al., 2021). Despite being implemented in most of these nations some time ago, scarce research has been published (Barnack-Tavlaris et al., 2019). What limited research there is suggests uptake rates are low (Baird et al., 2021). In Japan, menstrual leave was introduced in 1947; however, use declined from 20% to 13% from 1960 to 1981 due to societal pressure, disapproval of its use and workplace discrimination (Dan, 1986). Indonesia's menstrual leave legislation has had mixed responses, with a case study of female Indonesian workers stating that white-collar workers view it as an embarrassment, while blue-collar workers support it due to poor sanitation in their workplaces (Lahiri-Dutt & Robinson, 2008). In South Korea, one day per month of menstrual leave was introduced in 2001. However, this has been criticised by male workers as "reverse sexism", and uptake rates have reportedly been declining (Baird et al., 2021). In Taiwan, menstrual leave was legislated in 2002, allowing employees up to three instances annually of one day off per period at half regular wage. A thematic analysis using focus groups concluded that of the 43 Taiwanese women in the sample, most had not used menstrual leave, citing that they did not understand the regulations, found it inflexible, did not know anyone who used it, had no one to cover for them if they took it or that their workplace required medical certificates to use it (Chang et al., 2011).

Company Policy

Outside government policy, individual workplaces have implemented menstrual leave, including Coexist in Bristol, Cultural Machine, Gozoop and Zomato in India and Shark and

Shrimp in Cairo (Baird et al., 2021). In Australia, the Victorian Women's Trust, Modibodi and Future Super have introduced menstrual leave. In 2013, the Victorian Women's Trust introduced 12 days of annual menstrual leave, reporting that of the 10 women in the team, approximately 37 days of leave were taken in five years between them (Melican & Mountford, 2017; Muroi, 2022). About 42% of eligible employees at Future Super have used menstrual leave, which allows up to six days annually with the option to take partial days off (Muroi, 2022; Prasser, 2021). However, these figures are self-reported by the companies, and a lack of longitudinal data makes it unclear whether these rates have changed with time.

Theory and the Current Study

The current study is generally informed by the Theory of Planned Behaviour (TPB) (Ajzen, 1991), which has been used for explaining intentions for workplace behaviours in regards to work environment, health promotion, safety and return to work (Dunstan et al., 2013; Gh et al., 2021; Greaves et al., 2013; Hedlund et al., 2021; Röttger et al., 2017). It postulates that strong intentions to perform a behaviour leads to the behaviour itself based on three underlying beliefs: behavioural (attitudes), normative (subjective norms) and control beliefs (perceived behavioural control)(Ajzen, 1991; Hedlund et al., 2021). According to the TPB, women should be more likely to use paid menstrual leave if they have positive attitudes towards it, believe taking it is normal and have the control to take it. The present study was not wholly guided by the TPB due to the use of existing data and prospective responses. As an emerging topic, flexibility was also necessary. Rather, the TPB informed understandings about leave-taking intentions and can be used in future research related to menstrual leave intentions and behaviours.

While public and academic interest in menstrual leave is growing, it has scarcely been addressed in empirical literature thus far, likely due to the newness of the concept in high-income nations (Baird et al., 2021; Goldblatt & Steele, 2019). A thematic analysis on 600

individuals living in the United States about perceptions of menstrual leave has been published; however, their sample would likely not be representative of Australian populations and included both men and women (Barnack-Tavlaris et al., 2019). Furthermore, considering the implications of the reportedly low uptake of menstrual leave in countries which offer it, there is a question about whether Australian women would be willing to use the leave if implemented. The current study addresses this by examining reported intentions to use paid menstrual leave amongst a sample of Australian women. The study employed a concurrent embedded mixed methods design utilising multiple binary logistic regression and conventional content analysis. The results can inform legislators, unions and workplaces considering implementing the leave in Australia.

The aims of the present study are to:

1. Determine the proportion of participants who report that they would or would not use paid menstrual leave should it be made available,
2. Examine attitudinal, demographic and menstrual health characteristics associated with reported intention to use paid menstrual leave, and
3. Explore reasons participants would or would not use paid menstrual leave.

Method

Study Design

The present study used cross-sectional, concurrently collected quantitative and qualitative data. This prompted the decision to use a concurrent embedded mixed methods design. An embedded approach involves one type of data supplementing another to answer the research questions where one type alone is insufficient (Creswell et al., 2003). This approach combines the strengths of quantitative and qualitative data (Creswell, 2015). Here, the qualitative findings were supplementary to the quantitative findings in providing context for reasons participants would or would not use menstrual leave. The study was generally

informed by existing theory; however, qualitative analysis created flexibility for some ideas to emerge independently (Zhang & Wildemuth, 2009). This approach was suitable considering the emerging nature of the topic. The methods were rooted in the paradigm of pragmatism, driven by using what works best to answer the research question rather than a particular philosophical position (Johnson & Onwuegbuzie, 2004).

Terminology

In line with Sex and Gender Equity in Research guidelines (Heidari et al., 2016), the current study acknowledges the difference between sex and gender and that not all women menstruate and not all people who menstruate are women. Whilst acknowledging this, for the present study, participants are referred to as “women” rather than “menstruators”, given concerns that the latter may be construed as dehumanising.

Procedure

This study used existing data collected by XXXX, supervised by XXXX and XXXX, approved by the University of Adelaide Research Ethics Subcommittee (approval number 22-78). Data were collected from 1 October 2022 until 23 January 2023 via an anonymous online questionnaire hosted on Qualtrics, comprising multiple-choice and open-answer questions. Questions relevant to the present study were presented in the order of views towards menstrual leave, age, education, industry, menstruation status, intentions to use leave, presence of menstrual pain and history of skipping work for menstrual pain (see Appendix A). Participation was voluntary, and on the opening page, participants were told of the aims, inclusion criteria and potential benefits and risks. Consent and extended consent were asked before beginning the questionnaire. Participants could elect to receive a copy of the research findings via email; however, email addresses were stored separately and de-identified by the original researcher.

Sampling

Non-probability sampling (convenience/volunteer sampling) and passive snowball sampling were used as they were considered pragmatic for achieving a large sample size. Participants were recruited using the researchers' social media, Australian women's health and menstruation forums and the mailing list of the Body@Work Project at the University of Sydney Business School. Furthermore, the questionnaire was available on the Psychology Research Participation System at the University of Adelaide for course credit and shared via organisations such as TABOO Period Products, SONTA Adelaide, the University of Adelaide's Diversity, Illness and Divergence Association (DIDA), The Chalice Foundation and the Woman Code.

