

Original article

Attitudes and Beliefs About Adolescent Work and Workplace Safety Among Parents of Working Adolescents

Carol W. Runyan, Ph.D.^{a,b,c,*}, Michael Schulman, Ph.D.^{a,b,d}, Janet Dal Santo, Dr.P.H.^a,
J. Michael Bowling, Ph.D.^{a,b,e}, and Robert Agans, Ph.D.^e

^aUniversity of North Carolina Injury Prevention Research Center, Chapel Hill, North Carolina

^bDepartment of Health Behavior and Health Education, University of North Carolina School of Public Health, Chapel Hill, North Carolina

^cDepartment of Pediatrics, University of North Carolina School of Medicine

^dDepartment of Sociology and Anthropology, North Carolina State University, Raleigh, North Carolina

^eDepartment of Biostatistics, University of North Carolina School of Public Health, Chapel Hill, North Carolina

Manuscript received February 29, 2008; manuscript accepted August 6, 2008

Abstract

Purpose: This study was designed to examine the attitudes and beliefs of the parents of working adolescents related to the safety of the employment of their children.

Methods: A cross-sectional telephone survey was conducted in 2003 among English-speaking parents of working adolescents aged 14–18 years in the continental United States. Questions addressed parental concerns about adolescents' employment and potential safety issues at work.

Results: Most parents expressed favorable attitudes about adolescent employment, although many expressed concerns about fatigue (48%), problems completing schoolwork (33%), or spending time with families (35%). Half of all parents indicated concerns about adolescents being present during a robbery, and 40–50% were concerned about adolescents working alone or not having adequate safety training. Parents were favorable to laws that regulate the teen work environment, although most (69%) also indicated that parents, not laws, should determine the work that teens do.

Conclusions: Parents of working teens are favorable to their teens working, but they do have varied concerns about safety. Although many parents believe they should set the rules about teen work, they are also generally supportive of governmental regulation of hours and tasks. Helping parents understand child labor policies and consider evidence about work hazards may facilitate their ability to provide appropriate advice to their children. © 2009 Society for Adolescent Medicine. All rights reserved.

Keywords: Youth; Adolescent; Worker; Parent; Workplace safety; Occupation

Our search has revealed only one study since 1990 of parental views about teen work. This research has suggested that parents generally favor teens holding jobs [1], despite literature indicating that adolescent work has both benefits and drawbacks. To the extent that parents are a source of information and influence for their teenagers regarding work decisions, as they are for other adolescent behaviors that affect health such as substance use or automobile driving [2–4], it

is important to understand more clearly the nature of their views about adolescent work.

In the United States, approximately two-thirds of adolescents age 16–17 were documented to have paid employment in 2000 [5,6]. Federal and state governments restrict formal employment of youth under age 18, although fewer restrictions apply when youth work for their parents. The retail and services sectors, notably restaurants and grocery stores, employ the largest numbers of teens [7,8].

Federal data indicate that nearly 70 adolescents are fatally injured at work each year [9]. The largest proportion of adolescents are working in retail settings where two thirds of the fatalities are attributable to homicide [7,10]. Nonfatal injuries

*Address correspondence to: Carol W. Runyan, CB 7505, University of North Carolina, 137 East Franklin Street, Chapel Hill, NC 27599-7505.
E-mail address: carol_runyan@unc.edu

to young workers are estimated at approximately 200,000 cases per year [11]. Although adolescents appear to have lower rates of injury per worker than older workers, it must be remembered that younger workers typically work fewer hours so the rates by exposure time may be higher than for adults. Also, given that the rate of injury is greatest for workers in their first month of work and adolescents change jobs more often than adults, there may be excess risk for youth [12].

State and federal child labor laws restrict the hours and types of jobs for which teens can be legally employed. However, data from the National Longitudinal Study of Youth (NLSY) show that some teens are in paid employment as young as 12 years of age [7]. Because there is no national system for monitoring occupational illnesses and injuries, estimates of the number of nonfatal injuries to working adolescents vary across studies depending on definitions and sources of information [13–17]. Furthermore, this problem has received limited policy attention in recent years despite findings that many young workers are performing dangerous tasks and/or tasks prohibited for persons of their age [18,19]. In addition to safety issues, the literature points to concerns about the effects of working too many hours on increasing fatigue, decreasing school performance, and increasing delinquent behavior, including alcohol and substance use as well as possibly affecting involvement in violent behaviors [20–25]. It is believed, on the other hand, that working helps to teach responsibility and eases student workers' transition from school to full-time work [22,25]. Consequently, the developmental impact of adolescent employment is a topic of scholarly public health investigation.

