



RACIAL DIFFERENCES IN SUPERVISION AMONG TEENS AT WORK

Erin C. Welsh, B.S.¹, Teresa J. McGeeney, B.A.¹, Kristina M. Zierold, PhD., M.S.¹
 Department of Epidemiology and Population Health¹
 University of Louisville School of Public Health and Information Sciences

◆ Background

Although labor force participation by teens has declined over the last fifteen years, nearly 80% of teenagers work at some point during high school. Due to their inexperience and lack of skill, teens are at increased risk for occupational injury, with minorities possibly being at highest risk. The role of the supervisor in workplace injury occurrence among teen workers has not yet been studied. Quantity and quality of supervision as well as perception of supervision could influence the frequency and outcome of workplace injury in teens. Furthermore, racial differences in supervision could impact the occurrence of workplace injury. As teens are more likely to experience workplace injury, it is important to determine factors that protect against injury or increase risk of injury. Our objective was to determine the role of supervision in workplace injury among teens.

◆ Methods & Materials

- ◆ Study utilizes qualitative and quantitative methods:
 - Focus groups and interviews of 42 students aged 15-19 from Jefferson County, KY public high schools in Spring 2010
 - Anonymous survey administered to schools in Spring 2011
- ◆ Survey assessed characteristics of working and non-working teens and factors which contribute to work-related injury
- ◆ Schools were chosen based on diversity of students and variety of job training opportunities
 - Inner-city school with a majority of African American students
 - Blue-collar school with a majority of white students

◆ Results

Table 1. Demographics of working teenagers

Demographic Variable	Percentage (n)
Sex	
Male	41.01 (162)
Female	58.73 (232)
Race	
White	44.81 (177)
Black/African American	44.05 (174)
Hispanic	3.04 (12)
Other	8.10 (32)
Age (years)	
14 or younger	1.01 (4)
15	16.46 (65)
16	38.99 (154)
17	30.38 (120)
18 or older	13.16 (52)

◆ Results

Table 2. Supervision characteristics of injured and all working teens, by race

Supervision Characteristics	Injured		p-value	All Working Teens		p-value
	% White	% African American		% White	% African American	
Received safety training (Y)	79.52	87.93	0.19	70.06	85.63	0.0004
Talk to supervisor fewer than three times a week	15.66	29.31	0.051	19.32	27.54	0.071
Felt that supervision helps to prevent accidents *	81.93	82.76	0.90	86.93	89.22	0.51
Felt as if they receive enough supervision*	85.84	84.48	0.86	90.40	91.62	0.69
Felt as if supervisor makes sure they understand safety	80.72	81.03	0.96	87.01	86.23	0.83
Would do something dangerous if asked*	46.99	44.83	0.80	42.37	42.77	0.94
Perceives supervisor negatively**	1.20	8.62	0.032	2.26	6.90	0.037
Think they could be fired if they reported something dangerous*	56.63	53.45	0.71	53.14	54.49	0.80
Expressed self – blame	81.71	65.52	0.029	-	-	-
Told supervisor about injury	60.98	77.59	0.013	-	-	-

*Includes both 'Yes' and 'I don't know' answers
 **Response included 'Does not care about my safety', 'Mean', or 'More concerned about getting work done than safety'.

In total, 884 students completed surveys. Of those, 398 (45.02%) worked. White teens were significantly more likely to be injured than African American teens, at 47.16% and 36.02% (p = 0.039), respectively. Several supervisor and worker characteristics were found to be associated with injury risk. In addition, white and African American teens were found to differ significantly on a number of traits relating to supervision.

◆ Results

Table 3. Supervision characteristics associated with injury, by race

Supervision Characteristic	Crude OR (95% CI) White	p-value	Crude OR (95% CI) African American	p-value
Felt supervision does not help to prevent accidents	2.32 (0.93, 5.79)	0.0722	2.83 (1.01, 7.89)	0.047
Felt they did not receive enough supervision	2.97 (1.00, 8.84)	0.0499	4.50 (1.32, 15.34)	0.016
Felt as if supervisor does not make sure they understand safety	3.46 (1.29, 9.33)	0.0140	1.94 (0.78, 4.80)	0.15

Support from focus groups and interviews:

- ◆ White 15F Injured: "And like my boss is always on the phone with his kids or like making food orders that he doesn't need. Like there's so much more that he could be doing that he doesn't do."
- ◆ African American 18M Injured: "Yeah, our, our supervisors are very concerned, you know, at work, they make sure we're following all the rules and nobody's doing anything unsafe. And even, I feel like I can trust my supervisors even out of work..."
- ◆ White 17M Injured: "I was taught growing up not to run and tattle about everything, so that was just kind of my personal reaction." (about reporting an injury)
- ◆ African American 17F Uninjured: "I feel like I have the right amount of supervision where I work because they're not always hounding me."
- ◆ White 16F Injured: "... it would have been my fault because I didn't watch out for the car and I wasn't paying no bit of attention." (about whose fault an injury was)
- ◆ African American 17M Uninjured: "Supervisor's always watching you, and comin' back and forth, make sure you doin' your job and not, not stayin' off task."

◆ Discussion

This study investigated the role of the supervisor in workplace injury in teenaged youths and racial differences associated with supervision. Overall, white teens were more likely to be injured, more likely to blame themselves for their injury, and less likely to report their injury to their supervisor than African American teens. Injured African American teens talked to their supervisor less often and were more likely to attribute negative traits to their supervisor. Several supervision characteristics were found to be associated with injury, with levels of association varying by race.

Research on adult workers' perception of supervision has indicated that African American workers are more sensitive to a supervisor's "behavioral integrity", or how well an employer's actions match his words. In addition, non-Black adults showed more trust in their superiors. This could be mirrored in our findings. African American teens may be more tuned in to their supervisor's skill or attentiveness and be less likely to rely on them to maintain a safe workplace environment. In this case, proper safety training or individual worker characteristics may play a larger role in protecting a teen from injury. White teens may be more forgiving or trusting in their supervisors, placing blame on themselves for workplace injury. Placing trust in a supervisor to maintain a safe work environment may make a teen less vigilant in being aware of unsafe situations at work.

◆ Conclusion

- ◆ Findings indicate racial differences in supervision amount and perception of supervision
- ◆ Presence of supervision alone does not protect against workplace injury
- ◆ Detection of poor supervision is different in white and African American teens
- ◆ Further research should focus on what supervisor behavioral patterns put working teens at increased risk of injury

◆ Acknowledgements

Research supported by grant R21OH008934 from the Center for Disease Control and Prevention/National Institute of Occupational Safety and Health. We would also like to thank Paulette Flores-Enriquez, Tiffany Ciszewski, Dr. Scott LaJoie, and Dr. Kathy Baumgartner for their contributions to this project. In addition, we thank the students, faculty and staff of Central High School and Pleasure Ridge Park High School.