WORKING ON THE FRONTLINES IN U.S. HOSPITALS: SCHEDULING CHALLENGES & TURNOVER INTENT
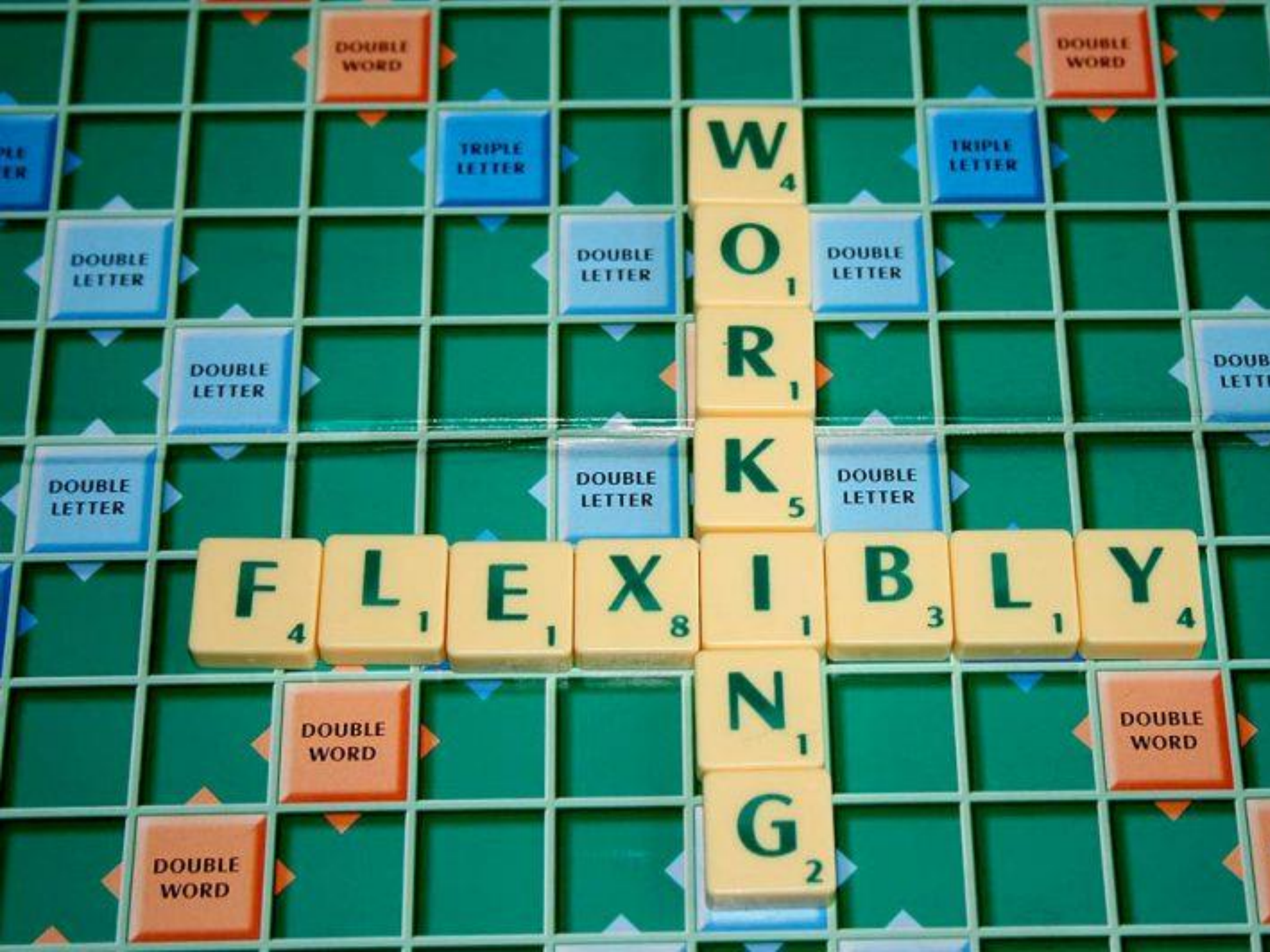
Work Autonomy, Flexibility and Work-Life Balance
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nature of low-wage work

- ❑ Low-wage jobs pay less than $13.83/ho...
  - ❑ Less than 28,500/year (NELP, 2014)

- ❑ Low-wage jobs more li... ...s. (BLS, 2015).
  - ❑ There are curren... ...rt-time workers in the US

- ❑ Less li... ...health insurance, paid sick days,

LOW-WAGE JOBS HAVE <u>LIMITED OR NO ACCESS TO</u> FLEXIBLE WORK ARRANGEMENTS

work schedules can create havoc

❑ **schedule unpredictability**
  - ❑ workers are given little advance notice of their assigned work schedule
  - ❑ required to work overtime with little or no notice.