The literature on adolescent work derives from several streams of research. One stream examines the quality of the adolescent work experience and its impacts on psychosocial development and the transition to adulthood [26,27]. This work examines how working helps to teach responsibility and eases student workers' transition from school to full-time work [28]. Other scholars focus on the impact of the intensity of adolescent work on adolescent risk behaviors, family relationships [29], and academic achievement, pointing to concerns about the effects of working too many hours on increasing fatigue [21], decreasing school performance [30], and increasing delinquent behavior, including alcohol and substance use as well as possibly affecting involvement in violent behaviors [23,31]. Other work documents the hazard exposures and injuries youth face on the job [20,21,24] with special attention to jobs in construction and agriculture [18,28,32–34]. Common throughout these research streams are concerns about measurement issues and the potential for biases associated with concerns about the differences between working and nonworking adolescents [23].

This article describes the responses of parents of working teenagers in the United States to a survey designed to ascertain their attitudes and beliefs about the work that their teens do, the safety of their teens' work environments, and potential strategies to improve safety.

Methods

Our study reports results from a cross-sectional telephone survey conducted in 2003 designed to elicit information from a national sample of parents of working teenagers between the ages of 14 and 18 years.

Instrument design was based upon initial pilot testing with a convenience sample of 20 North Carolina parents of working teens and further refined with a random pilot sample of 60 parents. The instrument, consent process, and interview procedures were approved by the Human Subjects Committee of the University of North Carolina at Chapel Hill School of Public Health.

The final survey instrument, consisting of 136 items, was programmed into a computer-assisted telephone interviewing system using Blaise [35] and included categories addressing parents' concerns about workplace safety and their attitudes about protecting young worker safety.

Study sample

A simple random probability sample of households with telephone-line access in the continental United States was chosen for this study. To offset the costs of screening households for eligible teens, the sample was selected using a dual-frame approach [36,37] in which 10% of the sample was selected from a list-assisted random digit dialing (RDD) telephone frame, and the remainder from a complementary (i.e., nonoverlapping) targeted-list frame consisting of directory-listed residential telephone numbers for which recent demographic information about the household was available.

Screening and eligibility

Once interviewers reached a residential household with a working telephone number and English-speaking adults, they ascertained eligibility by asking if there was a resident teenager between the ages of 14 and 18 who had held a job not supervised by a parent or legal guardian for at least a 2-month period within the preceding 12 months. In addition, because of our interest in workers in the age group covered by U.S. child labor laws [14–17], the teen needed to be at least 14 years old but younger than 18 at the time that he or she worked. If there was more than one eligible teen in the household, one was randomly selected to serve as the teen about whom we asked questions. For the selected teen, we asked the parent or guardian to identify that teen's most recent job meeting the eligibility criteria, and defined this as the referent job throughout the interview with the parent and a followup interview with the teenager (reported elsewhere) [19]. We asked to speak with the parent or guardian most knowledgeable about the selected teen's job. Therefore, in our sample, "parent" refers to the biological or legal guardian of a working teenager. From the eligible 1662 households identified in the study, we successfully interviewed 1059 parents.

Data collection

Interviews took place 7 days a week between the months of February and September 2003. Selected numbers were called until a minimum of 10 unsuccessful attempts were made with at least one weekend call, one evening call, and one daytime call over a period of several weeks. Calls were closely monitored to ensure that data were being collected and entered according to standard computer-assisted telephone interviewing procedures.

Data management and data analysis

Data were weighted to reflect overall probabilities of selection and adjusted for national distributions to reduce biases associated with coverage and non response by race of household head and household income as described elsewhere in more detail [19]. Analyses reported here include raw frequencies of responses to key items and comparisons within age and gender strata. Percentages, 95% confidence intervals, and calculations of means rely on sampling weights.

