

All Aboard! Next Stop: Gender Diversity and Safety Culture on the Track

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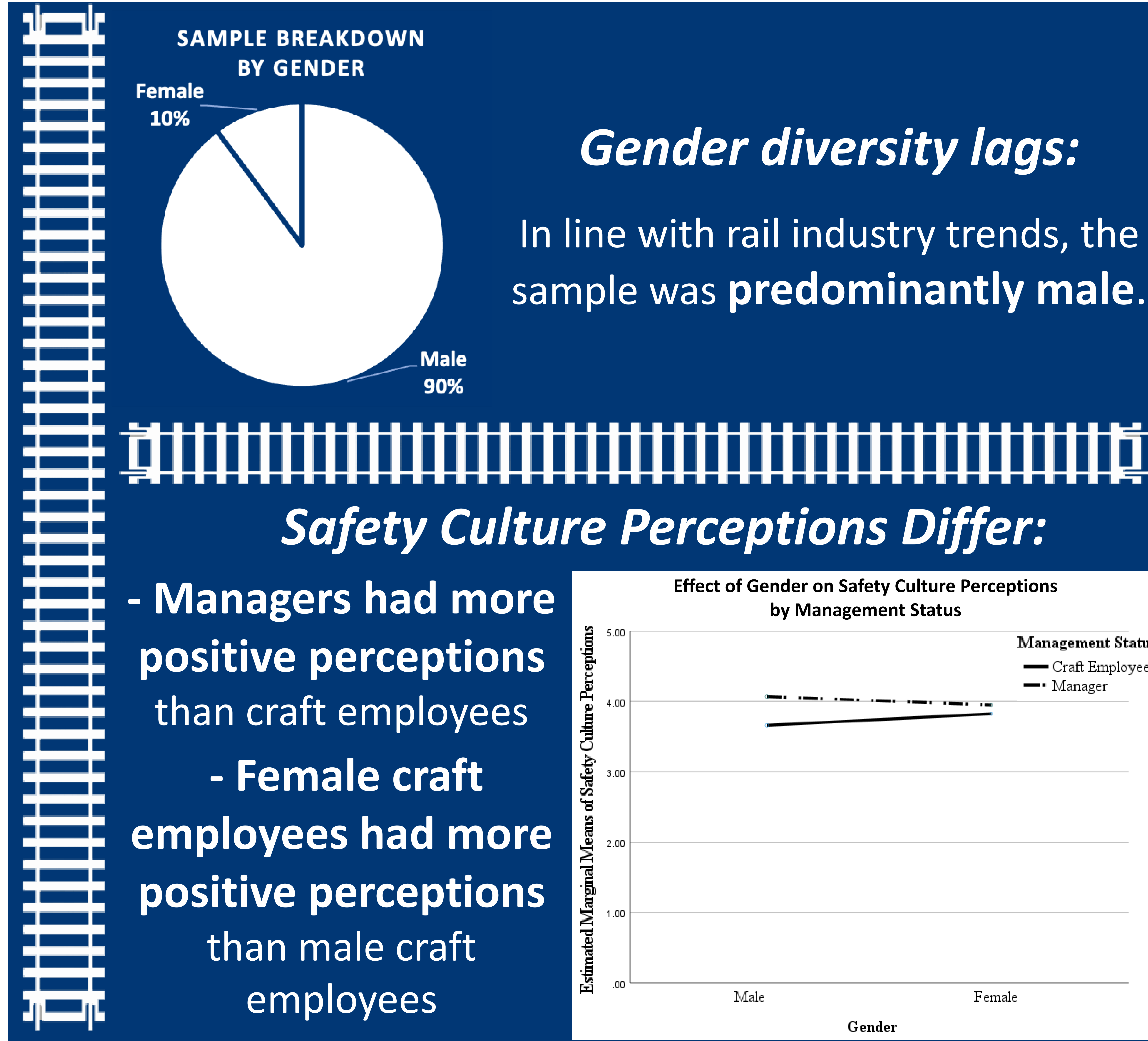


INTRO

- The Federal Railroad Administration identified gender diversity as one of the rail industry's top workforce challenges
- The present study provides a more detailed view of gender diversity in rail transportation, and how factors such as gender and management status interact to affect perceptions of safety culture

METHOD

- **Participants:** Utilized archival survey data from 1,239 individuals ($N_{\text{craft employees}} = 814$, $N_{\text{managers}} = 425$) from 23 short line and regional railroads across the U.S. who participated in the Short Line Safety Institute's Safety Culture Survey between 2016 and 2018
- **Measures:**
 - Demographics (e.g., gender (male, female), management status (manager, craft employee), etc.)
 - Perceptions of the railroad's safety culture (78-item survey; all items scored using a 5pt agreement scale)
- **Analyses:**
 - A series of one-way ANOVAs and chi-square tests explored relations between genders on various demographic variables
 - A univariate analysis tested the interaction between gender and management status on safety culture perceptions



FINDINGS

Sample Demographics: Significant Differences by Gender ($p < .05$)

	Male		Female		Total	
	n	Mean (SD)/%	n	Mean (SD)/%	n	Mean (SD)/%
Age (in years)	1029	41.55 (11.55)	115	45.19 (12.40)	1144	41.92 (11.69)
Highest Educational Level					1194	100%
Some high school	20	1.9%	2	1.7%	22	1.8%
High school graduate	327	30.5%	12	9.9%	339	28.4%
Some college	391	36.4%	29	24.0%	420	35.2%
Two-year college	130	12.1%	22	18.2%	152	12.7%
Four-year college	177	16.5%	42	34.7%	219	18.3%
Graduate degree +	28	2.6%	14	11.6%	42	3.5%
Railroad Tenure (in years)	976	12.93 (10.28)	106	10.88 (9.00)	1082	12.73 (10.18)
Management Status					1239	100%
Craft Employee	751	67.5%	63	50.0%	814	65.7%
Manager	362	32.5%	63	50.0%	425	34.3%
Organizational Size					1239	100%
Small/medium (25-99)	376	33.8%	22	17.5%	398	32.1%
Large/XL (100+)	737	66.2%	104	82.5%	841	67.9%

Women tended to be **older** than men, have **more education**, and were more likely to be **employed at larger organizations**. Despite being **employed in the railroad industry for fewer years** than men, women in our sample were also more likely to be **managers**.

IMPLICATIONS

- Highlights the underrepresentation of women in the industry
- Senior leadership should be cognizant of potential gender differences in safety culture perceptions
 - Utilize management training programs to develop and prepare safety leaders for a diverse workforce
- Senior leadership should ensure female representation across different job types
 - Show the railroad as a career destination for women
 - Help women visualize their advancement within the industry

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