



# Psychological Health and Meaningful Work Among Brewery Workers

Presented by Adelyn B. Shimizu, Colorado State University

# Acknowledgements

- Gwen Fisher, Ph.D.
- Kevin Walters, M.S.
- Melanie Kramer, M.S.





- Mountains and Plains Education and Research Center
  - Occupational Health Psychology Training Concentration



A NIOSH Education and Research Center for Occupational & Environmental Health & Safety

# Meaningful Work

• An integrative aspect of workers' overall well-being and health.<sup>1</sup>

• Finding meaning in the domain of work also helps fulfill the global need for meaning in life.<sup>2</sup>

• Meaningful work has been incorporated by NIOSH as part of the definition of well-being and Total Worker Health®.

<sup>&</sup>lt;sup>1</sup>e.g., Dik, Byrne & Steger, 2013; Harpaz & Fu, 2002 <sup>2</sup>Steger & Dik, 2010

Meaningful work has been defined as the appraisal of work as both positive and significant.<sup>1</sup>

### Meaningful Work, Worker Health, and Well-Being

- Linked to greater job satisfaction<sup>1</sup> and commitment.<sup>2</sup>
- Identifying and expressing one's strengths and talents at work linked to increased productivity.<sup>3</sup>
- Decreased mental health concerns (e.g., low self-esteem and anxiety)<sup>4</sup> and stress<sup>5</sup> in workers.
- Meaningful work acts as mediator between transformational leadership and psychological well-being.<sup>6</sup>

<sup>1</sup>Kamdron, 2005; Sparks & Schenk, 2001; <sup>2</sup>e.g., Bunderson and Thompson, 2009 <sup>3</sup>Hodges & Clifton, 2004; <sup>4</sup>Deci et al., 2001; <sup>5</sup>e.g., Elangovan, Pinder & McLean, 2010 <sup>6</sup>Arnold et al., 2007

# **Study Purpose**

- Despite the high importance of meaningful work and other psychosocial factors for worker health, most research on workers within the brewing industry focuses on physical health issues.<sup>1</sup>
- The purpose of this study is to provide an initial examination of the psychological well-being of brewery workers as a foundation for future studies.

<sup>&</sup>lt;sup>1</sup>e.g., Thygesen et al., 2005; Godnic-Cvar et al., 1999

# Type of Breweries

Breweries are either craft or non-craft;

- Craft has been defined as 1) small, 2) independent, and 3) traditional.<sup>1</sup>
- The Brewer's Association states that craft brewers are "very" small, innovative, and involved in their community.

<sup>&</sup>lt;sup>1</sup>Definitions taken from: https://www.brewersassociation.org/statistics/market-segments/

# Type of Breweries

4 types of craft breweries<sup>1</sup>

- Microbrewery: A brewery that produces less than 15,000 barrels (17,600 hectoliters) of beer per year with 75 percent or more of its beer sold offsite.
- **Brewpub:** A restaurant-brewery that sells 25 percent or more of its beer on site. The beer is brewed primarily for sale in the restaurant and bar.
- Regional Brewery: A brewery with an annual beer production of between 15,000 and 6,000,000 barrels.
- Large Brewery: A brewery with an annual beer production over 6,000,000 barrels.

<sup>&</sup>lt;sup>1</sup>Definitions taken from: https://www.brewersassociation.org/statistics/market-segments/

### Breweries in the US

	2012	2013	2014	2015	2016
Craft	2,420	2,898	3,734	4,504	5,234
Regional Craft Breweries	97	119	135	178	186
Microbreweries	1,143	1,471	2,071	2,596	3,132
Brewpubs	1,180	1,308	1,528	1,730	1,916
LARGE NON- CRAFT	23	23	26	30	51
OTHER NON- CRAFT	32	31	20	14	16
Total U.S. Breweries	2,475	2,952	3,780	4,548	5,301

# **Brewery Workers**

• In 2016, the Brewer's Association counted 5,301 breweries in the U.S.

- Denver has 72 breweries (depending on how you count).¹
- Know a lot about the beer side of the industry, less about the brewery workers...

<sup>1</sup>http://www.westword.com/restaurants/how-many-breweries-does-denver-have-a-list-of-every-denver-brewery-9546998

## **Research Questions**

• What are the common characteristics (i.e., demographics) of brewery workers?

• How do brewery workers rate their psychological health on several key indicators?

• Do brewery workers find their work to be meaningful?

### Method

#### **Participants and Procedure**

- Participants (n = 96) were brewers recruited via an online brewer forum.
- Participants self-identified as 71.9% male and 88.5% Caucasian, 3.1% Asian, 2.1% Native American, and 1% Other.
- The mean age of participants was 38.47 years (SD = 9.69).
- Participants reported being highly educated, holding a 4-year degree (42.7%) or master's level degree (25.0%).

### Method

All scales were measured on a 5-point Likert scale.



- Meaningful work: Work and Meaning Inventory,  $\alpha = .92$ .
- General life satisfaction: Satisfaction with Life Scale,  $\alpha = .88$ .
- Job satisfaction: The Michigan Organizational Assessment Questionnaire Job Satisfaction subscale, short form,  $\alpha = .88$ .
- Turnover intentions: Seashore Turnover Intentions Scale, short form,  $\alpha = .89$ .
- Burnout: Copenhagen Work Burnout Inventory,  $\alpha = .72$ .

<sup>1</sup>Steger, Dik, & Duffy, 2012; <sup>2</sup>Diener, Emmons, Larsen, & Griffin, 1985; <sup>3</sup>Cammann, Fichman, Jenkins, & Klesh, 1979; <sup>4</sup>Seashore, Lawler, Mirvis, & Cammann, 1982; <sup>5</sup>Borritz & Kristensen, 2001

### Results

Participants rated *high* on....

- Meaningful work
- Life and job satisfaction

#### Rated low on...

- Turnover intentions (responses were more varied on for turnover intentions than other variables)
- Burnout

# Results

All variables measured on a 5-point Likert scale.

Variable	1	2	3	4	5
1. Meaningful Work			-		
2. Life Satisfaction	.45	_			
3. Job Satisfaction	.69	.41			
4. Turnover Intentions	61	38	81	_	
5. Burnout	45	44	57	.53	_
M	4.20	3.64	4.27	2.40	2.67
SD	0.66	0.81	0.76	1.17	0.75

• Results of this study indicate a generally psychologically healthy workforce for brewery workers, despite engaging in a variety of tasks... sometimes with high level of manual, repetitive work.

• These results are consistent with a consultation project done with a mid-size brewery as well as anecdotical evidence.

### **Method Limitation**

• This study did not assess the size of the brewery participants worked at.

• Likely differences between large and craft (and types of craft) breweries with regard to the psychological health of workers.

• Future research is needed to begin to explore possible differences.

### **Discussion**

• Worker demographics within the brewing industry: predominantly Caucasian, male, late 30s, and had some college education.

• These results support the importance of meaningful work and point to meaningful work's theorized role in increasing life and job satisfaction and buffering again burnout.

### **Future Directions**

Meaningful work is associated with more positive outcomes. However, future research is needed to investigate whether meaningful work truly serves as a buffer when brewery workers experience job stressors.

### **Future Directions Continued**

• Future research should examine which key factors influence brewery workers apparently healthy psychological health and high reported well-being.

• From there, can use this information to inform how to improve the psychological health and well-being of other small enterprise industry workers.

# **Questions and Comments?**

Contact Adelyn: adelyn.shimizu@colostate.edu

Thank you!