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Athletic Participation and Adolescent Sexual Behavior

Submitted by: Sally Moore, M.S. and [Rosemary V. Barnett](#), Ph.D., Assistant Professor Youth Development and Public Policy

The Effects of Athletic Participation on Adolescent Sexual Debut. Moore, S., Barnett, R., Brennan, M., & Gibson, H. (2007).

Introduction

According to the CDC, approximately 34% of adolescents in the United States are currently sexually active (defined as having had sexual intercourse in the past three months) and 46.7% have had sex at least once (Grunbaum, Kann, Kinchen, Ross, Hawkins, Lowry, et al., 2004). Early initiation of sexual activity can lead to devastating consequences. Sexually active adolescents may experience unwanted pregnancy, contract a sexually transmitted infection (STI), or suffer difficulties in relationships with parents or peers. Identifying and understanding antecedent factors that might influence an adolescent's decisions to engage in sexual behavior is vital if we hope to protect adolescents from these consequences. An ecological model developed by Small and Luster (2004) proposed that the accumulation and interaction of various risk factors at the individual (intellectual ability, gender, self-esteem), familial (connection to parents, family structure, socio-economic status), and extrafamilial level (having a boyfriend/girlfriend, peer group, attachment to school) work to influence the sexual decisions made by adolescents. One factor in particular that may influence adolescent sexual behavior is sport participation. Sport is an extrafamilial factor that has been found to have both positive (Kirkcaldy, Shephard, & Siefen, 2002; Petitpas, Van Raalte, Cornelius, & Presbrey, 2004) and negative (Baumert, Henderson, & Thompson, 1998; La Greca, Prinstein, & Fetter, 2001) effects on adolescent participants. Research designed to examine the impact of athletic participation specifically on sexual behavior is limited and inconclusive, but suggests that some link does exist (Lehman & Koerner, 2004; Savage & Holcomb, 1999). This study examined numerous factors at each of the ecological levels to determine their relationship with age of sexual debut and overall sexual activity. In particular, this study attempted to elucidate the relationship between sport participation and sexual activity.

Methodology

A self-completion questionnaire created for this study was administered in undergraduate general education classes to a sample of 437 participants aged 18-25 (29.3% male, 70.7% female). The questionnaire consisted of the following conceptual areas: athletic participation, Athletic Identity Measurement Scale (AIMS), ecological variables, Brief Sensation Seeking Scale (BSSS), sexual activity, and sociodemographics. Due to exclusions based on age or involuntary sexual debut, 417 questionnaires were used for data analysis. Data were analyzed using a variety of tests, including descriptive statistics, bivariate analyses (Cross-tabs, t-tests, ANOVA) to examine possible relationships between the dependent variables and both independent and demographic variables, and multiple regressions to explore these relationships in a multivariate context.

Main Ideas

Sexual Debut

A total of 252 respondents (64.3%) reported already having their sexual debut. The mean age of sexual debut was 17.19 years; reported ages ranged from 13.00 to 24.00 years. ANOVA

revealed significant differences in age of sexual debut by indices measuring Values and Risk Avoidance, with respondents reporting higher scores on these indices reported older ages of sexual debut. A significant difference in age of sexual debut was also found for the statement I felt like I received a good education in high school, with respondents indicating strong agreement reporting much older ages of sexual debut than those who said they felt neutral about the statement. A reduced multiple regression model was developed by entering all demographic (gender, race/ethnic origin, religious affiliation, athlete status) and independent (ecological variables, sensation seeking domains) variables and systematically removing the least significant until only the statistically significant variables remained. This model, which accounted for just over 14% of the variance in age of sexual debut ($Adj. R^2 = .142$), revealed that Values, Risk Avoidance, and I felt like I received a good education in high school were all positively related to age of sexual debut; higher scores corresponded with later ages of sexual debut.

Sexual Activity

Respondents were asked to indicate on a scale of 1 (Never) to 5 (A Lot) the frequency with which they engaged in a series of eight behaviors on a sexual activity continuum (kissing; French kissing; touching a partner's breast or having your breast touched by a partner; touching a partner's penis or having your penis touched by a partner; touching a partner's vagina or having your vagina touched by a partner; performing oral sex; receiving oral sex; sexual intercourse [vaginal penetration]). Responses to these items were combined to create an overall sexual activity scale (Cronbach's $\alpha = .95$), with higher scores indicating higher overall level of sexual activity. Males reported significantly higher sexual activity scores than did females. ANOVA revealed that scores on Risk Avoidance, Values, and Parental Monitoring indices were negatively related to sexual activity score. Additionally, propensity for sensation seeking behavior, measured by total score on the BSSS, was positively related to sexual activity score; higher sensation seekers reported higher levels of sexual activity. A reduced regression model, accounting for approximately 28% of the variance in sexual activity ($Adj. R^2 = .281$), revealed that Values, Risk Avoidance, and Parental Monitoring were all negatively related to sexual activity. Connection to School and Others was found to be significantly and positively related to sexual activity; higher scores on this index corresponded with higher sexual activity scores. Further, the sensation seeking domain of Disinhibition was also significantly and positively related to sexual activity; higher sensation seekers in this domain reported higher sexual activity scores. Lastly, current athlete status was significant, with current athletes reporting lower sexual activity scores than nonathletes.