Analysis

Preliminary Analysis

The outcome variable, which included "no", "unsure" and "yes" for whether participants would use menstrual leave, was dichotomised for the binary logistic regression. Statistical testing found that the "unsure" group was different to the "would use" and "would not use" menstrual leave groups on several measures and so could not be merged with these. Moreover, literature suggests that a uniform interpretation of an "unsure" response group is generally unjustifiable (Denman et al., 2018; Krosnick, 1991). Subsequently, the 93 participants in this group were excluded from further analyses.

Power Analysis

While conventions differ, for logistic regression, upwards of 500 participants is often considered adequate, of which this study's sample size exceeds (Bujang et al., 2018; Long, 1997). It is also conventional to have at least 10 events per independent variable (Concato et al., 1995). The current study has 91 events and seven variables, with approximately 13 events per variable. Therefore, the study was sufficiently powered according to these conventions.

Testing Assumptions

The assumption of no multicollinearity between independent variables was tested using statistical associations. Associations were found to be weak, which indicated little to no multicollinearity. Logistic regression additionally assumes linearity of continuous independent variables with the logit of the outcome variable. This assumption was tested using the Box-Tidwell procedure on the continuous measure of age. The result was non-significant, which met this assumption. Finally, logistic regression assumes no extreme outliers. Using visualisation and statistical distances, no notable outliers were found.

Binary Logistic Regression

Quantitative data were analysed using SPSS Statistics Version 27. The cut-off for statistical significance was when $p < .05$. Descriptive statistics were examined. Where appropriate, levels of independent variables were collapsed. After all assumptions had been tested, a binary multiple logistic regression was performed using the enter method to examine associations between participant characteristics and reported intention to use paid menstrual leave.

Conventional Content Analysis

In the questionnaire, participants were prompted to explain more about their response to whether they would use paid menstrual leave. Using these responses, an inductive conventional content analysis was conducted guided by existing procedures (Hsieh & Shannon, 2005; Mayring, 2000). Initially, data were read repeatedly to achieve immersion. NVivo 12 was used for highlighting codes consisting of phrases, sentences and paragraphs. A coding dictionary was maintained for consistency and transparency. Based on recommendations in literature, inter-coder agreement was performed using a random sample of 20% ($n = 104$) of the total sample size (O'Connor & Joffe, 2020). There was sufficient agreement of approximately 97% with a fellow researcher, and so coding continued. Once

coding was completed, codes were collapsed into themes. Themes that were complementary to each other were sorted into categories where appropriate. Themes that did not fit into a particular category were left to stand alone. Frequencies were calculated according to the number of participants who made comments in each theme or category. These were then divided into themes endorsed by those who report they would use menstrual leave and those who would not. The percentages of participants in each of these groups who endorsed each theme or category were then calculated.

A reflexive approach creates credibility in qualitative research (Tracy, 2010). The primary researcher acknowledges that they have experienced menstruation and have a personal interest in women's health, though they have not experienced debilitating symptoms or menstrual diagnoses.

Participants

To be eligible for inclusion, participants had to be over 18 years, assigned female sex at birth, living in Australia, fluent in English and have experienced menstruation. Five hundred and thirty participants who did not meet these criteria or had not completed the entire survey were excluded. The resulting total sample size was 554 participants for the binary logistic regression and 519 participants for the conventional content analysis.

Measures

Due to the emerging nature of the topic, no relevant psychometrically validated scales were available. However Australian Bureau of Statistics demographic categories were used where possible.

Outcome Variable: Reported Intention to Use Menstrual Leave

Reported intention to use leave was a dichotomous outcome variable, including "would use" or "would not use" to whether participants would use paid menstrual leave. Participants then explained their responses in short-answer form.

Independent Variables

Due to absence of published research regarding women's intentions to use paid menstrual leave, demographic variables for the regression model were chosen based on leave-taking behaviours for sick leave. Age has shown a positive association with sickness absence (Ng & Feldman, 2008; Warr & Yearta, 1995), but also a negative association (Koopmans et al., 2010; Taimela et al., 2007; Tenhiälä et al., 2013), and mixed or no association (Ariansen, 2014; Donders et al., 2012; Goštautaitė & Shao, 2019; Shao et al., 2022). Sickness absence is reportedly higher in female-dominated industries (Mastekaasa, 2005; Victorian Public Sector Commission, 2012) and lower in those with a higher level of education (Piha et al., 2009). The remaining variables were chosen based on their direct relevance to menstrual health. Seven total variables were chosen, grouped into attitudinal, demographic and menstrual health characteristics.

Attitudinal Characteristics. There was one ordinal attitudinal variable for whether participants were in favour of paid menstrual leave (“supported”/“unsure”/“did not support menstrual leave”).

Demographic Characteristics. Three demographic characteristics; age, education and industry were included in the model. Age in years was continuous, and highest level of education was dichotomised (“university- educated”/“not university educated”). Type of industry was categorised according to gender dominance of industry categories (Australian Bureau of Statistics, 2018). This included “female-dominated”, “male-dominated”, “unemployed”, and “mixed industry or other” (those who work in an evenly gender-distributed industry or multiple industries of different gender dominance).

Menstrual Health Characteristics. Three menstrual health items were examined, comprising menstruation status, experience of debilitating menstrual pain and history of skipping work for menstrual pain. Menstruation status included “currently menstruating” and

“previously menstruated”, and experience of debilitating pain and history of skipping work or using leave for menstrual pain were dichotomised into “yes” or “no”.

Results

Participant Characteristics

Table 1 summarises the descriptive characteristics of the sample and the proportion of participants who would or would not use menstrual leave according to each characteristic. The mean age was 28.6 years (SD = 9.5). Approximately 97% of the sample identified as woman or female. Participants were predominantly heterosexual and born in the Oceania region. Most of the sample (71.1%) had commenced or completed tertiary university study, and 41.4% were employed full-time. A relatively large proportion were also employed part-time and casually. The sample worked predominantly in mixed or other industries. Most participants were actively menstruating when completing the questionnaire, had experienced debilitating pain while menstruating, had skipped work in the past due to menstrual pain and were in favour of menstrual leave.

Table 1.