Results

Study population

To complete interviews with 1053 parents/guardians of working teens, 29,523 telephone numbers were called. Using the American Association for Public Opinion Research (AAPOR) Standard Definitions [38], the range in response rates was 51–64%. The low-end response rate assumes that the same proportion of unknown eligibility households were eligible to participate as the proportion eligible with known status, as follows: (interviewed / (all those eligible + portion of unknown eligibility)). The high-end rate assumes that all households contacted for which no eligibility information was available were considered not eligible to participate in the survey (interviewed / all those eligible).

Of the final respondents, 81% were the mother or other adult female caregiver (e.g., stepmother, grandmother). Most of the respondents were the teen's parent: 97% of all female respondents were the teen's mother and 92% of male respondents were the teen's father. The majority of the respondents (63%) was in the 40–50-year age range and had completed less than 4 years of college. Of the responding parents, 57% reported that they had full-time jobs, whereas 24% indicated they worked part time and 19% were not currently employed. Of the respondents, 13% self-identified as being of a minority race/ethnicity. Most respondents ($n = 797$) answered questions about their household income, with 46% indicating incomes less than \$40,000 per year and 24% indicating incomes more than \$75,000. One-third of the parents indicated that they themselves had at some time experienced work injuries serious enough to miss work for 1 day or more. The referent teen workers were evenly divided between girls (52%) and boys (48%). From the parallel study

of teens [19] we found that 866 of the teens worked in the retail or service sector, whereas the remaining teenagers who provided information in response to this item indicated that they worked in construction ($n = 12$), manufacturing ($n = 11$), or communications ($n = 11$).

Parental attitudes about teen work

To learn what parents think about their teens' work, we asked a series of questions designed to elicit attitudes about potential benefits and risks perceived to be associated with working during adolescence. We used a four-point scale identifying the responses "strongly agree," "agree," "disagree," and "strongly disagree" for each statement. As shown in Table 1, most parents indicated that they believed that working teens learned valuable job skills and were less likely to get in trouble than teens who don't work. About one half of parents also agreed with the statement that "...teens who work earn money families need for important things." Still, nearly half of the parents were concerned that teens who work get too tired, whereas about one-third expressed beliefs that working teens "don't have enough time with families," "have problems completing their schoolwork," or "have too little time for extracurricular activities." Very few parents expressed the belief that working teens are more likely to use drugs or alcohol or to be victims of violence than teens who do not work.

Parental concerns about the dangers of work for their teens

When asked about being concerned that their teen's work could be dangerous, only 13% of parents of working teens "strongly agreed" or "agreed" that "working could be dangerous for my teen." Parents of working females differed only slightly in their level of concern about work safety than parents of working males (14% vs. 12%, respectively). However, the patterns of what they were concerned about does show some variation (Table 2).

Although not shown in the tables, more than half of parents indicated that they thought that the likelihood that their teen would be injured at work seriously enough to need medical attention or miss at least 1 day of work was "very unlikely," whereas only 10% believed this to be at least "somewhat likely." Nevertheless, when asked about specific areas that might pose concerns, between one-third and one-half of parents agreed or strongly agreed with a variety of statements about potential dangers at work.

Although parents of male versus female adolescent workers differed little on most types of concerns, parents of female workers were significantly more concerned about dangers of physical and sexual assault than were parents of male workers.

Despite these concerns, 98% of parents of working adolescents reported that they were confident that their teenager knows how to keep him-/herself safe while on the job and is aware of his/her rights about safety on the job, although

Table 1
Parental attitudes about teen work, by teen gender, U.S., 2003 (n = 1053)