Athlete Status

Respondents were categorized as being current athletes (respondents who were athletes in high school and currently participate in sport at the collegiate or club/intramural level – 29%), high school athletes (respondents who were athletes in high school and are no longer active in sport – 36.5%), or nonathletes (respondents who were not athletes in high school – 31.2%). ANOVA revealed significant differences in Connection to School and Others by athlete status group. Current athletes reported the highest scores on this index, followed by high school athletes and, lastly, nonathletes. A t-test examining sensation seeking and athlete status revealed that athletes (current and high school athletes combined) reported higher propensity for sensation seeking than did nonathletes. To explore possible differences in the variables affecting athletes and nonathletes, a series of reduced multiple regression analyses were conducted with sexual activity as the dependent variable. While many variables were significant for athletes and nonathletes, numerous differences related to athlete status were also discovered.

- The first model was conducted by selecting only the nonathletes and included all demographic and independent variables. This model accounted for almost 24% of the variance in sexual activity score (Adj. $R^2 = .237$). Four variables were found to be statistically significant. Risk Avoidance and Parental Monitoring were negatively related to sexual activity; as scores on these items increased, sexual activity score decreased. Connection to School and Others and the sensation seeking domain Experience Seeking were positively related to sexual activity; as scores on these items increased, so did sexual activity score.
- The second model was by conducted selecting only the athletes and included the same independent and demographic variables as the nonathlete model. This model accounted for 30% of the variance in sexual activity score (Adj. $R^2 = .302$). Five variables were found to be statistically significant. Risk Avoidance and Values were negatively related to sexual activity; those reporting higher scores on these items reported lower sexual activity scores. Connection to School and Others and sensation seeking domain Disinhibition were positively related to sexual activity; those reporting higher scores on these items also reported higher sexual activity scores. Age was also positively related to sexual activity, with older respondents reporting higher sexual activity scores.
- The last model was again conducted by selecting only the athletes and included the initial independent and demographic variables, as well as additional sport participation variables. This model accounted for approximately 36% of the variance in sexual activity score (Adj. $R^2 = .366$). Eight variables were found to be statistically significant. Age was again positively related to sexual activity; older respondents reported higher sexual activity scores. The sensation seeking domain Disinhibition and the AIMS statement *I was part of the most popular group at school* were positively associated with sexual activity; as scores on these items increased, so did sexual activity score. Risk Avoidance, Values, and AIMS Social Identity were negatively associated with sexual activity; as scores on these times increased, sexual activity score decreased. Additionally, contact sport and team sport were negatively associated with sexual activity. Contact sport players reported generally lower sexual activity scores than noncontact sport players, while team sport participants reported generally lower sexual activity scores than individual sport participants.

Conclusion and Implications for Extension Programs

Results of this study support an ecological approach to adolescent sexual behavior, one in which numerous factors combine and interact to influence an adolescent's sexual decision making. Conclusions reached through this study have far-reaching implications for practitioners working with adolescents. First, this study clearly demonstrates that athletes and nonathletes are two distinct groups of students. Understanding this distinction may help school officials and youth workers more effectively reach both populations, specifically in the realm of sexual behavior. For example, athletes reported higher sensation seeking, which was related to increased sexual activity. Recognizing this fact allows practitioners working directly with youth to target students involved in sport, and to ensure that this drive for excitement is focused in healthy, structured activities rather than risky sexual behaviors or other risk behaviors, such as drug or alcohol use. Coaches, teachers, or other practitioners working with the student athlete population should emphasize the importance of sport participation and the pride they should have in their achievements. This emphasis could enhance some of the positive facets of athletic identity, which were associated with lower sexual activity scores. Secondly, it is important to note that

influential factors identified through this research exist at the individual (gender, personal risk avoidance, propensity for sensation seeking, athletic identity), familial (parental monitoring, parental values toward sex), and extrafamilial level (risk behaviors of close friends, school attachment, connection to school and others, sport participation). Thus, practitioners hoping to affect adolescent sexual behavior must work to address the whole environment, rather than the specific behavior. This recommendation echoes that forwarded by Brindis (2006), who advocated for more global youth development programs. Programs should include components addressing such issues as overall healthy decision making, commitment to school, and positive peer influence; each of these areas is supported by the results of this study. By positively impacting adolescents' environments more broadly, youth workers, school personnel, and extension agents can better hope to make a difference in their lives as a whole, and to improve their sexual decision making specifically.

