

Working for Mom and Dad: Are Teens More Likely to Get Injured Working in Family-Owned Businesses?

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Published online: 30 June 2011
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Abstract Recent controversy regarding the issue of children working in family-owned businesses has come to the forefront, pitting safety and health versus parent's right to teach their children the family trade. While studies have characterized injury among working teens, no studies have assessed work and injury among teens employed in family-owned businesses. This study is the first to examine teenagers working in family-owned businesses and to compare the experiences of teens working in family-businesses to the experiences of other working teens. A questionnaire was distributed to 8,085 teens in high schools throughout the five public health regions of Wisconsin. A total of 6,810 teens responded (84%). Overall 2,858 high school teens aged 14–17 reported working (42%); of which 963 (34%) worked in a family-business. Teens working in family-businesses were more likely to report that their injury was severe, affecting their activities for more than three days, compared with other working teens (33% vs. 21%, $P = 0.05$). The percentage of teens working in family-businesses that reported broken bones or crushed body parts was 17% compared to only 5% of other-

working teens. Additionally, teens employed in family-businesses were more likely to file for workers' compensation (28% vs. 12%, $P = 0.005$). Teens working in family-owned businesses may be at a greater risk for more severe injury based on the jobs and tasks they are doing. Teens working in family-owned businesses were more likely to report engaging in dangerous tasks, including some that are illegal under the Hazardous Occupation Orders. More research is needed to assess the dynamics that exist for teens working in family-owned businesses.

Keywords Child labor · Family business · Workplace injuries

Introduction

Studies have characterized adolescent labor in the United States, specifically relating jobs, injury, and the effects of work on adolescent life and development [1–17]; however, the experiences of teens who work in family-owned businesses have been ignored in the literature. While anecdotal evidence has suggested that teens who work for their families are “overworked” and “underpaid,” no true information regarding the work experiences, the safety climate, and the injury occurrence for teens working in family-businesses is available.

Recent controversy regarding the issue of children working in family-owned businesses has come to the forefront, pitting safety and health versus parent's right to teach their children the family trade. On May 20, 2010, restaurant owners and parents filed suit against the Connecticut Department of Labor (DOL) in federal court asking the court to declare state child labor laws inapplicable to “family-business circumstances [18–20].”

This study was funded by CDC/NIOSH Grant Number: U01-OH07298 Youth Employment Training Pilot Program.

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While many states have labor laws that protect children who work in family-owned businesses, current federal child labor laws do not apply to youth working in family-businesses; as long as the work does not involve jobs which are considered hazardous by the Secretary of Labor (Table 1). Current federal child labor laws are a product of the Fair Labor Standards Act (FLSA), which was formed in 1938 to prevent children from working in dangerous jobs and to ensure that work did not interfere with their education. FLSA sets rules regarding earnings, weekly hours, times worked, and safety requirements for children under 18 years old who are working in jobs covered by the statute. The rules vary depending upon the child's age and the job.

One major exemption provided by the FLSA is that youth of any age can work in a business solely owned or operated by their parents or by persons standing in place of their parents. Since youth who are employed in parent-owned businesses are not covered by the FLSA there are no limits on the number of hours per week and times during the day that they can work. Nor are there regulations on job tasks that youth can perform, with the exception of the previously mentioned hazardous jobs. If individual states do not have

labor laws covering youth who work in family-owned businesses, there is no protection for these young workers.

Injuries among young workers are an enduring problem. In 2006, an estimated 52,600 injuries among youth aged 15–17 years old were treated in US hospital emergency departments. The number of work-related injuries among teens are greatly underestimated as the National Institute for Occupational Safety and Health estimates that only one-third of work-related injuries and illnesses are treated in hospital emergency departments [21].

To date, there are no studies assessing work and injury among youth working in family-owned businesses, nor comparisons regarding injury occurrence in teens working in family-owned businesses compared to other working teens. Therefore, this study was conducted to address the following specific questions (a) are the job characteristics of teens working in family-owned businesses similar to other working teens, (b) is working in family businesses associated with injury, and (c) what is the effect of multiple jobs on the outcomes of interest?