	% Indicating “strongly agree” or “agree”		
	Parents of male teens (n = 544) % (95% CI)	Parents of female teens (n = 509) % (95% CI)	All parents (n = 1053) % (95% CI)
Teens who work...			
...learn valuable job skills	99.5 (99.0, 100.0)	99.3 (98.8, 99.9)	99.4 (99.0, 99.8)
...are less likely to get in trouble than teens who don't work	92.1 (88.7, 95.4)	89.5 (83.8, 95.3)	90.7 (87.3, 94.1)
...earn money families need	50.9 (43.2, 58.6)	49.4 (41.5, 57.2)	50.1 (44.6, 55.6)
...get too tired because of the demands of school/work	43.0 (35.4, 50.7)	53.4 (45.6, 61.1)	48.4 (42.9, 54.0)
...don't have enough time to spend with their families	34.7 (27.1, 42.4)	35.4 (27.9, 43.0)	35.1 (29.7, 40.5)
...have problems completing schoolwork	34.7 (26.9, 42.5)	31.4 (24.0, 38.8)	33.0 (27.6, 38.3)
...have too little time for extracurricular school/church activities	30.0 (22.7, 37.3)	31.6 (24.0, 39.2)	30.8 (25.5, 36.1)
...are more likely to use drugs/alcohol	7.6 (2.5, 12.7)	7.4 (2.7, 12.0)	7.5 (4.0, 10.9)
...are more likely to be victims of violence than teens who don't work	7.0 (4.0, 10.0)	7.6 (3.2, 12.0)	7.3 (4.6, 10.0)
Other beliefs:			
I am confident my teenager knows how to keep him/herself safe while on the job	98.8 (98.2, 99.5)	96.7 (92.9, 100.0)	97.7 (95.7, 99.7)
I am confident my teenager knows his/her rights when it comes to safety on the job	85.8 (80.8, 90.8)	87.5 (83.6, 91.4)	86.7 (83.5, 89.8)
I am concerned that working could be dangerous for my teen	12.2 (7.2, 17.3)	14.5 (10.0, 18.9)	13.4 (10.1, 16.7)

Note: Sample sizes vary for each item between 977 and 1044. Missing values are not included in denominators of calculated percentages. Percentages rely on sampling weights.

only 16% indicated agreement with the statement “accidents at work just happen and there is little that teen employees can do to avoid injury.”

Beliefs about workplace safety and teen work practices

In an effort to learn about how parents believe workplace safety should be managed, we asked a series of questions designed to gauge parental viewpoints about the role of parents, employers, and laws when it comes to regulating teens' work. Although not shown in a table, data indicated that the vast majority of all parents said that it was important that working teens do the following: (1) get on-the-job training on how to perform basic job tasks, (2) ask lots of questions about tasks and rules; (3) have parents who help them look out for safety issues, (4) have a qualified adult supervisor, and 5) avoid peer pressure to act in certain ways.

Protecting young workers

Although only 17% of parents agreed with a statement indicating that they didn't want their teen to work as many hours as s/he does, half expressed strong disagreement with the statement (not shown in table).

As shown in Table 3, parents clearly expressed beliefs that there should be limits placed on teen work hours, but they were not uniform in their perspectives about where the responsibility for regulating teen work should fall. Two-thirds of the parents of working boys and 72% of the parents of working girls endorsed (i.e., strongly agree or agree) the statement that “parents, not laws, should decide what kinds of work their teenagers can do.” However, most indicated that it is important or very important “that there be laws limiting the kinds of tasks teenagers are allowed to do.” Similarly, most parents, regardless of the sex of their working

Table 2
Parents concerns associated with teen work, U.S. (n = 1053)

Areas of potential concern	% of Parents indicating “very concerned” or “somewhat concerned”		
	Parents of male teens (n = 544) % (95% CI)	Parents of female teens (n = 509) % (95% CI)	All parents (n = 1053) % (95% CI)
How concerned are you about your son/daughter ...			
Being there during a robbery	46.3% (38.7, 54.0)	54.5% (46.8, 62.1)	50.5% (45.1, 56.0)
Not having safety training	51.3% (43.6, 59.0)	44.7% (36.8, 52.7)	47.9% (42.4, 53.5)
Getting behind in school	42.6% (35.3, 49.9)	47.6% (39.8, 55.3)	45.2% (39.8, 50.6)
Working alone	38.5% (30.6, 46.4)	42.1% (34.4, 49.8)	40.4% (34.9, 45.9)
Not getting enough sleep	38.1% (30.6, 45.6)	40.8% (33.2, 48.4)	39.5% (34.2, 44.9)
Getting physically or sexually assaulted	26.0% (19.8, 32.2)	46.8% (39.0, 54.5)	36.8% (31.5, 42.1)
Working too late at night	34.5% (27.4, 41.5)	38.5% (31.2, 45.8)	36.5% (31.5, 41.6)
Not using protective equipment	41.4% (33.7, 49.1)	31.4% (23.7, 39.1)	36.2% (30.8, 41.7)
Being rushed at work	30.9% (23.7, 38.0)	38.0% (30.2, 45.8)	34.6% (29.2, 39.9)
Doing hazardous tasks	35.0% (27.3, 42.8)	29.7% (22.0, 37.4)	32.3% (26.8, 37.8)
Handling hazardous equipment or substances	34.3% (26.4, 42.2)	24.3% (17.3, 31.4)	29.1% (23.8, 34.5)