❑ **schedule instability**
  - ❑ hours, days and/or times of scheduled work change often,
  - ❑ workers have hours reduced unexpectedly or
  - ❑ forced to work part-time schedules when they want full-time work.

❑ **schedule rigidity/control**
  - ❑ when workers have little to no control over their schedules,
    - ▪ the days and times they work,
    - ▪ when they begin and end work each day and
    - ▪ when they take breaks during the work day.

scheduling challenges impact work-life & well-being

limited advance schedule notice & schedule instability

- ❑ interferes with the ability to manage personal responsibilities (Zeytinoglu, et al., 2004).
- ❑ results in problems arranging childcare (Henly & Lambert, 2005).
- ❑ creates disruptions in family and social activities(Bohle, et al., 2005).
- ❑ contributes to economic insecurity

lack of control in work schedule

- ❑ increased levels of work-life conflict and more stress (Henly & Lambert, 2014).
- ❑ higher levels of adversity in maintaining work-family balance (Olsen & Dahl, 2010).

scheduling challenges impact life @ work

decreased employee engagement

❑ greater variability in scheduled hours, the greater the dissatisfaction with work hours in general (Bohle, et. al, 2011).

❑ limited advance notice of schedule linked to decreased work engagement and lower job satisfaction (EPI, 2015; Swanberg, McKechnie, Ojha, & James, 2011).

increased risk of turnover

❑ higher levels of turnover are connected to last minute notice of schedules among hourly workers (Williams & Huang, 2011)

❑ higher risk of turnover when workers report undesirable hours (Martin, et al., 2012).

turnover:
impacts employees, patients & hospitals

employees

- ❑ economic instability, reduced long-term earnings, periods of unemployment and poor mental health & self-esteem (Fallick, 1996;Lane, 1999; Stewart, 2007;Uchitelle, 2006).

patients

- ❑ **patient quality of care declines** when employees are dissatisfied and when turnover is high (Morrison, et al., 2007; Atkins, et al., 1996; Fahad Al-Mailam, 2005)
- ❑ **patient satisfaction declines when turnover occurs,** due to higher workloads and more stress for the remaining workers (Fukuyama, 1995).

hospitals

- ❑ **high turnover contributes to reduced customer service quality,** lower organizational profitability and higher discharge costs (JCAHO, 2005; Subramony, et al., 2012).
- ❑ **financial costs** - exit interviews, paperwork, advertising for the newly open position, interviewing applicants and training the new employee (Cascio, 1991).