Methods

Data for this study comes from a survey of high school youth throughout the state of Wisconsin. A comprehensive questionnaire was developed to investigate employment, work-related habits, injury, and school performance among 9th through 12th graders throughout the five public health regions of Wisconsin. The questionnaire contained 65 questions and took approximately 15 min for teens who were employed. In developing the questionnaire, input was obtained from teachers and teens regarding the appropriateness and comprehensibility of the questions. In May 2003, the questionnaire was distributed to 8,805 teens, of which 6,810 (84%) completed the questionnaire. Of those teens that responded, 52% ($n = 3,574$) reported working during the school year. To compare and contrast teens who worked in family-owned businesses and other working teens with regards to child labor laws, only teens aged 14–17 were included in this study ($n = 2,858$).

All study procedures were reviewed by the Institutional Review Board affiliated with the Wisconsin Division of Public Health. Parental consent was obtained. Each school distributed a letter detailing the study, the objectives, the risks, and the procedures that would be used. If parents did not want their teen to participate in the study, they were instructed to contact the principal of the school.

Measures

The measures that were used in this study can be broken down into five categories: working status, work

Table 1 Hazardous occupations; youth < 18 should not be working

Order	Hazardous occupation (29CFR570 Subpart E)
1	Occupations in or about plants or establishments manufacturing or storing explosives or articles containing explosive components
2	Occupations of motor-vehicle driver and outside helper
3	Coal-mine occupations
4	Logging occupations and occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage stock mill
5	Occupations involved in the operation of power-driven woodworking machines
6	Exposure to radioactive substances and to ionizing radiations
7	Occupations involved in the operation of power-driven hoisting apparatus
8	Occupations involved in the operations of power-driven metal forming, punching, and shearing machines
9	Occupations in connection with mining, other than coal
10	Occupations in the operation of power-driven meat-processing machines and occupations involving slaughtering, meat packing or processing,
11	Occupations involved in the operation of bakery machines
12	Occupations involved in the operation of paper-products machines, scrap paper balers, and paper box compactors
13	Occupations involved in the manufacture of brick, tile, and kindred products
14	Occupations involved in the operations of circular saws, band saws, and guillotine shears
15	Occupations involved in wrecking, demolition, and shipbreaking operations
16	Occupations in roofing operations and on or about a roof
17	Occupations in excavation operations

characteristics, injuries, perceptions of safety, and sociodemographics. These categories are described below.

Working Status

To determine the working status of the teens answering the questionnaire, we asked “During the school year, have you worked? (Include any work done on your family’s farm or family owned business, any paid work for a company or business, any paid work involving regular babysitting, lawn mowing, or snow shoveling jobs, or any paid school to work job experience time.) (Y/N)?” To determine whether the teens worked in a family-owned business, we asked “During the school year, have you worked in a non-farming family-owned business (Y/N)?”

Work Characteristics

Variables included the number of hours worked per week, nighttime hours worked, and whether the youth worked before 8:00 AM. Additionally, to determine the jobs/tasks that the youth did we asked “What type(s) of job tasks did you perform during the school year?” Numerous jobs and tasks were listed from which youth could choose. If the job or task for which the youth worked, was not listed, they could choose “Other” and then fill in their job/task. In an effort to evaluate the reason teens were working, we asked teens “During the school year, how do/did you spend the money you make/made: To support your family? (None, Some of the money, Most of the money).”

Injuries

To determine whether a teen was injured, we asked “During the school year, have you been injured at work (Y/N)?” To evaluate the severity of the injury, we asked the teen two questions: “Did the injury affect your normal activities at home or work for longer than 3 days (Y/N)?” and “Did you file a workers’ compensation claim for your injury (Y/N)?” To characterize the type of injury that the teen sustained we asked “What type of injury did you experience? (ex. Cut, bruise, burn), “What part of the body was affected?” (ex. finger(s)/hand(s), toe(s)/foot(feet), head, etc.), and “How did the injury occur?” (ex. slip, trip or fall from a flat surface, contact with hot fluid or grease, etc.).

Perceptions of Safety

In addition to assessing injury, we were interested in determining the teen’s perceptions of the safety of their job. Therefore, we asked four questions including: “During the school year, have you been asked to do something at

work that you thought was dangerous? (Y/N)”, “What were you asked to do that you thought was dangerous?”, “If you feel you are being asked to do something dangerous at work, would you refuse (Yes, No, Maybe, Don’t Know)?”, “During the school year, have you been in a “near-miss” incident where you were almost injured at work? (Y/N)”.