Note: Sample sizes vary for each item between 1026 and 1042. Missing values are not included in denominators of calculated percentages. Percentages rely on sampling weights.

Table 3

Views of parents concerning responsibilities for regulating work safety for adolescents (n = 1053)

	% Indicating “strongly agree” or “agree”		
	Parents of male teens (n = 544) % (95% CI)	Parents of female teens (n = 509) % (95% CI)	All parents (n = 1053) % (95% CI)
Employers should protect workers by enforcing safety rules	100.0 (100.0, 100.0)	99.7 (99.3, 100.0)	99.8 (99.6, 100.0)
Parents, not laws, should decide what kinds of work their teenagers can do	65.8 (58.3, 73.3)	72.4 (66.3, 78.5)	69.3 (64.4, 74.1)
Laws should limit the number of daily and weekly hours teenagers can work	85.4 (80.2, 90.5)	84.6 (79.2, 90.0)	85.0 (81.2, 88.7)
Laws that keep teenagers from working late at night on school nights are a bad idea.	14.0 (7.8, 20.3)	14.4 (9.2, 19.6)	14.2 (10.2, 18.2)
	% “Very important” or “important”		
	Parents of male teens (n = 544) % (95% CI)	Parents of female teens (n = 509) % (95% CI)	All parents (n = 1053) % (95% CI)
It is [very important/important] that there are laws limiting the kinds of equipment teenagers are allowed to use	98.3 (96.9, 99.7)	98.2 (97.0, 99.4)	98.2 (97.3, 99.1)
It is [very important/important] that there are laws limiting the kinds of tasks teenagers are allowed to do	98.3 (96.9, 99.8)	95.8 (91.5, 100.0)	97.0 (94.7, 99.4)

Note: Sample sizes vary for each item between 1018 and 1038. Missing values are not included in denominators of calculated percentages. Percentages rely on sampling weights.

teenager, indicated that they believe it is important that “there are laws limiting the kinds of equipment teenagers are allowed to use.” Virtually all parents said they believe that employers should “protect workers by enforcing safety rules.”

With respect to the appropriate working hours for adolescents, we discovered greater variation in parental perspectives. Overall, parents of adolescents who worked were favorable to laws that restrict teens working late at night on school nights and limit the total number of daily and weekly hours a teen can work. Only 14% of parents agreed or strongly agreed with the statement “laws that keep teenagers from working late at night on school nights are a bad idea,” and 85% agreed or strongly agreed with the statement “laws should limit the number of daily and weekly hours teenagers can work.”

To understand what parents think the work-hour restrictions for teens should be, we asked them to indicate: (1) the maximum number of hours a teen worker under age 18 should be allowed to work during a week when school is in session, and (2) the latest hours that teens less than 16 years versus those 16–17 years of age should be allowed to work on a school night. As shown in Figure 1, the largest proportion of parents (45%) said they believed that teen work during the school year should be limited to less than 16 hours per week, although 16% indicated that they thought that the maximum should be more than 20 hours.

We asked all parents opinions about the latest hours that adolescents should be allowed to work when they are less than 16 years of age versus when they are 16–17 years. Figure 2 displays the data separately for the two age groups. Consistent with federal policy, parents were more accepting of later work hours for teens age 16–17 years of age than for those younger than 16. Federal law prohibits school night work after 7 PM for teens under age 16, yet two-thirds of parents endorsed a school-night work-hour restriction of 8 PM or later. Although federal law does not limit the number of work hours for adolescents 16 and 17 years of age, state laws vary

with regard to work-hour restrictions. Even although the largest proportion of parents endorsed a 9 PM work restriction, 36% of parents suggest working 10 PM or later. Although not shown in the figure, parents of working girls endorsed slightly earlier work hours than parents of working boys, but the findings were not statistically significant.