Additional References

- Baumert, P., Henderson, J., & Thompson, N. (1998). Health risk behaviors of adolescent participants in organized sports. *Journal of Adolescent Health, 22*, 460-465.
- Brindis, C. (2006). A public health success: Understanding policy changes related to teen sexual activity and pregnancy. *American Review of Public Health, 27*, 277-295.
- Grunbaum, J., Kann, L., Kinchen, S., Ross, J., Hawkins, J., Lowry, R., et al. (2004). Youth risk behavior surveillance – United States, 2003 (abridged). *Journal of School Health, 74*(8), 307-324.
- Kirkcaldy, B., Shephard, R., Siefen, R. (2002). The relationship between physical activity and self-image and problem behaviour among adolescents. *Social Psychiatry and Psychiatric Epidemiology, 37*, 544-550.
- La Greca, A., Prinstein, M., & Fetter, M. (2001). Adolescent peer crowd affiliation: Linkages with health-risk behaviors and close friendships. *Journal of Pediatric Psychology, 26*(3), 131-143.
- Lehman, S. & Koerner, S. (2004). Adolescent women's sports involvement and sexual behavior/health: A process-level investigation. *Journal of Youth and Adolescence, 33*(5), 443-455.
- Petipas, A., Van Raalte, J., Cornelius, A., & Presbrey, J. (2004). A life skills development program for high school student-athletes. *The Journal of Primary Prevention, 24*(3).
- Savage, M. & Holcomb, D. (1999). Adolescent female athlete's sexual risk-taking behaviors. *Journal of Youth and Adolescence, 28.5*, 595-603.
- Small, S. & Luster, T. (1994). Adolescent sexual activity: An ecological, risk-factor approach. *Journal of Marriage and the Family, 56*, 181-192.

Perceptions of Fatness: How Do Men and Women Differ?

Submitted by: [Eboni J. Baugh](#), PhD, Assistant Professor of Family Life

Arguette, Mara; Yates, Alayne; & Edman, Jeanne. "Gender Differences in Attitudes about Fat." *North American Journal of Psychology* v. 8, 1 (2006)
<http://web.ebscohost.com/ehost/detail?vid=4&hid=2&sid=a91851f8-9321-4f39-8fb7-03c8d58a5a5a%40sessionmgr2> (accessed August 28, 2007).

Introduction

America's obsession with thinness has been linked to many sources from the media, family and peer influences, genetics, etc. Gender has also been connected to obsession with weight and general dissatisfaction with the body. In this article, the researchers examined male and female perceptions of fat and the internalization or externalization of thin messages from society.

Methodology

College students in the Midwest were recruited from undergraduate psychology and education classes at two universities. The participants completed self-report measures on dislike of fat people, body dissatisfaction, and social position. In addition to the surveys, students' BMI (body-mass index) calculations were taken in order to compare ideal and actual body weight.

Main Ideas

The authors initially hypothesized that women internalize messages about thinness and subsequently exhibit an increased dissatisfaction with their own bodies, while men externalize messages, which result in a dislike of fat people. Other gendered differences highlighted in the study were:

Women were more likely to diet and skip meals

The women surveyed admitted to frequent dieting and skipping meals on a regular basis.

Women skipped breakfast and dinner more than men, with dinner being the biggest difference among the sexes.

Women wanted to lose as much as three times as much weight as men. Men were more satisfied with their bodies.

Only 8% of the sample reported being satisfied with their current weight. Women wanted to lose an average of 19.5 pounds while men only wanted to lose an average of 6.7.

Men valued thinness in others more than in themselves.

Men consistently reported more negative attitudes and statements about fat people than women. This occurred despite the fact that men had higher BMIs than women.

People who are satisfied with their bodies expressed more dislike of fat people.

Heavier participants were less likely to dislike fat people than those who were satisfied with their own body weight. Men, who expressed more satisfaction with themselves, reported a greater dissatisfaction with other people who were heavier.

Implications for Extension Programs

Extension professionals creating and delivering programs could benefit from the information included in this article. Program materials and activities tailored to each gender allows for more personal extension work. Suggested areas of work include:

- Nutrition education
- Body image and eating disorders information and prevention
- Self-esteem encouragement
- Mate selection and dating

As women internalize their attractiveness and perceive their value based on physical standards they are more susceptible to body image problems and eating disorders. As men judge the physical appearance of others with a more critical eye than they judge themselves: it can place them at an increased risk for obesity. Recognizing these gendered differences in perceptions about weight and attractiveness is needed in order to help combat problems that plague both men and women in regards to weight and health.

Schoolwide food practices are associated with body mass index in middle school students

Submitted by: Linda B. Bobroff, Ph.D., RD, LD/N, Professor – Nutrition and Health

Kubik MY, Lytle LA and Story M. "Schoolwide food practices are associated with body mass index in middle school students." Arch Pediatr Adolesc Med. 159: 1111-1114 (December 2005).