Sociodemographics

Demographic variables included gender, race, age, and location of school district. The locations of the school districts were divided into four categories as defined by the Wisconsin Department of Public Instruction: rural, small town, medium city, and large city. In 2009, the minority population made up 10.6% of the state of Wisconsin [22]; therefore a dichotomized variable (White/Other) was created and used in the analysis.

Statistical Analysis

The statistical analysis focused on comparing outcomes between teens that worked in family-owned businesses and other-working teens. Demographic characteristics and work characteristics were summarized by both the working group (family-owned business teens versus other-working teens) and by the number of jobs held (one job versus multiple jobs). Frequency counts and percents were calculated along with p-values from Chi-square tests comparing the two working groups. Next, univariate odds ratios were estimated using logistic regression models to assess the association between the working groups and the main outcomes of interest in this study, “injured at work” and “severe injury (i.e. injury affected normal activity for more than 3 days).” Additional odds ratio associations between the working groups and outcomes such as work characteristics and perceptions of safety were also estimated using the univariate logistic regression models. Since the univariate results were not statistically significant and the odds ratios were only slightly elevated, no further logistics analysis was conducted. All statistical analyses were performed using SAS 9.2 (SAS Institute Inc., Cary, NC, USA). All statistical tests were made at the alpha equal 0.05 level.

Results

Overall 2,858 high school teens aged 14–17 reported working; of which 963 (34%) worked in a family-owned business and 1,895 (66%) worked other jobs. Of the 963 teens who worked in family-businesses, 554 (58%) worked only for their families and 394 (41%) worked in both the family-owned business and other jobs. Of the 1,895 other-

working teens, 1,289 (68%) held only one job and 563 (30%) held multiple jobs. Teens who worked in family-owned businesses were significantly more likely to work multiple jobs compared to other working teens (41% vs. 30%, $P < 0.0001$).

Teens Who Worked One Job

Characteristics

Table 2 presents the demographic data and work characteristics for working teens. Among teens working only one job, those working in family-owned businesses were more likely to be male (48% vs. 39%, $P < 0.001$) and non-white (32% vs. 26%, $P = 0.007$) when compared to other-working teens. Teens who worked in family-owned business were more likely to work before 7:00 PM (43% vs. 35%, $P = 0.002$) compared to the other-working teens. There were no differences in hours worked per week or the number of days worked before 8:00 AM.

There was no significant difference between teens who worked in family-owned businesses and other working teens when it came to being injured (12% vs. 11%, $P = 0.507$). However, among the teens that were injured, those that worked in family-businesses reported that their injuries were more severe and affected their activities for three or more days (33% vs. 21%, $P = 0.05$). Teens employed in family-businesses were also more likely to file for workers' compensation (28% vs. 12%, $P = 0.005$). There were no significant differences between groups when it came to being asked to do something dangerous, having a near-miss incident, receiving safety training or being informed of legal rights.

The majority of teens worked in restaurant or fast food establishments (35.4% for family business and 29.4% for other-working). Table 3 presents the tasks that teens reported working. For teens working in family-owned businesses, the top job tasks reported were cashier/wait-person, cleaning tables/floors/rooms, childcare, dishwashing, and stocking shelves. The top job tasks reported by other-working teens were the same.

Injuries

Among teens working in family-owned businesses, 69 reported they were injured (12%). A total of 132 injuries were reported. Of the injured, 23 (33%) reported that the injury was severe and affected their activities for more than 3 days. The most common injuries were cuts (52.2%), burns (34.8%), and bruises (27.5%). Broken bones and crushed body parts accounted for 17.4% of reported injuries. Among teens working in family-owned businesses, most were injured by slips, trips, and falls from flat

surfaces (31.9%), contact with hot grease or fluid (29%), and contact with a knife or other sharp object (18.8%). Fingers/hands (50.7%) arms (36.2%), and legs (21.7%) were the most common body locations for injuries. Of the teens that were injured, 19 (28.8%) filed a workers' compensation claim for their injury.