"flexibility" for hourly, low-wage workers

schedule challenge	flexible work arrangement
schedule unpredictability	• schedule predictability
schedule instability	• schedule stability
schedule rigidity/ no control	• schedule control
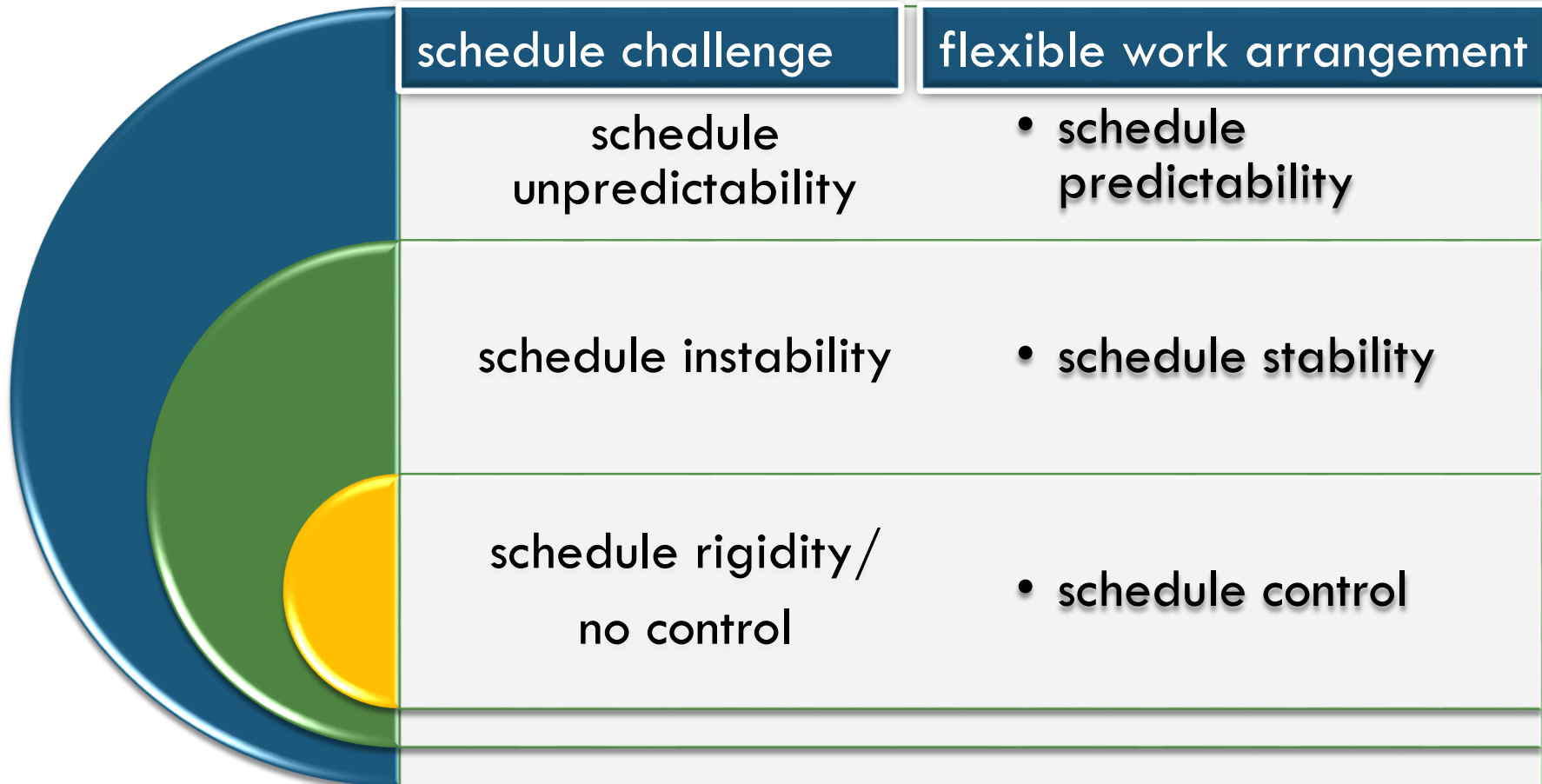
study aims

☐ determine **the types of scheduling challenges** experienced by housekeeping and dietary service workers

☐ determine the **scheduling challenges** significantly **different between worker groups**

☐ determine the **scheduling challenges** associated with **intent to leave** for all workers

methods:
quality of work-life study details

❑ **study design**

    ❑ observational, cross-sectional design

    ❑ employee survey

    ❑ conducted at 2 U.S. hospitals

❑ **study procedures**

    ❑ housekeeping and dietary service workers were recruited via non-probability convenience sampling

    ❑ eligibility criteria: 18+ years of age, paid hourly (not salaried), and employed in housekeeping or dietary services

    ❑ 73% response rate (N=270)

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measures: independent variables
schedule unpredictability

- ❑ **Advance notice:**
  - ▪ How far in advance do you usually know what days and times you will be working? (1 = one week or less to 5 = set schedule)

- ❑ **Day/time unpredictability:**
  - ▪ You can easily anticipate what days and times you will be working from week to week." (1 = strongly disagree to 4 = strongly agree)

- ❑ **Total hours unpredictability:**
  - ▪ You can easily anticipate how many hours you will be working from week to week." (1 = strongly disagree to 4 = strongly agree)

measures: independent variables
schedule instability

- **Fluctuation in the # of hours scheduled:**
  - How frequently does the # of hours scheduled for work vary from week to week? (1 = never to 5 = always)

- **Supervisor changes schedule without consent:**
  - How frequently does your supervisor reduce or change your hours without your consent?" (1 = never to 5 = always)

- **Last-minute schedule changes**
  - How frequently do you experience last minute adjustments to your schedule during the work week?" (1= never to 5 = always)

measures: independent variables
schedule rigidity

- **Employee input in scheduling**:
  - Which of the following best describes the flexibility in the start and end time of your work day?" (1 = times decided by supervisor only to 4 = employee is free to decide)
- **Employee ability to change schedule for planned personal/family matters**:
  - It is difficult to change my schedule when I have planned family/personal business to attend. (1=strongly disagree/4= strongly agree)
- **Employee ability to change schedule for unplanned personal/family matters**.
  - When an unexpected personal/family matter arises, I have the ability to modify my schedule." (1 = strongly disagree to 4 = strongly agree)

measures and data analysis

❑ **Dependent variable:**

▪ **intent to turnover***:* how likely is it you will look for a new job with another employer within the next year? (1 = not at all likely to 4 = very likely)