Introduction

The increasing prevalence of childhood obesity in the U.S. has raised concerns among health care providers, parents, teachers, and others interested in the health of young people. The causes of the increase in obesity among even very young children have not been clearly identified, although a combination of factors are likely involved. The school environment has been under scrutiny for a number of reasons including the lack of physical education and recess, branded (a la carte) food items available in the lunchrooms, high-fat and/or sugar snack foods and beverages in vending machines, use of candy as rewards in classrooms, and fundraising activities involving candy or other foods of poor nutritional quality. Researchers in Minnesota (Kubik et al.) investigated the association between school food practices and body mass index among middle school students.

Methodology

Researchers collected data on **school food practices** and measured **body mass index** (BMI) of students at 16 schools in the St. Paul-Minneapolis metropolitan area. This study was conducted as part of a healthy lifestyles intervention, Teens Eating for Energy and Nutrition at School (TEENS), which was designed to reduce future cancer risk in the students.

Students self-reported their heights and weights which were used to calculate BMI. The authors indicate that in this age group, self-reported heights and weights correlated well with measured data ($r=0.92$). Information about school food practices was obtained by interviewing school administrators using a standardized interview schedule developed by the TEENS researchers, and used to generate a **food practice score** for each school. The seven items included in the food scale related to food used as reward or incentive; permission for students to have foods and beverages in the classroom and hallways; and use of food sales for fundraising in classrooms and school.

The researchers hypothesized that higher food practice scores would be positively associated with higher BMI of the students.

Results

Demographics of students. Most (70%) of the students were white, 51% were male, and 20% participated in the free or reduced-price lunch program. More than half of the students reported having two parents who worked full-time and 49% had at least one parent who completed college. The mean age was 14.2 years and mean BMI was 21 (range was 12.9 to 37.9). Fifteen percent of the sample was at risk for overweight (BMI between 85th and up to the 95th percentile)

and 8% were overweight (at or over the 95th percentile).

Prevalence of food practices. The food practice that was most commonly allowed (11 of 16 schools, 69%) was use of food or food coupons as reward or incentive for students and the second most prevalent practice (nine of 16 schools, 56%) was having classroom fundraising that includes food sales. The average food practice score was three (highest score possible was seven, and the range of scores among the 16 schools was 0 to seven).

Association between food practice score and BMI. As the researchers hypothesized, the school food practice score **was positively associated** with the students' BMI. In the school studied, with each additional food practice allowed within a school, there was a 10% increase in BMI.

Conclusion

One of the factors identified as part of our “obesogenic” culture is the constant exposure to and availability of food (particularly high calorie food) in our environment. In the study described, we see that most of the food practices addressed in this study related to availability of foods or beverages to students during the school day. Schools may be a significant source of excess calories among students and, therefore, a contributor to the rise in obesity among young people. With a change in food policies, schools could be one environment in which young people learn that food does not need to be constantly available. One particularly troublesome practice, which happened to be the most common one among the 16 schools studied, is the use of food or food coupons as a reward or incentive for students. Although this study was conducted several years ago, using food as a reward is still not uncommon in schools, but may be one of the food practices addressed by emerging school wellness policies. Another food practice that was commonly allowed in these schools was use of food in school fundraising. Alternatives have been identified and shown to be profitable for schools (Johansen et al.).

A recent study (Nollen et al.) found that high school principals and school food service personnel did not appear to recognize a significant role for the schools in limiting access to foods and beverages that might be contributing to excess calorie intake during the school day (e.g., vending sales and a la carte items in cafeterias). This could be a barrier to collaborative efforts to change school food policies that contribute to excess food intake and increased risk for obesity among young people.

Implications for Extension Programs

Addressing the issue of childhood obesity through healthy lifestyles programs for all children and youth (not just those identified as overweight) is within the scope of Extension's nutrition and health programs as well as work with 4-H youth programs in traditional as well as school enrichment environments. Extension can bring a variety of nutrition and physical activity programs into school classrooms and after-school environments to promote healthy lifestyle choices, and engage parents and teachers in this effort. In addition, this research points to the potential value of including the schools themselves as a target for changes that will contribute to a more positive environment for young people. Working in school and community coalitions to review and change school food policies addressed in this research study can be an additional way in which Extension can have an impact on the environment that fosters overeating and increased

risk for obesity among young people. These activities already are being implemented in many county Extension programs.

In addition, being aware that school administrators and school food service personnel may be reluctant to acknowledge the potential negative effects of food fund raisers, poor a la carte food choices, and food used as classroom rewards, can help Extension faculty work effectively in the school environment to raise awareness in a non-confrontational and positive way.

Additional References

Johanson J. and Wootan MG. Sweet deals: school fundraising can be healthy and profitable. Center for Science in the Public Interest. Available at: www.cspinet.org/schoolfundraising.pdf. Accessed September 3, 2007.