Further analyses revealed that there was no consistent statistically significant pattern of association between parents’ beliefs and the parents’ gender, income or the parents’ own histories of being injured at work.

Discussion

Summary of major findings

These results confirm earlier research that parents of working teenagers are supportive of their adolescents working outside the home for pay [1]. Parents appear to be confident about the maturity of their teens when it comes to handling job safety, although they are concerned about

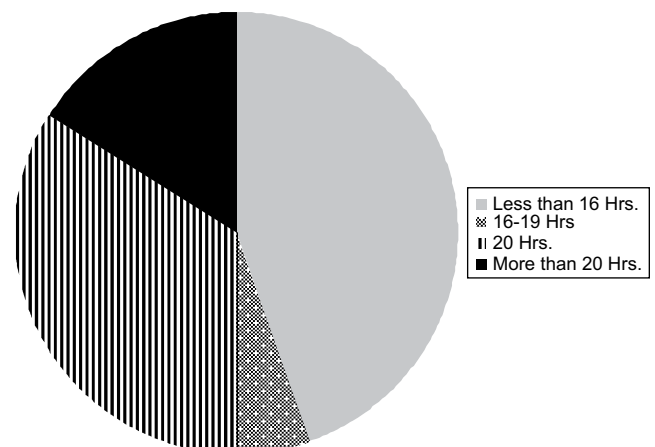


Figure 1. Proportions of parents indicating the maximum number of hours teen workers less than 18 years of age should be allowed to work during a week when school is in session (n = 1053).

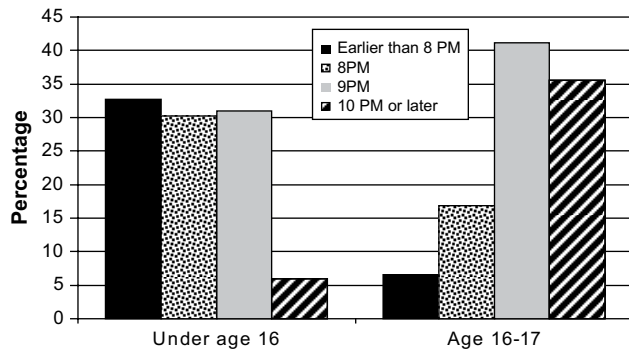


Figure 2. Percentage of parents indicating the latest hour they thought teens less than 16 years versus 16–17 years of age should be allowed to work on school nights (n = 1053).

some hazards in the workplace and about the hours their teens work.

Although most parents think that they, rather than laws, should govern teens' work, they are supportive of legal restrictions as well, particularly restriction on the numbers of hours teens can work. This is consistent with the concerns they expressed about teens being tired or having too little time for family or schoolwork.

However, despite the fact that many parents said they were concerned that their adolescents are not getting enough sleep, are working too late at night, do not have enough time for school, family and/or extracurricular activities, or might be present during a robbery, most favored school-night work-hour restrictions for teens 14–15 years old that were later than the 7 PM hour mandated by federal policy. Although state laws about school-night work for teens over age 16 vary, more than three-quarters of parents were supportive of policies that restrict how late teens can work during a school night.

Study limitations

The sample was limited to parents who could speak English, who lived in the continental United States, who were willing to participate in a telephone interview. Higher proportions of our respondents (36%) had completed college than the population overall (26%), although the median income category (\$40,000–50,000) of respondents was just below the median for the U.S. during the same time period (\$52,000) [6]. We are not sure how nonrespondents may have differed from those who participated, leaving uncertainty about the generalizability of the findings across income categories.

Relatively few of the respondents had teens working in jobs that are especially hazardous (e.g., construction), so we were not able to compare parental attitudes by the hazardousness of the teen's work. Because the study was restricted to parents of working teens, the results can not be generalized to all parents. Also, because of the cross-sectional nature of our study, we can not infer any causal relationship between

parental attitudes and characteristics and the work-related behaviors of their teenagers.

Implications

Parents of working teens support adolescents working but express concerns about a number of aspects of work. Their views are somewhat inconsistent with respect to night work, suggesting they may not be aware of the specific hazards, particularly robbery, associated with working at night.