❑ **Control variables:**

▪ Race, age, worker group, kids<18, hourly wage, access to health insurance

❑ **Data analysis**

▪ Bivariate analysis

▪ binomial logistic regression

sample characteristics

Variable	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ² statistic
Gender				4.22*
Male	32.6 (46)	21.2 (25)	27.4 (71)	
Female	67.4 (95)	78.8 (93)	72.6 (188)	
Race				20.79***
White	20.7 (29)	47.8 (54)	32.8 (83)	
Non-White	79.3 (111)	52.2 (59)	67.2 (170)	
Education				5.51*
High school diploma or less	67.4 (97)	53.0 (61)	61.0 (158)	
Some College or more	32.6 (47)	47.0 (54)	39.0 (101)	
Marital status				0.02
Married	43.1 (62)	42.2 (49)	42.7 (111)	
Single	56.9 (82)	57.8 (67)	57.3 (149)	
Kids under age 18 at home				2.72
Yes	52.4 (75)	42.1 (48)	47.9 (123)	
	M (SD)	M (SD)	M (SD)	t-test statistic
Age	39.82 (15.01)	39.30 (15.72)	39.59 (15.30)	0.25

sample characteristics

Variable	housekeeping (n=147) % (n)	dietary (n=123) % (n)	total (N=270) % (N)	χ^2 statistic
Employment status				24.33***
Full-time	91.8 (134)	68.0 (83)	81.0 (217)	
Part-time	8.2 (12)	32.0 (39)	19.0 (51)	
Intent to turnover				6.46**
Likely	51.0 (75)	35.5 (43)	44.0 (118)	
Not likely	49.0 (72)	64.5 (78)	56.0 (150)	
	M (SD)	M (SD)	M (SD)	t-test statistic
Typical hours worked	39.88 (8.59)	34.40 (11.31)	37.35 (10.29)	4.36***
Hourly pay	9.94 (1.44)	11.14 (2.44)	10.49 (2.05)	-4.60***

Note. n's for housekeeping range from 140 to 147 due to occasional missing data. n's for dietary range from 113 to 123 due to occasional missing data. N's range from 253 to 268 due to occasional missing data. * p < .05, **p < .01, ***p < .001

schedule unpredictability: prevalence & differences

| Variable | schedule unpredictability | | | |
	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ^2 statistic
Advance notice of schedule is 1 week or less	20.5 (30)	14.8 (18)	17.9 (48)	1.52
Advance notice of schedule is more than 1 week	79.5 (116)	85.2 (104)	82.1 (220)	
Subject to unpredictable days/times of work	27.6 (40)	30.8 (37)	29.1 (77)	0.34
Not subject to unpredictable days/times of work	72.4 (105)	69.2 (83)	70.9 (188)	
Subject to unpredictable number of hours of work	19.7 (28)	27.5 (33)	23.3 (61)	2.21
Not subject to unpredictable number of hours of work	80.3 (114)	72.5 (87)	76.7 (201)	

NO DIFFERENCES

schedule unpredictability: prevalence & differences

	schedule unpredictability			
Variable	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ² statistic
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Advance notice of schedule is more than 1 week	79.5 (116)	85.2 (104)	82.1 (220)	
Subject to unpredictable days/times of work	27.6 (40)	30.8 (37)	29.1 (77)	0.34
Not subject to unpredictable days/times of work	72.4 (105)	69.2 (83)	70.9 (188)	
Subject to unpredictable number of hours of work	19.7 (28)	27.5 (33)	23.3 (61)	2.21
Not subject to unpredictable number of hours of work	80.3 (114)	72.5 (87)	76.7 (201)	

schedule instability:
prevalence & differences

	schedule instability			
Variable	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ^2 statistic
Frequently subject to variation in work hours/week	22.9 (33)	55.0 (66)	37.5 (99)	28.75***
Not subject to frequent variation in work hours/ week	77.1 (111)	45.0 (54)	62.5 (165)	
Supervisor frequently changes schedule w/o consent	14.6 (21)	29.8 (36)	21.5 (57)	8.96***
Supervisor does not change schedule w/o consent	85.4 (123)	70.2 (85)	78.5 (208)	
Frequently subject to last-minute schedule changes	24.6 (35)	45.0 (54)	34.0 (89)	12.01***
Not frequently subject to last-minute schedule changes	75.4 (107)	55.0 (66)	66.0 (173)	