Nollen NL, Befort CA, Snow P, Daley CM, Ellerbeck EF and Ahluwalia JS. The school food environment and adolescent obesity: qualitative insights from high school principals and food service personnel. *Intl J Behav Nutr Phys Activ.* 4:18 (2007). Available at: <http://www.ijbnpa.org/content/4/1/18>. Accessed September 3, 2007.

The Self Renewing Organization

Submitted by: [Elizabeth B. Bolton](#), Ph.D. Professor of Community Development

Connors, Tracy D. (2001). "The Self-Renewing Organization." The nonprofit handbook: Management, Third edition. New York: John Wiley & sons, Inc. (p. 3-45).

Introduction

This is a book chapter that provides the introduction for the study of nonprofit organizations, their management and governance in the present and the future. He discusses the concept of excellence in terms of applying the fundamentals of organizational improvement that do not require extensive training in quantitative analysis and or statistical theory. Rather, it requires a definition of excellence within the functional areas of an organization and a set of basic definitions applied to levels of quality achievement. (p. 4)

Main Ideas

In the latter part of the 19th century, the USA was consumed with the idea of quality management and how it could be attained. Managers and executives sought prescriptions and models that would align them with the quality management thought to be behind Japan's success. This view gave way to the belief that there are three essential components necessary for achieving and sustaining excellence: efficiency, effectiveness and organizational environment.

Quality management by itself is not enough. It must be accompanied by "knowing where we are going, why we are going there and how we plan to get there" (p. 6). Connors says this must be accompanied by constantly improving everything we do and making it safe to change for ourselves and for those to whom we are responsible. Change is the only constant and it will happen whether or not is planned. The effective leader is required to manage and to benefit from it. More importantly the effective leader will seek to initiate change in the organization and not simply react to change when it occurs.

A second component of the self-renewing organization is that it must be aware of where it is in the life cycle. He compares the organization life cycle to the human life cycle as a constant process of birth, death and rebirth, a renewal or regeneration. While strategic planning is important, it is not enough by itself. It must be customer focused and committed to its mission to serving the public purpose for which it was formed. When organizations are synchronized with their operating environment, they are more relevant, aware and fresh. When they are not, they become irrelevant and out of touch.

Connors proposes an excellence equation as the key to sustainability. When organizations are meeting their public purpose by staying within their mission and operating in synchronization with their environment, they achieve the criterion of excellence. Unfortunately this is rare. For an organization to achieve and sustain excellence it must self-renewing and "exploit the dynamic interdependent relationship among effectiveness, efficiency, and environment—the excellence equation" (p. 10).

In order to be effective, self-renewing organizations must know their public service purpose is

both valid and viable and shape the delivery of services so that they are customer focused. They use strategic planning to make decisions, allocate resources and manage the organization. Finally, they must achieve tangible business results with their programs and services.

The second part of the equation is efficiency and self-renewing organizations achieve them when they perform well and economically without wasting time, energy and materials. They use process management techniques to improve customer service and information analysis to support the decision making process.

The third part of the excellence equation is to create and sustain a transformational organizational environment in both leadership and utilization of human resources. Connors says that visionary leadership is needed to establish the direction needed to promote high performance and individual development. The leadership must link the human resource focus to development and management practices needed in the self-renewing organization.

Connors provides detailed description of the categories of effectiveness, efficiency and organizational environment. These detailed lists give the nonprofit manager a sense of what is really important in each part of the excellence equation. For example to elaborate on the effectiveness role, he provides a list of characteristics for self-renewing organizations in strategic planning and customer focus and satisfaction. In the efficiency part of the excellence equation, he gives the characteristics of public service providers and process management. The evolutionary organizational environment part of the equation is more fully defined by providing leadership and human resource development and management characteristics.

Implications for Extension Programs

Every county extension office is an organization that is either in a constantly regeneration cycle or in a cycle of decline. It is especially important during this period of budget cuts and fiscal hardships to see county extension as organizations that can benefit from a look at the self-renewing organization equation and checklists provided. County managers start with some list of criteria to see which programs will be saved and which will be cut. The checklists provided in this chapter obviously are not the magic potion that will solve all fiscal problems but they do go a long way to allowing organizations to do a good deal of self assessment and to be prepared when assessment comes from other quarters.

The same view can be taken with organizations that we in extension work with on a daily basis. Are they self-renewing and regenerating or are they in decline? It is easy to get lost in the details of daily minutia and miss the trends and issues that signal change is happening that was not brought about by the organization's leaders but by other external forces. Are we as extension professionals equipped to work with the local organizations to help them adjust to change and to benefit from it? This is a compelling question and it deserves a thoughtful response.