Descriptive Characteristics of Participants and Proportion of Sample Who Report They Would or Would Not Use Paid Menstrual Leave

Characteristic	N (%) of total participants (N = 554)	Would use menstrual leave N(%) of participants	Would not use menstrual leave N(%) of participants
Total sample	554	463 (83.6)	91 (16.4)
Age, M (SD) (N = 552)*	28.6 (9.5)	28.1 (8.9)	31.2 (11.8)
Gender			
Woman or female	537 (96.9)	499 (83.6)	88 (16.4)
Man or male	2 (.4)	1 (50.0)	1 (50.0)
Non-binary	11 (2.0)	10 (90.9)	1 (9.1)

Other	4 (.7)	3 (75.0)	1 (25.0)
Sexual orientation			
Heterosexual	380 (68.6)	315 (82.9)	65 (17.1)
Gay	14 (2.5)	12 (85.7)	2 (14.3)
Bi+ (bisexual, pansexual)	124 (22.4)	112 (90.3)	12 (9.7)
Don't know	15 (2.7)	9 (60.0)	6 (40.0)
Prefer not to answer	8 (1.4)	6 (75.0)	2 (25.0)
Other	13 (2.4)	9 (69.2)	4 (30.8)
Region of birth (N = 551)*			
Oceania and Antarctica	465 (84.4)	391 (84.1)	74 (15.9)
Northwest Europe	36 (6.5)	27 (75.0)	9 (25.0)
Southern and Eastern Europe	3 (.5)	3 (100.0)	0 (0.0)
North Africa and The Middle East	4 (.7)	4 (100.0)	0 (0.0)
Southeast Asia	19 (3.5)	17 (89.5)	2 (10.5)
Northeast Asia	6 (1.2)	5 (83.3)	1 (16.7)
Southern and Central Asia	6 (1.2)	6 (100.0)	0 (0.0)
Americas	9 (1.6)	8 (88.9)	1 (11.1)
Sub-Saharan Africa	3 (.5)	0 (0.00)	3 (100.0)
Highest level of education (N = 553)*			
Commenced/completed university study	393 (71.1)	322 (81.9)	71 (18.1)
Not university educated	160 (28.9)	141 (88.1)	19 (11.9)
Employment Type (N = 551)*			
Full-time (40+ hours per week)	228 (41.4)	192 (84.2)	36 (15.8)
Part-time (20+ hours per week)	102 (18.5)	89 (87.3)	13 (12.7)
Casual	138 (25.1)	115 (83.3)	23 (16.7)
Unemployed (student/retiree/unemployed)	69 (12.5)	56 (81.2)	13 (18.8)
Self-employed	14 (2.5)	9 (64.3)	5 (35.7)
Industry Type			
Female-dominated	182 (32.9)	152 (83.5)	30 (16.5)
Male-dominated	33 (6.0)	25 (75.8)	8 (24.2)
Mixed or other industry	290 (52.4)	230 (85.2)	40 (14.8)
Unemployed	69 (12.5)	56 (81.2)	13 (18.8)
Menstruation Status			

Currently menstruating	505 (91.2)	427 (84.6)	78 (15.4)
Previously menstruated but no longer do	49 (8.8)	36 (73.5)	13 (26.5)
Experience of debilitating menstrual pain			
Yes	487 (87.9)	438 (89.9)	49 (10.1)
No	67 (12.1)	25 (37.3)	42 (62.7)
Ever had to skip work, cancel shift or use leave for pain related to menstrual cycle (<i>N</i> = 553)*			
Yes	446 (80.7)	412 (92.4)	34 (7.6)
No	107 (19.4)	50 (46.7)	57 (53.3)
Support for menstrual leave (<i>N</i> = 553)*			
Yes	478 (86.4)	410 (85.8)	68 (14.2)
Unsure	25 (4.5)	20 (80)	5 (20)
No	50 (9.0)	32 (64)	18 (36)

Note. * = Deviation from the total sample size due to blank responses (*N* = 554)

Aim 1: Proportion of Participants Who Would Use Paid Menstrual Leave

Overall, 83.6% (95% CI [80.2, 86.6], *n* = 463) of the participants reported intention to use paid menstrual leave. The remaining 16.4% (95% CI [13.4, 19.8], *n* = 91) reported that they did not intend to use paid menstrual leave. As explained previously, 93 participants who answered that they were unsure if they would use menstrual leave were removed from analysis.

Aim 2: Characteristics Associated with Reported Intention to Use Paid Menstrual leave

Binary logistic regression was used to examine the associations of seven independent variables with women's reported intentions to use menstrual leave (see Table 3). The model was statistically significant, $\chi^2(10) = 146.51$, $p < .001$, and explained 39.8% (Nagelkerke's R^2) of the variance of reported intention to use menstrual leave. The model correctly classified 88.3% of the cases with sensitivity classifications of 96.5% and specificity classifications of 46.1%. Support for leave in reference to non-support was significant ($B =$

1.02, *Wald* χ^2 (1) = 5.53, *p* = .019), though it was the weakest association. Those who support menstrual leave had 2.7 times increased odds of reported intention to use menstrual leave compared to the reference group who do not support it. Debilitating pain was a significant independent variable for whether women intend to use menstrual leave (*B* = 1.73, *Wald* χ^2 (1) = 23.32, *p* < .001), with women who have experienced debilitating menstrual pain having 5.6 times increased odds of reporting they intend to use menstrual leave. Skipping work for menstrual pain had a strong association with intention to use leave (*B* = 2.08, *Wald* χ^2 (1) = 41.87, *p* < .001), with women who have taken time off work previously due to menstrual pain having 8 times increased odds of intending to use menstrual leave compared to the non-intending group. All other independent variables were non-significant.

Table 2.