Data from the teen interview part of this study reported elsewhere indicate that it is not uncommon for teens to work alone or without adult supervision—conditions that further draw into question safety, particularly at night [19]. Other research indicates that risks of being present during a robbery and/or being a victim of workplace homicide are greatest in retail establishments, where most teens work, and take place mostly during hours of darkness and with fewer employees on site [39,40].

Professionals who interact with parents about teen health issues should become familiar with the evidence about both the benefits and hazards of teen work and help parents establish boundaries for their teens' work experiences. By directing parents' concerns to issues about the various qualities of their teens' jobs, including safety, adolescent health professionals may be able to engage parents in increasing their monitoring of the safety of their teens' workplaces, putting pressure on employers to adhere to safety standards and child-labor laws and helping teen workers exercise their rights to safe jobs. However, understanding the dynamics of how parents can influence safety behaviors, as in teen driving [3], for example, is a relatively new area of research in which there is much more to learn, particularly about the processes by which parents assist teens with safety judgments and decisions in the varied environments in which they operate.

Acknowledgments

This project was supported by grant: 5-RO1-OH03530-02 from the National Institute of Occupational Safety and Health. We are most appreciative of analysis assistance provided by Jose Sandoval, MS, and Steven Lippmann, and for help in instrument development from Darlene Adkins, Thomas Harris, JD, Chris Miara, MS, Susan Gallagher, MPH, Marlee Gurrera, MS, Linda Treiber, PhD, and Susan Pollack, MD, MPH. We appreciate the critical review of the manuscript in draft form by Kimberly Rauscher, ScD.

References

- [1] Phillips S, Sandstrom KL. Parental attitudes toward youth work. *Youth Society* 1990;22:160–83.
- [2] Bahr SJ, Hoffmann JP, Yang X. Parental and peer influences on the risk of adolescent drug use. *J Prim Prev* 2005;26:529–51.
- [3] Williams AF, Leaf WA, Simons-Morton BG, et al. Parents' views of teen driving risks, the role of parents, and how they plan to manage the risks. *J Safety Res* 2006;37:221–6.