Conclusion

We, in extension, work in a layered organization and with multiple local and regional organizations. Some give us satisfaction and some cause us grief and consternation. By looking at our organizational environment, the efficiency of our organization and its effectiveness, we can begin to see how we might make changes in the direction, albeit perhaps small, of our closest

organizational environment. Being aware of the self-renewing organization equation, we might make a difference in our part of the large multilayered extension hierarchy that functions with a mission, is customer focused and operates with a strategic plan as a guide. We as the human resource part of the organizational environment can affect the other two components of the equation, efficiency and effectiveness.

“Who Has Time to Cook?” How Family Resources Influence Food Preparation.

Submitted by: Christine Brennan, BS, MPA, Assistant In, Family Nutrition Program

Mancino, L., Newman, C. 2007 *Who Has Time To Cook? How Family Resources Influence Food Preparation*, ERR-40, Economic Research Service, U.S. Department of Agriculture, May.

Introduction

This study estimates how the amount of time an individual spends daily in preparing food correlates with individual and household characteristics, specifically, income, wage rates, marital status, employment status, employment status of other household adults, and the number of children in a household. This research was undertaken to support proposed modifications to the USDA’s Thrifty Food Plan (TFP), a guide to show Food Stamp recipients how low cost healthy meals can be purchased with Food Stamp benefits, to include some convenience and commercially prepared foods. Recent estimates of the time required to prepare foods according to current TFP recipes range from 80 minutes a day to 16 hours a week.

Methodology

The researchers use 2003-04 data from the American Time Use Survey and multivariate analysis to study how time allocated to food preparation differs between low-income and higher income households, men and women, and individuals working full-time (more than 35 hours /week), part-time (less than 35 hours/ week, but in the labor force), or those that are not employed. The time spent in food preparation is defined as the total minutes in a day spent in the following four activities:

- Preparing food and drinks, which includes cooking and in any way getting food and drink ready for consumption.
- Serving food and drinks, which includes activities like setting the table.
- Food and kitchen cleanup.
- Storing or putting away food and drinks.

Main Ideas

The researchers found a relationship between food preparation decisions and income, employment status, gender, and family composition as follows:

Women spend more time preparing food than men do regardless of income and marital status.

Among women, time spent preparing food in the home decreases with higher household income and more time working outside the home.

Single women spend less time preparing food than do married or partnered women whether they are working or not.

Among low- and middle-income women, time spent preparing food does not decrease

significantly with higher wage rates.

Having more children who live in the household also increases the time a woman spends preparing food.

Household time resources significantly affect the amount of time allocated to preparing food. The researchers find that working full-time and being a single parent appear to affect the time allocated to preparing food more than an individual's earnings or household income do.

Conclusion

The study concludes that low-income households with two adults or those headed by a single parent who works less than 35 hours a week allocate enough time for food preparation. However, low-income women who work full-time spend just over 40 minutes per day on food preparation and may have difficulties meeting the 80 minutes per day meal preparation time requirement implied by the Thrifty Food Plan. These conclusions may support revisions to the TFP to include some healthful and nutritious convenience and commercially prepared foods.

Implications for Extension Programs

UF/IFAS Extension provides nutrition education to limited resource audiences via the Family Nutrition Program and the Expanded Food and Nutrition Education Program. Regardless of possible changes to the TFP, county extension faculty have both the expertise and the structure in place to provide these families with education related to resource management, meal planning and meal preparation. These efforts will assist them in optimizing their benefits from the Food Stamp Program and other federal nutrition assistance programs in order to prepare low cost, easy to prepare, nutritious meals for themselves and their families. Additionally, the results of this study indicate that low income women who work full-time may benefit the most from these educational efforts.

Additional References

Barrett, Allison. 2006. *Characteristics of Food Stamp Households: Fiscal Year 2005*, FSP-06-CHAR, U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis, Nutrition, and Evaluation.

Blisard, W.N., J.N. Variyam, and J. Cromartie. 2003. *Food Expenditures by U.S. Households: Looking Ahead to 2020*, AER-821, Economic Research Service, U.S. Department of Agriculture, February.

Carlson, Andrea, Mark Lino, Shirley A. Gerrior, and P. Peter Basiotis. 2003. *The Low-Cost, Moderate-Cost and Liberal Food Plans: 2003 Administrative Report*, CNPP-13, Center for Nutrition Policy and Promotion, U.S. Department of Agriculture.

Harnack, L., M. Story, B. Martinson, D. Neumark-Sztainer, and J. Stang. 1998. "Guess Who's Cooking? The Role of Men in Meal Planning, Shopping and Preparation in U.S. Families," *Journal of American Dietetic Association* 98(September):995-1000.

U.S. Bureau of Labor Statistics. 2006. "American Time Use Survey User's Guide: Understanding ATUS 2003, 2004, and 2005," available at <http://www.bls.gov/tus/atususersguide.pdf>.

U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. 2000. *Recipes and Tips for Healthy, Thrifty Meals Centers for Nutrition Policy and Promotion*, CNPP-11.