Binary Multiple Logistic Regression of Attitudinal, Demographic and Menstrual Health

Characteristics Associated With Women’s Intention to Use or Not Use Paid Menstrual Leave

Independent Variable	B	SE	Wald	df	Sig.	Odds Ratio	95% CI	
							Lower	Upper
Constant	-1.07	.76	1.99	1	.158	.34		
Reference: Non-support of leave								
Unsure if supports leave	1.00	.76	1.73	1	.188	2.71	.61	11.94
Supports leave	1.01	.43	5.53	1	.019	2.74	1.18	6.35
Age	-.03	.02	3.76	1	.053	.97	.94	1.00
Education level	.48	.36	1.80	1	.180	1.62	.80	3.27
Reference: Mixed or other industry								
Male-dominated industry	-.12	.45	.07	1	.785	.89	.37	2.14
Female-dominated industry	-.95	.66	2.05	1	.152	.39	.11	1.42

Unemployed	-.06	.48	.02	1	.897	.94	.37	2.39
Menstruation status	.44	.58	.56	1	.453	1.55	.50	4.81
Experience of debilitating menstrual pain	1.73	.36	23.32	1	.000	5.65	2.80	11.40
Skipped work for menstrual pain	2.08	.32	41.87	1	.000	8.00	4.26	15.01

Aim 3: Reasons Participants Would or Would Not use Paid Menstrual Leave

The results of the conventional content analysis examining reasons participants would or would not use menstrual leave are displayed in Table 4 and Table 5, respectively. Each table provides a label, category, theme, quote and the count and percentage of participants who mentioned each category or theme in their response. Five hundred and nineteen total responses were analysed, including 433 responses from those who reported they would use menstrual leave and 86 responses from those who reported they would not use menstrual leave. This differs from the total sample size of 554 as 35 participants (6.32%) chose to leave their response blank, consisting of 30 “would use” participants (6.5%) and 5 “would not use” participants (5.5%). Seventy-four total themes were generated. These were then separated into 13 categories. Twenty individual themes that did not fit into a category were left to stand alone. Only categories or individual themes endorsed by 15% or more of participants are included here (see Appendices B and C for all other results).

Table 3.*Content Analysis of Reasons Participants Would Use Paid Menstrual Leave*

Code label	Category	Theme	Quote	N (%) of Participants Total N = 433
DS.Y	Debilitating menstrual symptoms			262 (60.5%)
DS1.Y		Pain/cramping	“I experience severe menstrual pain during my menstrual cycle and usually take those days off school, work, and other commitments as I cannot mentally or physically complete strenuous tasks.”	224 (51.7%)
DS2.Y		Other or not specified symptoms	“I would absolutely use it as I sometimes suffer with negative symptoms associated with my menstruation”	56 (12.9%)
DS3.Y		Heavy bleeding	“I have heavy and painful periods. I require super tampons and pads to be worn at the same time for about 2 days of my period.”	44 (10.2%)
DS4.Y		Use of pain medication to cope	“I have to take nurofen to get through my work days and it’s taking a toll on my stomach/ body”	25 (5.8%)
DS5.Y		Nausea or gastrointestinal issues	“I occasionally experience debilitating gastrointestinal upset and pain with menstruation which makes it difficult/embarrassing to get through work”	18 (4.2%)
DS6.Y		Migraine/headache	“I get quite bad migraines and the only thing that really helps is lying down in a dark room and resting- not really able to do that at work”	17 (3.9%)
DS7.Y		Mental health effects	“Severely anxious and depressed for 1-2 days prior to my period”	16 (3.7%)

INTENTIONS TO USE MENSTRUAL LEAVE IN AUSTRALIA

DS8.Y	Pushing through makes symptoms worse	“Not only do I then end up being unproductive at work and often needing to go home, but I also tend to make my pain worse”	5 (1.2%)
WL.Y	Menstruation affects work life		114 (26.3%)
WL1.Y	Affects concentration, productivity or work ability	“I always feel like I am not able to perform and concentrate properly on those days”	101 (23.3%)
WL2.Y	Workplace not accommodating	“In my role at work, I'm not sure when I'll see a bathroom next, as we can often spend hours in different places dealing with complicated situations. Our uniform doesn't disguise the colour of blood either”	10 (2.3%)
WL3.Y	Embarrassment or awkwardness	“When I was younger I'd be embarrassed that it was obvious that I took a day or two off at the same time each month”	7 (1.6%)
WL4.Y	Affecting career or professional relationships	“The emotional symptoms can also be overwhelming and I worry that professional relationships could be damaged because I am struggling to cope”	6 (1.4%)
WL5.Y	Fears of leaking at work	“I get very self conscious about leaking when I am at work and do so regularly”	6 (1.4%)
D.Y	Diagnoses		107 (24.7%)
D1.Y	Endometriosis	“I have endometriosis which can make certain days particularly difficult to work with the pain and the other symptoms I have”	86 (19.9%)
D2.Y	Polycystic Ovary Syndrome (PCOS)	“I have PCOS, my menstrual cycle is irregular and when they do arrive, it can be very painful. Therefore, this would be very useful for me”	25 (5.8%)

INTENTIONS TO USE MENSTRUAL LEAVE IN AUSTRALIA

D3.Y		Medical intervention or surgery for diagnosis	“I have suffered from painful and heavy periods my whole life and have just recently undergone surgery for endometriosis and the barriers I have faced to access leave on even flexibility to accommodate it have been abhorrent”	16 (3.7%)
D4.Y		Adenomyosis	“I have endometriosis and adenomyosis so it has been recommended to me by both my gynaecologists and my pain specialist that I should stay home and rest when I have my period”	15 (3.5%)
D5.Y		Other or non-specified diagnosis	“I have a medically diagnosed condition”	7 (1.6%)
D6.Y		Premenstrual dysphoric disorder (PMDD)	“I also suffer from PMDD which drastically impacts my ability to function in the few days leading up to the start of my period”	7 (1.6%)
D7.Y		Dysmenorrhea	“Due to chronic dysmenorrhea (and possible endometriosis) I have been unable to work as I am unable to regularly due to the severe pain”	3 (0.7%)
ON1.Y	N/A	Would use menstrual leave occasionally or only if necessary	“Whilst it is not severe every time I menstruate there are rare times where I am in bad pain. Only in these instances would I use it”	101 (23.3%)
TO1.Y	N/A	Have taken time off due to menstruation before or used leave for menstrual reasons	“Yes, I have had to take sick leave on multiple occasions due to debilitating menstrual symptoms”	89 (20.6%)

Reasons Participants Would Use Paid Menstrual Leave

The most prevalent category for reasons participants would use menstrual leave was debilitating menstrual symptoms (DS.Y), with 60.5% endorsing this. Within this category, participants cited themes of pain/cramping (DS1.Y), other/non-specified symptoms (DS2.Y), heavy bleeding (DS3.Y), nausea/gastrointestinal issues (DS5.Y), migraine/headache (DS6.Y) and mental health impacts (DS7.Y). Another 5.8% of participants mentioned they needed pain medication to cope with symptoms (DS4.Y), and 1.2% suggested that pushing through symptoms only makes them worse (DS8.Y).