schedule rigidity:
prevalence & differences

Variable	schedule rigidity			
	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ^2 statistic
No input in the start/end times	73.6 (103)	72.6 (85)	73.2 (188)	0.03
Some input in the start/end	26.4 (37)	27.4 (32)	26.8 (69)	
Difficulty changing schedule for planned family/personal matters	50.3 (73)	40.2 (49)	45.7 (122)	2.77[†]
No difficulty changing schedule for planned personal/family matters	49.7 (72)	59.8 (73)	54.3 (145)	
No ability to modify schedule for unplanned family/personal matters	47.1 (66)	38.3 (46)	43.1 (112)	2.05
Ability to modify schedule for unplanned family/personal matters	52.59 (74)	61.7 (74)	56.9 (148)	

[†]p<.10

NO DIFFERENCES

schedule rigidity: prevalence & differences

Variable	schedule rigidity			
	Housekeeping (n=147) % (n)	Dietary (n=123) % (n)	Total (N=270) % (N)	χ^2 statistic
No input in the start/end times	73.6 (103)	72.6 (85)	73.2 (188)	0.03
Some input in the start/end	26.4 (37)	27.4 (32)	26.8 (69)	
Difficulty changing schedule for planned family/personal matters	50.3 (73)	40.2 (49)	45.7 (122)	2.77[†]
No difficulty changing schedule for planned personal/family matters	49.7 (72)	59.8 (73)	54.3 (145)	
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Ability to modify schedule for unplanned family/personal matters	52.59 (74)	61.7 (74)	56.9 (148)	

[†]$p<.10$

turnover intent:
do scheduling practices matter?

Models 1-3: Binary Logistic Regression Analyses Predicting Turnover Intent based on 3 Types of Scheduling	Model 1			Model 2			Model 3		
Variable	B	SE	OR	B	SE	OR	B	SE	OR
Control Variables: Worker and job characteristics									
Worker group (Housekeeping = 1)	.43	.30	1.54						
Race (White = 1)	-.16	.35	.85						
Kids < 18 years old at home (Yes = 1)	.11	.30	1.11						
Age	**-.04*****	.01	.96						
Hourly pay	**-.26****	.10	.77						
Health insurance at work (No = 1)	.30	.29	1.35						
Model 1: Types of schedule unpredictability									
Advance notice of schedule less ≤ 1 week =1	.03	.38	1.03						
Days/times of work are unpredictable =1	**.78***	**.40**	**2.18**						
Total hours of work are unpredictable =1	-.57	.44	.56						
Model 2: Types of schedule instability									
Frequent fluctuation in hours worked =1									
Frequent schedule changes without consent =1									
Frequent last-minute schedule changes =1									
Model 3: Types of schedule rigidity									
Employee has no input in start/end times =1									
Difficulty changing schedule for planned events =1									
Difficulty changing schedule for unplanned events =1									
Constant	3.60**	1.19	36.43						
Model Summary									
Omnibus χ^2 (df)	43.76 (9), p < .001								
Nagelkerke R^2	.27								

turnover intent:
do scheduling practices matter?

Models 1-3: Binary Logistic Regression Analyses Predicting Turnover Intent based on 3 Types of Scheduling	Model 1			Model 2			Model 3		
Variable	B	SE	OR	B	SE	OR	B	SE	OR
Control Variables: Worker and job characteristics									
Worker group (Housekeeping = 1)	.43	.30	1.54	.63*	.33	1.88			
Race (White = 1)	-.16	.35	.85	-.27	.35	.76			
Kids < 18 years old at home (Yes = 1)	.11	.30	1.11	-.02	.30	.98			
Age	-.04***	.01	.96	**-.04***	.01	.96			
Hourly pay	-.26**	.10	.77	**-.27***	.11	.77			
Health insurance at work (No = 1)	.30	.29	1.35	.29	.29	1.34			
Model 1: Types of schedule unpredictability									
Advance notice of schedule less ≤ 1 week =1	.03	.38	1.03						
Days/times of work are unpredictable =1	.78*	.40	2.18						
Total hours of work are unpredictable =1	-.57	.44	.56						
Model 2: Types of schedule instability									
Frequent fluctuation in hours worked =1				-.21	.34	.81			
Frequent schedule changes without consent =1				.17	.42	1.18			
Frequent last-minute schedule changes =1				**.90***	**.35**	**2.45**			
Model 3: Types of schedule rigidity									
Employee has no input in start/end times =1									
Difficulty changing schedule for planned events =1									
Difficulty changing schedule for unplanned events =1									
Constant	3.60**	1.19	36.43	3.43**	1.23	30.73			
Model Summary									
Omnibus χ^2 (df)	43.76 (9), p < .001			48.26 (9), p < .001					
Nagelkerke R^2	.27			.29					

turnover intent: do scheduling practices matter?