Among other-working teens, 147 reported that they were injured at work (11.4%). A total of 281 injuries were reported. Of the injured, 31 (21%) were severe, such that they affected the teen's activities for more than three days. The most common injuries reported were the same as those among teens who worked in family-owned businesses. However, injuries of broken bones and crushed body parts accounted for only 5.4% of injuries in other-working teens, compared to 17% in family-owned business teens. Other-working teens were injured most commonly by contact with hot grease or fluid (34%), contact with a knife or other sharp object (28.6%), and slips, trips, and falls on flat surfaces (19%). The most common body sites for injury were the same as the teens who worked in family-owned businesses. Of the teens that were injured 18 (13%) filed a workers' compensation claim for their injury.

Regression Findings for Outcomes of Interest

Table 4 presents the univariate odds ratios (OR) and 95% confidence intervals for the outcomes of interest for teens with one job. The only significant difference found between teens that worked in family-owned businesses and other-working teens was in regards to filing for workers' compensation. Teens who worked in family-owned businesses were almost three times more likely to file for workers' compensation compared with other-working teens (OR = 2.76, 95%CI = 1.34–5.72).

Teens Who Worked Multiple Jobs

Characteristics

Table 2 presents the data for teens who worked more than one job. Among teens working more than one job, those that lived in rural areas or small towns were more likely to work at least one job in a family-owned business (22% vs. 14%, $P = 0.006$). There were no differences in race, gender, hours worked, or times worked between the two groups. Teens that worked at least one job in family-owned businesses were slightly younger compared with other working teens, although this difference was not significant.

There was no significant difference between teens who worked in family-owned businesses and other working teens when it came to being injured (20% vs. 16%, $P = 0.09$), severity of injury (27% vs. 26%, $P = 0.91$), or filing for workers' compensation (19% vs. 16%, $P = 0.57$).

Table 2 Characteristics of working teens, stratified by number of jobs held

Variable	Levels	Worked 1 job		Worked multiple jobs	
		Family business (N = 554)	Other-working (N = 1289)	Family business (N = 394)	Other-working (N = 563)
Age	14	36 (6%)	96 (7%)	30 (8%)	27 (5%)
	15	178 (32%)	382 (30%)	125 (32%)	162 (29%)
	16	186 (34%)	405 (31%)	135 (34%)	188 (33%)
	17	154 (28%)	406 (31%)	104 (26%)	186 (33%)
School location	Rural	71 (13%)	140 (11%)	54 (14%)	51 (9%)
	Small town	34 (6%)	75 (6%)	31 (8%)	28 (5%)
	Medium city	412 (74%)	995 (77%)	277 (70%)	451 (80%)
	Large city	37 (7%)	79 (6%)	32 (8%)	33 (6%)
Gender	..	3 (1%)	13 (1%)	6 (2%)	1 (0%)
	Male	266 (48%)	505 (39%)	172 (44%)	228 (40%)
	Female	285 (51%)	771 (60%)	216 (55%)	334 (59%)
Race	..	4 (1%)	9 (1%)	3 (1%)	5 (1%)
	White	374 (68%)	955 (74%)	286 (73%)	421 (75%)
	Black	60 (11%)	113 (9%)	27 (7%)	42 (7%)
	Hispanic	44 (8%)	60 (5%)	27 (7%)	33 (6%)
	Others	72 (13%)	152 (12%)	51 (13%)	62 (11%)
Informed of legal rights	..	13 (2%)	28 (2%)	3 (1%)	11 (2%)
	Yes	415 (75%)	921 (71%)	292 (74%)	377 (67%)
	No	126 (23%)	340 (26%)	99 (25%)	175 (31%)
Received safety training	..	13 (2%)	31 (2%)	5 (1%)	13 (2%)
	Yes	349 (63%)	821 (64%)	261 (66%)	353 (63%)
	No	192 (35%)	437 (34%)	128 (32%)	197 (35%)
Asked to do dangerous task	..	18 (3%)	30 (2%)	7 (2%)	13 (2%)
	Yes	30 (5%)	63 (5%)	37 (9%)	43 (8%)
	No	506 (91%)	1196 (93%)	350 (89%)	507 (90%)
Would refuse to do something dangerous	..	18 (3.3%)	37 (2.9%)	8 (2.03%)	17 (3.02%)
	Yes	207 (37.4%)	422 (32.7%)	104 (26.4%)	142 (25.2%)
	No	79 (14.3%)	140 (10.9%)	72 (18.3%)	77 (13.7%)
	Maybe	190 (34.3%)	545 (42.3%)	167 (42.4%)	251 (44.6%)
	Don't know	60 (10.8%)	145 (11.3%)	43 (10.9%)	76 (13.5%)
Had a near-miss incident	..	26 (5%)	51 (4%)	12 (3%)	16 (3%)
	Yes	59 (11%)	115 (9%)	66 (17%)	83 (15%)
	No	469 (85%)	1123 (87%)	316 (80%)	464 (82%)
Co-worker injured	..	30 (5%)	56 (4%)	17 (4%)	20 (4%)
	Yes	122 (22%)	240 (19%)	107 (27%)	127 (23%)
	No	402 (73%)	993 (77%)	270 (69%)	416 (74%)
Injured at work	..	25 (5%)	55 (4%)	13 (3%)	17 (3%)
	Yes	69 (12%)	147 (11%)	78 (20%)	88 (16%)
	No	460 (83%)	1087 (84%)	303 (77%)	458 (81%)
Times worked during school	..	46 (8%)	96 (7%)	24 (6%)	35 (6%)
	Before 7 PM	239 (43%)	452 (35%)	139 (35%)	164 (29%)
	Between 7 PM and 11 PM	257 (46%)	714 (55%)	212 (54%)	338 (60%)
	After 11 PM	12 (2%)	27 (2%)	19 (5%)	26 (5%)