The next most prevalent category was that menstruation affects work-life (WL.Y). Most women identified that menstruation affects their concentration, productivity or work ability (WL1.Y). The other themes under this category included feeling as though the workplace was not accommodating for menstrual symptoms (WL2.Y), embarrassment or awkwardness at work due to their period (WL3.Y), worries that menstrual symptoms are affecting their professional relationships or career (WL4.Y), and fears of leaking through clothing at work (WL5.Y).

Around 25% of women described that a menstruation-related diagnosis was a reason they would use menstrual leave (D.Y). Within this, endometriosis (D1.Y) was most mentioned, followed by PCOS (D2.Y), adenomyosis (D4.Y), other or non-specified diagnoses (D5.Y), PMDD (D6.Y) and dysmenorrhea (D7.Y). Some participants (3.7%) also cited surgeries or medical interventions resulting from their diagnoses contributing to their reported intention to use menstrual leave (D3.Y).

Several participants endorsed the theme that they would only use menstrual leave occasionally or if necessary (ON1.Y). Another 20.6% expressed that they would use menstrual leave due to having previously taken time off for menstrual reasons (TO1.Y).

Table 4.

Content Analysis of Reasons Participants Would Not Use Paid Menstrual Leave

Code label	Category	Theme	Quote	N (%) of Participants Total N = 86
LN.N	Low need			52 (60.5%)
LN1.N		No or manageable symptoms	“My period pain and symptoms are not bad enough to require me to take time off work”	47 (54.7%)
LN2.N		Able to work on period	“I’m fine to work with my period”	11 (12.8%)
LN3.N		Never needed to use leave for menstrual reasons	“I’ve never experienced a lot of pain for my periods, so I’ve never had to use sick leave for them”	2 (2.4%)
NO.N	Negative opinion of menstrual leave			18 (20.9%)
NO1.N		Disagree with menstrual leave	“I am against menstrual leave out of principle and so would not use it even if available”	8 (9.3%)
NO2.N		Not necessary or ridiculous	“I don't feel that it is necessary to have paid leave”	5 (5.8%)
NO3.N		It is lazy to use menstrual leave	“It’s just pure laziness”	4 (4.7%)
NO4.N		Others have been able to cope up until now	“There is absolutely no reason why you cannot just push forward and continue to work like many others before us have”	4 (4.7%)
AA.N	Prefer alternate arrangements			16 (18.6%)
AA1.N		Would rather use personal leave	“I think for the most part paid sick leave is enough to cover this when/if required”	13 (15.1%)
AA2.N		Prefer individual arrangements with employer	“If periods were somehow debilitating enough to make it impossible to work, I would discuss arrangements and accommodations with my employer, but that sounds like an exceptional scenario that does not require menstrual leave to become a default option for everyone”	4 (4.7%)

Reasons Participants Would Not Use Paid Menstrual Leave

Overall, 60.5% of participants who reported they would not use menstrual leave gave the reason of low need (LN.N). Within this category, the majority cited no or manageable symptoms (LN1.N), followed by a smaller amount who stated they can work on their period (LN2.N) or that they have never needed to use leave for menstrual reasons before (LN3.N).

The next most populous category was a negative opinion of menstrual leave (NO.N), including disagreeing with menstrual leave policy (NO1.N), feelings that menstrual leave is not necessary or ridiculous (NO2.N), or it is lazy to use menstrual leave (NO3.N), and that women have been able to cope without it (NO4.N).

Some women endorsed preferring alternate arrangements (category AA.N), including that they would rather use personal or sick leave entitlements (AA1.N) or make individual arrangements with their employer (AA2.N).

Discussion**Overview**

While menstrual leave has become an increasingly debated topic amongst the Australian public and media, the idea is relatively new to high-income countries. As such, research around it is limited. Moreover, in countries where it is legislated, there are suggestions that uptake of menstrual leave is low. The present study aimed to address these issues by examining what proportion of Australian women report intent to use and not use paid menstrual leave, what factors are associated with women's intentions to use it and reasons they would or would not use it. The results provide novel findings that contribute to an emergent body of research about menstrual leave. Intentions to use menstrual leave have not been addressed in literature thus far, and so where relevant, findings have been compared to menstrual health research or other forms of leave. Findings will be summarised along with implications, strengths and limitations and recommendations for future research.

Summary of Findings

Reported Intention to Use Paid Menstrual Leave

Overall, the sample exhibited a high proportion of reported intention to use paid menstrual leave; 83.6% of participants indicated that they would use menstrual leave, compared to 16.4% who reported that they would not. Existing literature that corroborates this could not be found, however some research indicates general favour towards paid menstrual leave. For example, in the Australian Department of Health Menstrual Health Survey, of 292 employees who wanted departmental support, 57% wanted access to menstrual leave (Munro, 2022). Similarly, in a thematic analysis of 600 American participants, 42% supported menstrual leave while 34% opposed it (Barnack-Tavlaris et al., 2019). The proportion of those who report they would use leave in the present study is somewhat inflated compared to the findings about general support for menstrual leave. However, as indicated by findings below, there may be factors outside of general support that are associated with intentions to use menstrual leave. Thus, figures about general support for menstrual leave may not be directly comparable to the results of the present study. Additionally, as discussed in the limitations below, self-selection bias and the use of prospective answers may have skewed the figures. Future research should be undertaken to corroborate findings about reported intention to use menstrual leave.

Characteristics Associated with Reported Intention to Use Paid Menstrual Leave and Reasons Participants Would or Would Not Use Paid Menstrual Leave

In the binary logistic regression, three significant independent variables associated with reported intention to use menstrual leave were found; support for menstrual leave, experiences of debilitating menstrual pain and previously skipping work for menstrual pain. Content analysis results yielded consistent and additional findings. None of the demographic independent variables (age, education and industry type) that are typically associated with

leave-taking behaviours were significant in the model. Menstruation status and reported unsureness towards support of menstrual leave in reference to non-support were also non-significant.