Models 1-3: Binary Logistic Regression Analyses Predicting Turnover Intent based on 3 Types of Scheduling

Variable	Model 1			Model 2			Model 3		
	B	SE	OR	B	SE	OR	B	SE	OR
Control Variables: Worker and job characteristics									
Worker group (Housekeeping = 1)	.43	.30	1.54	.63*	.33	1.88	.44	.31	1.55
Race (White = 1)	-.16	.35	.85	-.27	.35	.76	-.04	.35	.96
Kids < 18 years old at home (Yes = 1)	.11	.30	1.11	-.02	.30	.98	-.02	.30	.99
Age	-.04***	.01	.96	-.04***	.01	.96	**-.04***	.01	.96
Hourly pay	-.26**	.10	.77	-.27*	.11	.77	**-.28**	.11	.75
Health insurance at work (No = 1)	.30	.29	1.35	.29	.29	1.34	.39	.29	1.47
Model 1: Types of schedule unpredictability									
Advance notice of schedule less ≤ 1 week =1	.03	.38	1.03						
Days/times of work are unpredictable =1	.78*	.40	2.18						
Total hours of work are unpredictable =1	-.57	.44	.56						
Model 2: Types of schedule instability									
Frequent fluctuation in hours worked =1				-.21	.34	.81			
Frequent schedule changes without consent =1				.17	.42	1.18			
Frequent last-minute schedule changes =1				.90**	.35	2.45			
Model 3: Types of schedule rigidity									
Employee has no input in start/end times =1							-.73*	.32	.48
Difficulty changing schedule for planned events =1							.29	.29	1.33
Difficulty changing schedule for unplanned events =1							.46	.30	1.58
Constant	3.60**	1.19	36.43	3.43**	1.23	30.73	4.01**	1.30	55.07
Model Summary									
Omnibus χ^2 (df)	43.76 (9), p < .001			48.26 (9), p < .001			46.43 (9), p < .001		
Nagelkerke R^2	.27			.29			.29		

turnover intent:
do scheduling practices matter?

Binary Logistic Regression Analyses: Predicting Intent to Turnover Based on Scheduling Challenges from Models 1-3 (N = 270)			
Variable	B	SE	OR
Control variables: Worker and job characteristics			
Worker group (Housekeeping = 1)	.70*	.32	2.01
Race (White = 1)	-.16	.35	.86
Kids < 18 years old at home (Yes = 1)	-.03	.31	.97
Age	.04***	.01	.96
Hourly pay	-.28*	.11	.76
Health insurance at work (No = 1)	.26	.29	1.30
Scheduling challenge variables from Models 1-3			
Days/times of work are unpredictable =1	.42	.32	1.53
Frequent last-minute schedule changes =1	**.80***	**.33**	**2.22**
Employee has no input in start/end times =1	**-.66***	**.32**	**.52**
Constant	3.87**	1.30	48.01
Model Summary			
Omnibus χ^2 (df)	51.95 (9), p < .001		
Nagelkerke R^2	.32		

Note. Unstandardized regression coefficient (B), standard error (SE) and odds ratio (OR) figures are multiple imputation pooled estimates. Model summary figures calculated with original data (N = 190). *p < .05, **p < .01, ***p < .001.

discussion:
workplace flexibility not once size fits all

❑ **rethink the meaning of "workplace flexibility" for workers in low-wage hourly jobs**

❑ **prevalence of scheduling challenges vary across occupational groups**

❑ **scheduling problems contribute to turnover intent**

❑ **schedule predictability, stability and control could contribute to positive outcomes for workers and employers**

future research

- ❑ further develop measures to assess detailed scheduling challenges that can be used across occupations

- ❑ assess mechanism through which scheduling influences turnover

- ❑ expand intervention research to address scheduling challenges

- ❑ cross-national perspective on quality of low-wage work