Table 2 continued

Variable	Levels	Worked 1 job		Worked multiple jobs	
		Family business (N = 554)	Other-working (N = 1289)	Family business (N = 394)	Other-working (N = 563)
Worked before 8 AM	..	35 (6%)	84 (7%)	23 (6%)	33 (6%)
	Never	378 (68%)	941 (73%)	242 (61%)	363 (64%)
	One day	43 (8%)	83 (6%)	42 (11%)	51 (9%)
	2 or more days	98 (18%)	181 (14%)	87 (22%)	116 (21%)
Hours per week worked	..	13 (2%)	41 (3%)	8 (2%)	16 (3%)
	Less than 5	123 (22%)	329 (26%)	79 (20%)	121 (21%)
	6–10 h	143 (26%)	328 (25%)	86 (22%)	139 (25%)
	11–16 h	130 (23%)	237 (18%)	71 (18%)	105 (19%)
	17–22 h	84 (15%)	231 (18%)	63 (16%)	94 (17%)
	23–40 h	57 (10%)	109 (8%)	68 (17%)	77 (14%)
	Over 40 h	4 (1%)	14 (1%)	19 (5%)	11 (2%)

.. = Missing values

Table 3 Job tasks of teens who worked in family-owned businesses compared to other-working teens, stratified by number of jobs

Job tasks	Worked one job				Worked multiple jobs			
	Family business (N = 554)		Other-working (N = 1289)		Family business (N = 394)		Other-working (N = 563)	
	N	%	N	%	N	%	N	%
Animal care	35	6.3	88	6.8	51	12.9	72	12.8
Harvesting/planting	17	3.1	50	3.9	34	8.6	28	5.0
Babysitting/child care	151	27.3	447	34.7	169	42.9	292	51.9
Cashier/waitperson	173	31.2	426	33.0	120	30.5	198	35.2
Dishwashing	118	21.3	256	19.9	83	21.1	124	22.0
Sales person	51	9.2	118	9.2	68	17.3	74	13.1
Cleaning tables/floors/rooms	161	29.1	370	28.7	118	29.9	196	34.8
Stocking shelves	105	19.0	237	18.4	76	19.3	124	22.0
Cooking/frying	84	15.2	174	13.5	57	14.5	90	16.0
Other food preparation (not cooking or frying)	89	16.1	231	17.9	72	18.3	111	19.7
Tree/shrub trimming or cutting	24	4.3	36	2.8	36	9.1	34	6.0
Carpentry	27	4.9	19	1.5	45	11.4	17	3.0
Lawn mowing	63	11.4	144	11.2	108	27.4	110	19.5
Roofing	27	4.9	22	1.7	39	9.9	30	5.3
Construction	28	5.1	22	1.7	40	10.2	23	4.1
Painting	35	6.3	57	4.4	59	15.0	52	9.2
Nursing assistant/working with patients	10	1.8	17	1.3	9	2.3	20	3.6
Newspaper/magazing delivery	17	3.1	28	2.2	15	3.8	30	5.3
Office assistant/receptionist	26	4.7	29	2.2	35	8.9	21	3.7
Driver/courier/delivery person (not newspaper/magazine delivery)	11	2.0	18	1.4	12	3.0	12	2.1
Other	79	14.3	191	14.8	81	20.6	95	16.9