Support for leave. Women who supported menstrual leave had 2.7 times greater odds of reporting intention to use menstrual leave when compared to the reference category of non-support. This finding is consistent with the TPB, where if women have behavioural beliefs such as a positive attitude towards menstrual leave, then they would be more likely to use menstrual leave (Ajzen, 1991). For example, in a leave-taking study of 282 women on long-term sick leave for mental disorders, a more positive attitude towards return to work was the strongest determinant of return to work intentions (Hedlund et al., 2021). Support towards menstrual leave was not a highly endorsed theme for those who reported they would use menstrual leave in the content analysis. However, within the reported reasons that participants would not use menstrual leave, 20.9% cited a negative opinion of menstrual leave (category NO.N). This included themes of disagreement with menstrual leave, that it is unnecessary or ridiculous, beliefs that it is lazy to use menstrual leave or that others have been able to cope until now. This is comparable to the thematic analysis of American participants where common themes were that menstruators should “just deal with it” and that a separate policy is not necessary. The researchers of this study suggest this may indicate a lack of knowledge amongst the public about the effect of debilitating menstrual symptoms on many women’s daily lives (Barnack-Tavlaris et al., 2019). Furthermore, this finding is consistent with stigmas around women taking time off due to menstrual symptoms where they may be perceived as lazy or not hard-working (Golding & Hvala, 2021). This may highlight the need for menstrual health literacy when considering implementation of menstrual leave and encourages future research into the social context for these negative perceptions.

Debilitating pain and skipping work for menstrual pain. An even stronger association was found where women who reported experiences of debilitating menstrual pain had 5.6 times increased odds of intending to use menstrual leave. In the content analysis, 51.7% of participants cited the reason they intend to use menstrual leave was due to pain/cramping (theme DS1.Y) within the category of debilitating menstrual symptoms (category DS.Y) endorsed by 60.5% of participants. Participants also cited themes of other symptoms, having to use pain medication to cope and that pushing through symptoms makes them worse. Correspondingly, 60.5% of participants within those who reported they did not intend to use menstrual leave cited “low need” (category LN.N) as their reason for answering so. This included no or manageable symptoms (theme LB1.N) endorsed by 54.7% of participants. Furthermore, 26.3% of those who reported they intended to use the leave expressed that menstrual symptoms affect their work-life (category WL.Y) including effects on concentration or productivity, that the workplace is not accommodating, feelings of embarrassment, worries of menstruation affecting their professional relationships/career and fears of leaking through clothing. This is substantiated by previous findings from the thematic analysis on an American sample where their participants expressed that pain and other symptoms associated with menstruation hinder working (Barnack-Tavlaris et al., 2019). Menstrual health literature also suggests that menstrual pain significantly contributes to absenteeism and presenteeism, as well as effects on physical, mental and social wellbeing. Women experiencing regular pain have been shown to be more likely to take time off work in general (Armour et al., 2020; MacGregor et al., 2023; Ponzo et al., 2022; Schoep et al., 2019; Yoshino et al., 2022).

Participants were 8 times more likely to report an intention to use menstrual leave if they had previously taken time off for menstrual pain. Likewise, 20.5% of participants who reported intention to use menstrual leave expressed that this was due to having taken time off

before for menstrual reasons (theme TO1.Y). Within those who expressed that they would not use menstrual leave, a small proportion (2.4%) gave the reason of never needing to use leave for menstrual reasons (theme LN3.N). Research to substantiate this finding does not currently exist. It can only be conjectured that perhaps those already using leave for menstrual reasons may be more willing to accept an official form of leave, whereas those who have not used leave for their menstruation may not see a need to use it. Further research is required to explore this assumption.

Other Qualitative Results

The content analysis provided supplementary results not captured by the quantitative analyses. Diagnosis was mentioned as a common category (D.Y) where many women expressed that endometriosis, PCOS, adenomyosis, PMDD, dysmenorrhea and other diagnoses contributed to their reason for intending to use menstrual leave. This is complementary to a large body of research exploring the negative impacts of menstrual disorders on women's working lives (Armour et al., 2022; Kujanpää et al., 2022; Minichil et al., 2020). Future research would benefit from examining the association between menstrual diagnoses and reported intention to use menstrual leave.

Approximately 23% of participants also expressed that they would only use the leave occasionally or if necessary (theme ON1.Y) which lies contrary to concerns found in the American thematic analysis that women have intentions to abuse the leave (Barnack-Tavlaris et al., 2019).

In this same study, they additionally found that participants reported that women should just use a sick day rather than creating a separate policy (Barnack-Tavlaris et al., 2019). The present study yielded comparable findings where 18.6% of participants who reported that they would not use the leave preferred alternate arrangements (category AA.N)

such as personal leave or individual negotiations with an employer. This suggests that some women may be satisfied with their current leave provisions under the *Fair Work Act*.

Implications

These findings have implications for prospective understandings of Australian women's intentions to use menstrual leave. Findings can inform Australian policymakers, legislators and workplaces when considering implementation of menstrual leave into the *Fair Work Act* or workplace policy. Overall, the findings demonstrated a high intention to use menstrual leave amongst the sample, contrary to reported low usage rates in countries with legislated menstrual leave. There was a high degree of reported intention to use it amongst women experiencing debilitating menstrual symptoms and taking time off work due to these symptoms. Likewise, there was a lesser demand amongst those with more manageable symptoms. Legislative bodies and workplaces can take this into account when considering introduction of a menstrual leave policy. If menstrual leave was to be implemented, these stakeholders can also target campaigns towards the women who fit this profile. There remains some general disagreement and preference for existing leave entitlements amongst those who do not intend to use the leave. Prior to implementing any form of menstrual leave, lawmakers would need to consider anticipated negative effects of the leave and how best to address these concerns. This would likely need to follow the example of recently introduced domestic violence leave where precautions were taken to prevent discrimination (Golding & Hvala, 2021).

Strengths

A strength of this study was that it benefitted from a large sample size which allowed for a diverse sample to be analysed along with achieving ample statistical power and increased validity. To the researcher's knowledge, this is the first mixed methods study based on intentions to use menstrual leave, thus these findings establish a basis for future research

to build upon. The use of a mixed methods framework allowed for flexibility of techniques and was pragmatic in addressing the research question. Another strength was that the research enabled the main stakeholders of the topic; women, being the population who experience menstruation, to express their opinion first. The research conducted was additionally held to a rigorous standard; the inter-coder agreement processes increased trustworthiness and use of a coding dictionary allowed transparency and systematicity of the coding process (Korstjens & Moser, 2018).

Limitations and Recommendations for Future Research

A limitation of the present study was that the research questionnaire was shared primarily via menstrual health forums and organisations. Self-selection bias may be present where participants with greater motivation and vested interest in the topic were more likely to complete the survey. The prevalence of reported debilitating symptoms and menstrual diagnoses as well as a high level of similarity within the sample corroborates this notion. Thus, the sample, while informative, may not be representative of the Australian female working population. Future research should aim for increased generalisability by collecting a broader sample. Ideally, it should also extend to women in rural and remote regions, multiple cultural groups and explore transgender and non-binary individuals' perceptions. Research regarding other stakeholders and members of the community should follow including employers, union members and men.