Zick, Cathleen D., Jane McCullough, and Ken R. Smith. 1996. "Trade-Offs Between Purchased Services and Time in Single-Parent and Two-Parent Families," *The Journal of Consumer Affairs* 30(1):1-23.

Community Participation in Rapidly Growing Communities

Submitted by: [Mark Brennan](#), Ph.D., Assistant Professor, Community Development

Cascante-Matarrita, D., Luloff, A. E., Krannich, R., and Field, D. 2006. "Community Participation in Rapidly Growing Communities." *Community Development: Journal of the Community Development Society*. 37(4): 71-87

Overview

Amenity-rich locations attract individuals searching for places to recreate, live, or retire. As a result, such areas, many of which are in the Western United States, experience changes related to population in-migration. Past research shows how the extensive in-migration of people with different values and perspectives can contribute to social conflict in affected communities. This study focuses on the relationship of community level indicators with community participation in a five-county rapidly growing amenity-rich area in southern Utah. The research team studied two main types of community members—seasonal and permanent residents. Differences among such residents can contribute to shifts in community social interaction and affect overall participation in community affairs. Because participation in community is a central aspect of fostering local community development, it is important to understand how these processes occur. This study found structural and interactional differences between permanent and seasonal residents. Both factors were stronger predictors of community participation for permanent compared to seasonal residents. This study adds to the literature on newcomers and long-term residents and their structural and interactional differences.

Implications for Research and Extension

Within the context of rapidly growing, amenity-rich communities, the investigators examined changes in levels of community participation between permanent and seasonal residents. Of particular interest in this study were the ways in which structural and interactional differences were associated with community participation.

Significant structural variables included annual household income, level of education, size of community the respondent lived in the most before age 16, religious affiliation, and the number of years lived in the community. Residents with higher incomes, more education, who had lived mostly in small communities before age 16, had higher levels of community participation than their counterparts. In addition, the longer the individual lived in the community, the more participative the individual was.

Significant interactional variables found in this study included both community attachment/organizational involvement and community satisfaction/social interaction dimensions for permanent residents. Three dimensions of local organizational involvement were important predictors of community participation. Level of involvement in local activities, number of local organizations to which a respondent belonged, and hours participating in local activities are significant factors associated with community participation. Moreover, these dimensions are the strongest predictors of community participation. Residents who are more involved had more interest in and attachment to their community. Increased levels of interaction in local activities

were associated with improved social bonds, which were, in turn, associated with increased levels of community attachment.

This study helps us understand how differences in levels of community attachment/organizational involvement and community satisfaction/social interaction, sociodemographics, and length of residence differentially influence community participation by permanent and seasonal residents. These factors can better predict permanent residents' levels of participation. In contrast, seasonal residents' structural and interactional factors contributed less in predicting community participation. Seasonal residents' structural and interactional characteristics differed from those of permanent residents. These differences were reflected in their levels of community participation. However, overall, the interactional variables contributed more than the structural variables in predicting community participation for these two types of residents.

Although growth may be inevitable, it does not have to affect a community's interaction and participation negatively. Knowing the characteristics of seasonal and permanent active (and non-active) residents can help reduce the negative impacts associated with growth. Such knowledge would facilitate greater numbers of people becoming involved in local decision-making and, as a result, broaden levels of community participation.

Teens and Deliberate Self-Harm: Findings from the Cutting Edge

A review of contemporary literature by [Kate Fogarty](#)

What is Self-Injuring Behavior?

Self-injury is viewed as a contemporary “teen disorder”¹ due to its recent attention as it affects anywhere from 2 to 10% of adolescents in the United States, Britain, and other parts of Europe^{2,3,4}. Self-injury (also known as non-suicidal self-injury/NSSI, cutting, deliberate self-harm, and self-mutilation) involves causing intentional harm to oneself by bruising, cutting, burning, scratching, banging, ripping or pulling skin or hair, ingesting toxic substances, and even breaking bones². These behaviors are usually brought on by teens’ feelings of low self-worth, stress, frustration in handling strong emotions, and anxiety^{2,4}. Youth workers and practitioners find cutting to be the most prevalent type of self-injury⁵.

What Self-Injuring Behavior is NOT

Self-injury is different from more “culturally sanctioned”² forms of self-decoration such as tattooing and piercing (although extreme cases of self-decoration may be motivated by similar emotional states and some consider tattooing and piercing to be a type of self-mutilation). It is not the same as suicidal behavior². Self-harmers are more prone to think about or attempt suicide, but self-injuring behavior is not a sign of suicidal intent, rather a way to relieve stress or a “highly functional alternative to suicide”² (p. 409).

Why a “Teen” Disorder?