Table 4 Univariate odds ratios for outcomes of interest for working teens

Outcome	Worked one job Odds ratio (95% CI) Family-owned business versus other-working	Worked multiple jobs Odds ratio (95% CI) Family-owned business versus other-working
Injured at work	1.11 (0.82, 1.51)	1.34 (0.96, 1.88), 0.089
Injury affected normal activity (>3 days)	1.76 (0.93, 3.35)	1.07 (0.53, 2.15), 0.847
Asked to perform a dangerous task	1.13 (0.72, 1.76)	1.25 (0.79, 1.97), 0.348
Had a near miss incident	1.23 (0.88, 1.71)	1.17 (0.82, 1.66), 0.390
Co-worker injured at work	1.26 (0.98, 1.61)	1.30 (0.96, 1.75), 0.088
Informed of legal rights and responsibilities	1.22 (0.96, 1.54)	1.37 (1.02, 1.83), 0.034
Received safety training	0.97 (0.78, 1.19)	1.14 (0.87, 1.50), 0.355
Filed for workers compensation	2.76 (1.34, 5.72)	1.29 (0.58, 2.90), 0.533

The majority of kids working multiple jobs worked in restaurants or fast food jobs. Table 3 presents the tasks that teens reported working. The top tasks reported by kids working in multiple jobs were the same as those tasks done by kids working in one job.

Injuries

Among teens working in family-owned businesses plus another job, 78 reported they were injured (19.8%). A total of 158 injuries were reported. Of the injured, 21 (27%) reported that the injury were severe and affected their activities for more than 3 days. The most common injuries were cuts (46.2%), burns (38.5%) and bruises (25.6%) and scrapes (25.6%). Broken bones and crushed body parts accounted for 15.3% of reported injuries. Among teens working in family-owned businesses plus another job, most were injured by contact with knife or sharp object (30.8%), contact with hot grease or fluid (30.8%), and carrying or lifting an object (20.5%). The most common body sites for injuries were fingers/hands (57.5%), arms (33.3%), and legs (24.4%). Of the teens that were injured, 15 (20.6%) filed a workers' compensation claim.

Among other-working teens working multiple jobs, 88 reported that they were injured at work (15.6%). A total of 194 injuries were reported. Of those injured, 23 (26%) reported that their injuries affected their activities for more than 3 days. The most common injuries were cuts (54.5%), bruises (30.7%) and burns (30.7%). Crushed body parts and broken bones accounted for 17.1% of the reported injuries. Other-working teens who worked multiple jobs were most commonly injured by slips, trips and falls (28.4%), contact with a knife or sharp object (26.1%), and carrying or lifting an object (23.9%). The areas of the body that were injured were the same. Of the other-working teens that were injured, 14 (16.9%) filed for workers' compensation.

Regression Findings for Outcomes of Interest

Table 4 presents the univariate odds ratios (OR) and 95% confidence intervals for the outcomes of interest for teens with multiple jobs. There were no significant differences found between teens working in family-owned businesses and other jobs compared with other-working teens.

Discussion

In the United States, 70–80% of teens work for pay sometime before leaving high school [23–26]. While the characterization of teen employment and resulting injury has been described by recent research, there is no description of the work and injury experience for teens who are employed in family-owned businesses. In our population of 2,858 working high school students, 34% reported working in family-businesses. If we consider teens who only worked one job, the percent of teens injured was not different; 12% in family-owned business and 11% among other working teens. However, the percent injured is not the entire picture; there were some differences that merit discussion. Among the teens injured, those working in family-owned businesses had a higher percentage of more severe injuries that affected their activities for more than 3 days or warranted applying for workers' compensation. Additionally, if we look at the reported injuries by category, 17% of injured teens in family-owned businesses reported broken bones or crushed body parts; compared with 5% of the other-working teens.