- [4] Westaby JD, Lowe JK. Risk-taking orientation and injury among young workers: Examining the social influence of supervisors, coworkers and parents. *J Appl Psychol* 2005;90:1027–35.
- [5] Szafran RF. Age-adjusted labor force participation rates, 1960–2045. *Monthly Labor Rev* 2002;125:25–38.
- [6] US Census Bureau, US Decennial Census 2000 [Online]. 2000. Available at: <http://factfinder.census.gov/home/saff/main.html>. Last accessed February 29, 2008.
- [7] United States Department of Labor. Report on the Youth Labor Force. Washington, DC: United States Department of Labor, 2000. Revised83.
- [8] Rothstein DS. Youth employment in the United States. *Month Labor Rev* 2001;124:6–17.
- [9] National Institute for Occupational Safety and Health. NIOSH Alert: Preventing Deaths Injuries and Illnesses of Young Workers. Washington, DC: US Department of Health and Human Services, 2003.
- [10] National Institute for Occupational Safety and Health. Worker Health Chartbook 2004. Chapter 5, Special Populations [Online]. 2004. Available at: <http://www2a.cdc.gov/niosh-Chartbook/ch5/ch5-2.asp>. Last accessed February 29, 2008.
- [11] National Institute for Occupational Safety and Health. NIOSH Alert: Request for assistance in preventing deaths and injuries of adolescent workers. Washington, DC: US Department of Health and Human Services, 1995.
- [12] Chapeskie K, Breslin F. Securing a safe and healthy future: The road to injury prevention for Ontario's Young Workers. In *Focus* 2003;34a.
- [13] Cimini MH. Research summary: Fatal injuries and young workers. *Compensation and Working Conditions* 1999;27:3.
- [14] Windau J, Meyer S. Occupational injuries among young workers. *Monthly Labor Review* 2005;128:11–23.
- [15] Committee on the Health and Safety Implications of Child Labor. National Research Council. Institute of Medicine, Protecting Youth at Work: Health, Safety and Development of Working Children and Adolescents in the United States. Washington, DC: National Academy Press, 1998.
- [16] Layne LA, Castillo DN, Stout N, et al. Adolescent occupational injuries requiring hospital emergency department treatment: A nationally representative sample. *Am J Public Health* 1994;84:657–60.
- [17] Windau J, Sygnatur E, Toscano G. Profile of work injuries incurred by young workers. *Month Labor Rev* 1999;122:3–10.
- [18] Runyan CW, Dal Santo J, Schulman M, et al. Work hazards and workplace safety violations experienced by adolescent construction workers. *Arch Pediatr Adolesc Med* 2006;160:721–7.
- [19] Runyan CW, Schulman M, Dal Santo J, et al. Work-related hazards and workplace safety of US adolescents employed in the retail and service sectors. *Pediatrics* 2007;119:526–34.
- [20] Bachman JG, Schulenberg J. How part-time work intensity relates to drug use, problem behavior, time use, and satisfaction among high school seniors: Are these consequences or merely correlates? *Dev Psychol* 1993;29:220–35.
- [21] Carskadon MA. Patterns of sleep and sleepiness in adolescents. *Pediatrician* 1990;17:5–12.
- [22] Mortimer JT, Finch M. The effects of part-time work on adolescent self-concept and achievement. In: Borman KM, Reisman J, eds. *Becoming a Worker*. Norwood, NJ: Ablex Publishing, 1986:66–89.
- [23] Paternoster R, Bushway S, Brame R. The effect of teenage employment on delinquency and problem behaviors. *Social Forces* 2003;82:297–335.
- [24] Steitz JA, Owen TP. School activities and work: Effects on adolescent self-esteem. *Adolescence* 1992;27:37–50.
- [25] Mortimer JT, Harley C, Staff J. The quality of work and youth mental health. *Work Occup* 2002;29:166–97.
- [26] Shanahan MJ, Mortimer JT, Kruger H. Adolescent and adult work in the twenty-first century. *J Res Adolesc* 2002;12:99–120.
- [27] Schoenhals M, Tienda M, Schneider B. The educational and personal consequences of adolescent employment. *Social Forces* 1998;77:723–61.
- [28] Call KT, Mortimer JT. *Arenas of comfort in adolescence: A study of adjustment in context*. Mahwah, NJ: Lawrence Erlbaum Associates, 2001.
- [29] Pickering LE, Vazonyi AT. The impact of adolescent employment on family relationships. *J Adolesc Res* 2002;17:196–218.
- [30] Zierold KM, Garman S, Anderson HA. A comparison of school performance and behaviors among working and nonworking high school students. *Fam Commun Health* 2005;28:214–24.
- [31] Brame R, Bushway SD, Paternoster R, et al. Assessing the effect of adolescent employment on involvement in criminal activity. *J Contemp Criminal Justice* 2004;20:236–56.
- [32] Rauscher KJ, Myers DJ. Socioeconomic disparities in the prevalence of work related injuries among adolescents in the United States. *J Adolesc Health* 2008;42:50–7.
- [33] Breslin FC, Day D, Tompa E, et al. Non-agricultural work injuries among youth. *Am J Prev Med* 2007;32:151–62.
- [34] Hard DL, Myers JR. Fatal work-related injuries in the agricultural production sector among youth in the United States, 1992–2002. *J Agromed* 2006;11:57–65.
- [35] Blaise version 4.5, Statistics Netherlands, Voorgburg/Heerlen, Netherlands, 2002.
- [36] Lepkowski JM, Groves RM. A mean squared error model for dual frame, mixed mode survey design. *J Am Stat Assoc* 1986;81:930–7.
- [37] Hartley H. Multiple frame surveys. *Proceedings of the Social Statistics Section* 1962;203–6. *Am Stat Assoc*.
- [38] AAPOR. *Standard Definitions: Final Depositions of Case Codes and Outcomes for Surveys*. 4th Edition. Lenexa, KS: American Association for Public Opinion Research, 2006.
- [39] Runyan CW, Bowling JM, Schulman M, et al. Potential for violence against teenage retail workers in the United States. *J Adolesc Health* 2005;267(36):e1–5.
- [40] Loomis D, Wolf SM, Runyan CW, et al. Homicide on the job: Workplace and community determinants. *Am J Epidemiol* 2001;154:410–7.