This study's design was centred on reported intentions of women to use menstrual leave and so the responses were prospective. Self-reported intentions do not always translate to behaviours (Webb & Sheeran, 2006) and so it cannot be known if women who report that they would use menstrual leave would truly use menstrual leave if given the opportunity. Furthermore, the data were cross-sectional so cannot claim causal relationships. Future

research would benefit from collecting retrospective data about menstrual leave use as well as any reported consequences of using it and changes in uptake longitudinally.

The removal of 93 participants who answered that they were unsure as to whether they would use menstrual leave may have created bias and reduced generalisability of the findings. Individuals who provide “unsure” or “don’t know” responses tend to have decreased health literacy, lower education, lower income and minority status (Denman et al., 2018). Future research may benefit from methodologies where unsure responses can be taken into consideration.

Another limitation is that the data were originally collected with a different purpose, being to examine general attitudes towards menstrual leave. Therefore, data that may have been insightful for the present study was not captured. It would be beneficial to have survey items targeted towards reported intention to use menstrual leave from the outset so that data such as income, residential area, menstrual diagnoses and presence of other menstrual symptoms can be collected. Inclusion of stakeholders in the research process itself may also be beneficial for gaining a broader understanding of the issues and increase trustworthiness (Alderson et al., 2022).

Finally, a theme that emerged from the findings was a preference for current leave provisions in comparison to menstrual leave. Future research should consider weighing the benefits of a separate menstrual leave compared to restructuring of current leave provisions and other flexible working arrangements such as work from home, workplace resting areas and access to menstrual products.

Conclusion

The present study is the first of its kind to examine Australian women’s reported intentions to use paid menstrual leave. Current literature regarding attitudes towards menstrual leave is minimal and so this study used a mixed methods approach with aims to

inform policy and establish a basis for future menstrual leave research. While not comparable to any existing studies, findings were consistent with and drew upon previous menstrual health and sickness-absence research. Overall, findings indicated a strong intention to use menstrual leave. Binary logistic regression results indicated that support for menstrual leave compared to non-support, presence of debilitating pain and having previously taken time off for menstrual reasons were significant independent variables associated with reported intention to use menstrual leave. Conventional content analysis results postulated that the most endorsed reason women intended to use menstrual leave was due to debilitating symptoms, while at the same proportion, the most expressed reason for not intending to use it was due to low need. Effects on work life, diagnoses and taking time off in the past were other prevalent reasons given for intending to use the leave. Meanwhile, a negative view of menstrual leave and preference for other arrangements were expressed by those who did not intend to use it. These findings have implications for Australian lawmakers, policymakers, unions and workplaces when considering the implementation of menstrual leave, such as foreseeing the demand for it and anticipating how it might be received. Future research should extend to other stakeholders, achieve a more generalisable sample and examine whether these intentions would be consistent with actual leave uptake behaviours.

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Appendices

Appendix A.

Relevant questionnaire items to the binary logistic regression from XXXX's Paid Menstrual Leave Survey. School of Psychology Low Risk Ethics Committee Approval Number: 22/78.

Q3. Are you in favour of paid menstrual leave?

- Definitely yes
- Somewhat yes
- Unsure
- Somewhat no
- Definitely no

Q13. How old are you in years?

Q15. What is your highest level of education?

- Less than Year 12/high school
- Completed Year 12/high school
- Vocational/Trade Certificate
- Undergraduate university study (i.e., Bachelor's or equivalent)
- Postgraduate university study (i.e., Master's, Doctorate)
- Other (please specify)

Q16. Which of the following industries do you work in?

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas, Water & Waste Services
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Transport, Postal and Warehousing

- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance
- Arts and Recreation Services
- Other Services

Q18. Which of the following statements best describes you?

- I currently menstruate
- I have previously menstruated but no longer do

Q8. If paid menstrual leave had been available to you, would you have used it? Please explain more about your response:

- Yes
- Unsure
- No

Q25. If paid menstrual leave is available to you, would you use it? Please explain more about your response:

- Yes
- Unsure
- No

Q19. Debilitating menstrual pain is a result of menstrual symptoms such as heavy bleeding, cramps and fatigue. This type of pain makes it harder for one to carry out activities they would normally carry out when they are not menstruating.

Have you ever experienced debilitating menstrual pain?

- Yes
- No

Q21. Have you ever had to skip work, cancel a shift or use your leave (eg. sick leave, annual leave) for pain related to your menstrual cycle?

- Yes, frequently
- Yes, occasionally
- Yes, rarely
- No

Appendix B.

Content Analysis of Reasons Participants Would Use Paid Menstrual Leave With Less Than 15% Frequency

Code label	Category	Theme	Quote	N (%) of Participants Total N = 433
RW1.Y	N/A	Rest and improved wellbeing or quality of life	“Being able to rest and care for my body rather than push myself to work will be beneficial for my health”	59 (13.6%)
SP1.Y	N/A	Sick or personal leave inadequate	“I experience immense pain along my menstrual cycle very often, however do not have enough sick leave to use for it. Also my sick leave requires a medical note, but I can not get into GPs in time to access this leave”	55 (12.7%)
FI.Y	Financial implications			34 (7.9%)
FI1.Y		Menstruation creates a financial burden	“This led to financial instability and a lot of financial stress and fear of losing my job”	24 (5.5%)
FI2.Y		Financial consequences would be reduced if menstrual leave was available	“I can’t tell you how much it would help and how much less strain it puts on my finances”	13 (3.0%)
IW.Y	Improved work life if menstrual leave introduced			34 (7.9%)
IW1.Y		Creates support, inclusion and positive work culture	“Having this option would make me feel supported and more likely to take it”	14 (3.2%)
IW2.Y		Would improve work performance and productivity	“It would make going to work the next day so much easier & more productive”	14 (3.2%)