The severity of the injuries may result from the fact that teens working in family-owned businesses were working in tasks that are more dangerous or prohibited by the HOO; such as roofing (4.9% FB vs. 1.7% Other), construction (5.1% FB vs. 1.7% Other), cooking/frying (15.2% FB vs. 13.5% Other), carpentry (4.9% FB vs. 1.5% Other), tree trimming/cutting (4.3% FB vs. 2.8% Other), and driver/

delivery person (2% FB vs. 1.4% Other). When asked what some of the specific dangerous tasks that teen's working in family-owned businesses were doing, we received the following responses "work on 12 foot scaffolding and haul up 40#s for 8 blocks and mortar and scaffolding sets high up in the air," "carry out all the hot grease," "stand on a scaffold 30 feet in the air and hang a ceiling piece of drywall," "pick up roof toppings off ground while other workers still were throwing toppings down—I still did it," "climb on a 15–20 foot pallet of grass seed to cut one off," "lean back on a ladder to put up insulation," "drive a fork lift—very hard," "walk on unsteady roof," "hang from a rain gutter four stories up while washing windows without a safety harness," "climb high ladders, spray dangerous materials on walls," and "work on the grill when there was grease spattering."

When teens were asked whether they would refuse to do something dangerous at work, more teens that work in family-businesses said "No" (14.3% vs. 10.9%, $P = 0.008$). Because of the family dynamics that may exist in a family-owned business, teens may feel that they have to do as their parents say, irregardless of safety. Furthermore, if teens feel that they must work in the family-owned business to help out financially, they may be more at risk of engaging in jobs or tasks that are dangerous. When asked how much of the money teens used to support their family, 3.6% of teens working in family businesses said "most of the money" compared with 1.8% of other-working teens.

The effect of multiple jobs on teen's safety is revealed by recognizing that the percent of injured teens increased among both teens working in family-owned businesses and other working teens. Simply put, more jobs equal more injuries. Job characteristics that changed among teens working multiple jobs, such as a greater percentage reported working after 11:00 PM, working more hours per week, and working more than two days before 8:00 AM per week, could put teens at risk for more injury. For example, only 1% of teens who reported working only one job worked more than 40 h per week, compared with 5% of teens who worked in both a family-business and another job.

If individual states do not have state child labor laws, there are no current laws that protect youth working in family-businesses from engaging in dangerous jobs or tasks. In our study, teens responded that they were doing dangerous jobs, several that would be illegal under FLSA if the business was not family-owned. Several reported jobs or tasks are illegal under the Hazardous Occupation Orders (HOO). For example according to the HOO, jobs such as working from a ladder or scaffold at a height of over 20 feet are illegal for youth under 16 and jobs working in roofing operations are illegal for youth under eighteen.

There are a few limitations to this study. First, since this study was conducted in one state, there may be selection

bias. There was a wide variety of schools selected to participate in the study, however, the child labor laws in Wisconsin may be different than labor laws of other states, especially regarding family-owned businesses. A second limitation of this study is that we cannot specifically determine what jobs or tasks were associated with an injury. During the survey, students selected multiple tasks associated with their jobs and there is no possible way of deciphering which task led to injury. However, we are able to evaluate the job tasks and compare the profiles to evaluate whether teens who worked in family-owned businesses were different from other-working teens.

This study has shed light on teens working in family-owned businesses; clearly noting that while the percentage of injury is not different, teens working in family-owned businesses may be more likely to suffer a severe injury compared with other-working teens. The disparity in the severity of the injury received in teens working in family-owned businesses is an important issue that needs addressing. Is it linked to more hazardous jobs and tasks? Is it linked to family dynamics, where children do what they are told irregardless of safety? Should labor laws apply to family-owned businesses or should the government stay out of "tradition?" Much more research regarding the health and safety of teens working in family-owned businesses is needed is thoroughly address and answer the questions regarding teens working in family-owned businesses.

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