IW3.Y		Less worries for job security	“I would be able to feel comfortable taking time off work without feeling worried this may impact my employment”	3 (0.7%)
IW4.Y		Can return to workforce	“Having it available might mean I can return to work as I had to quit my job due to severe pain from endo and adeno”	2 (0.5%)
FA1.Y	N/A	Advocacy for other flexible arrangements ie. work-from-home	“If flexible work hours or working from home was also an option, I think I would use that too”	32 (7.4%)
SN1.Y	N/A	Nice to have the option or silly not to use it	“If it is available and I am paid for it, it would seem silly to not use it”	19 (4.4%)
NR1.Y	N/A	Normalisation and reduced stigma or acknowledgement	“I believe this kind of leave would be a stride toward equity in terms of demystifying the menstrual lived experience”	19 (4.4%)
BH1.Y	N/A	Can manage symptoms better at home	“It also results in very heavy bleeding that’s uncomfortable and messy to deal with while in the workplace and much more comfortable at home”	17 (3.9%)
CM.Y	Concerns for using menstrual leave			17 (3.9%)
CM1.Y		Casual or self-employed workers don’t get leave	“I know as a casual I technically wouldn't be eligible for the leave anyway”	5 (1.2%)
CM2.Y		Concerns for inclusivity	“We need to make sure that menstrual leave includes those of us who still have cycles (ovaries) and have conditions like endometriosis and migraines,	3 (0.7%)

		menopause, etc, but do not have a uterus and do not bleed”	
CM3.Y	Fear of judgement from colleagues or employer	“That being said I would take it just because the option exists but I feel that managers and employees would see that as me being lazy”	2 (0.5%)
CM4.Y	Concerns it may delay diagnosis	“I’d also be concerned that if a diagnosis isn’t required then someone who potentially has a condition like endometriosis might delay getting diagnosed because the leave is available and they can just take a day off when it happens”	1 (0.2%)
CM5.Y	Depends on workplace culture	“It really does depend on how the rest of the workplace views this kind of leave”	1 (0.2%)
CM6.Y	Perpetuates gender discrimination	“Although the stigma of taking this leave might put me off”	1 (0.2%)
CM7.Y	Would feel guilty about regular use	“I would feel guilty about making regular (monthly) use of it”	1 (0.2%)
CM8.Y	Not necessary or ridiculous	“Because it would be allocated to me but I don’t think it is necessary”	1 (0.2%)
CM9.Y	Disagree with menstrual leave	“Probably, if it’s available and I’m paid why wouldn’t I? Essentially free money. I think it’s wrong and would be abused. I don’t think it should be offered.”	1 (0.2%)
CM10.Y	Would rather use personal leave	“I would have previously had sufficient sick leave to take when I needed time off for any physical complaint - be that a physical illness, injury or something like period pain.”	1 (0.2%)

WA1.Y	N/A	Workplace already flexible or accommodating	“Yes although in my position I do have access to ample personal leave and culturally within my work environment I have turned up for work while unwell”	12 (2.8%)
NR1.Y	N/A	Not right now due to medication	“I have an IUD which manages my symptoms because I have endometriosis. But when I have this removed eventually then I will need to use it”	11 (2.5%)
PA.Y	Positive attitude towards menstrual leave			7 (1.6%)
PA1.Y		Support for others to use	“I don't just want this for me, I want it for everyone who gets periods and experiences menopause”	5 (1.2%)
PA2.Y		Support for menstrual leave policy	“I am also an advocate for women in the workplace and advocate for these changes within my workplace currently”	3 (0.7%)
UU1.Y	N/A	Wouldn't have to use up sick leave	“Paid menstrual leave would be extremely helpful as I would be able to prioritise my health and mental health over worrying about the number of leaves I have left over”	9 (2.1%)
FG1.Y	N/A	Feelings of guilt	“It's very unpredictable and when I do take sick days sometimes I feel guilty. If there was menstrual leave I wouldn't have to feel guilty”	9 (2.1%)
MT1.Y	N/A	Would misuse or take advantage of the leave	“However if it was available to me I might abuse it to take a day off for other reasons eg. Mental health day”	7 (1.6%)

Appendix C.

Content Analysis of Reasons Participants Would Not Use Paid Menstrual Leave with Less Than 15% Frequency

Code label	Category	Theme	Quote	N (%) of Participants Total N = 86
PS.N	Perpetuation of stigma			11 (12.8%)
PS1.N		Negative effect on career progression for women	“I think I'd be too afraid to take the leave, thinking I might jeopardize my job or that of my female colleagues because we would have more sick leave than everyone else. (Making us less attractive to hire)”	7 (8.1%)
PS2.N		Perpetuates gender discrimination or stereotypes	“It would perpetuate harmful gender stereotypes”	5 (5.8%)
CJ.N	Concerns for judgement at work			10 (11.6%)
CJ1.N		Concerns for disclosure to employer	“I would find it far too personal to have to disclose to a (male especially) boss that I needed time off for menstrual symptoms”	9 (10.5%)
CJ2.N		Fear of judgement from colleagues or employer	“I would not want my coworkers to know my cycle as in my industry, I fear that it would incur unwanted comments from some of my older, hetero, male coworkers”	4 (4.7%)
OU1.N	N/A	Support for others to use menstrual leave	“I don't personally feel the need to access it but have no issue with others accessing this”	8 (9.3%)

NE.N	Negative effects on workplace			8 (9.3%)
NE1.N		Economic consequences for company	“I don’t agree with it particularly in female dominated workplaces how could a company afford it?”	4 (4.7%)
NE2.N		Inconvenienced colleagues	“I would feel terrible inconveniencing my co-workers and my employer every single month”	2 (2.3%)
NE3.N		Would create productivity loss	“No due to productivity loss and understanding of impact this can have”	1 (1.2%)
UI1.N	N/A	Creates unfairness or inequality	“I see it as unfair to other employees who don't menstruate”	5 (5.8%)
FA1.N	N/A	Advocacy for other flexible arrangements ie. work-at-home	“I think this is a ridiculous idea. Work from home yes.”	4 (4.7%)
WA1.N	N/A	Workplace already accommodating or flexible	“I already have flexibility in my small amount of paid work. As a family carer, I also have flexibility over my own timetable. I do not require menstrual leave. I do have a hard time one day a month but can accommodate that already”	4 (4.7%)
CS1.N	N/A	Casual or self-employed don’t get leave	“I am casual so don’t get leave at all”	3 (3.5%)
TC1.N	N/A	Prefer to treat the cause of the pain	“I would seek help to eliminate the cause of my pain/discomfort etc.”	2 (2.3%)
WM1.N	N/A	Wouldn’t use due to medication	“Since being on OCP I do not get severe enough cramping or discomfort and when I do I am able to relieve it with analgesia”	1 (1.2%)