Twelve years old is the typical age at which self-harm begins³, with a peak age period between 16 and 25 years⁵. Self-harm seems to follow the same pattern as other problem behaviors in adolescence: for example, starting in early adolescence, peaking in middle adolescence and phasing out in early adulthood². There is a second, more rare, pattern in which self-harm starts in early childhood and continues through adulthood. Others classify self-harm into three patterns of: *episodic* – occurring one or several times; (2) *repetitive* – occurring on a regular basis; and (3) *compulsive* – when a teen feels he or she is “unable to stop”⁶.

What Proportion of Teens Self-Injure?

To date, reliable estimates of self-harm prevalence in the U.S. are lacking². Also, most cases of teen self-injury are not easily detected by service professionals³. What we do know is that one-fifth of clinical samples, 4% of the population at large, and 1.8% of 15-35 year-olds in the U.S. engage in self-injuring behavior^{2,5}. A large study in Britain found about 10% of 11- 25 year-olds self-injured².

Why do teens injure themselves?

Teens who harm themselves have difficulty controlling their emotions, handling stress and tension and self cutting behaviors are a means to deal with angry, anxious, and depressed feelings⁵. Often their behavior is a way to deal with trauma experienced growing up⁵. Self-harming teens are likely to experience bullying and have low self-esteem. They may have also experienced abuse at home or parental divorce. Self-injuring is also linked with post-traumatic stress disorder, depression, anxiety, eating disorders, and borderline personality disorder². In their own view, teens who engage in non-suicidal self-injury most commonly do so to “get a reaction from someone”, “get control of a situation”, and “stop bad feelings”⁷.

A popular psychophysiological explanation of why some teens self-harm is that the pain of self-injury causes the release of endorphins, thus producing a natural “high” for temporary relief from

emotional distress and frustration. This explanation, combined with an understanding of adolescent brain development and teens' propensity to addiction, also leads to understanding why they sometimes become addicted to self-harming behaviors⁵.

Intervening with Teens who Self-Injure

Although teens most commonly outgrow self-harming behaviors by adulthood³ may leave limited physical scars, teens' self-harming behavior is a cry for help to alleviate the underlying causes. When it comes to self-injury, professionals agree that prevention supersedes intervention^{3,5}.

Due to the secretive way in which some teens engage in self-injuring behaviors, open dialogue between youth and adults (in families and in the community) is crucial. This could involve examining for signs and asking teens about any signs witnessed in a non-accusatory tone (for example, saying, "I noticed a razorblade on your nightstand. Could you tell me about that?"). We know that less than 2% of teens in the U.S. self-harm. However, your teen may have a friend or peer who self-harms. Also, "social contagion" has been found among adolescents who self-harm; in other words, susceptible teens learn behaviors from their peers who self-harm².

Signs that a teen may be engaging in self-injuring behaviors include⁸:

- Razor blades, scissors, pins, lighters and other sharp objects present in room or on their person.
- Unexplained frequent injuries
- Acting isolated, withdrawn or bored
- Low self-esteem and expressions of self-hatred
- Difficulty handling feelings and emotions
- Secretive, especially when asked about injuries

When dealing with teens that self-harm, it is preferable to take an assets-based perspective over a pathological one⁵. Teens that self-harm are often ashamed of their behavior and fear being labeled as psychopathic. Mental health and medical professionals are likely to label self-harming teens' behavior as "attention seeking..., manipulative, or time wasting"³ (p.14). Teens who self-harm may feel guilty and concerned that the public would view them as dangerous and unfit to volunteer or work in service professions³. However, the good news is in a study of teens who self-harm and share about their struggles on Internet message boards, a majority was largely positive about receiving psychological help².

Ultimately, the goal of intervention is to help teens with self-harming behaviors to improve interpersonal communication, handle interpersonal conflicts, and be better able to express emotions. A multidisciplinary (support groups, family therapists, social workers, teachers, counselors, psychologists etc.) and ecological (individual, family, school, community) approach is most effective⁵. This may involve individual and family therapy. Ultimately help the youth by improving his/her social environment.

Suggested Resources

Website: The site below, although from the United Kingdom, contains useful suggestions and information, and reflects the recent attention (past 3 years) that the UK has given adolescent self-harm, based on recent research findings which have affected children and educational policy.

National Children's Bureau, U.K. <http://www.selfharm.org.uk/default.aspx>

Video: The following video has been reviewed by scholars from the American Psychological Association (APA) and is available from the APA for the cost of \$99.95.

Lader, W. (2006). *Self-Injury*. Washington, DC: American Psychological Association Video Series, Specific Treatments for Specific Populations

Program/Intervention: This program has been around for 20 years and continues to be applied today for treatment of adolescent self-harm.

S.A.F.E. Alternatives (Self-Abuse Finally Ends), founded by Karen, Conterio, Administrative Director.

References

1. Welsh, P. (2004). Look students' scars point to emotional pain. *USA Today*, p. 11a.
2. Whitlock, J.L., Powers, J.L., & Eckenrode, J. (2006). The virtual cutting edge: The Internet and adolescent self-injury. *Developmental Psychology*, 42, 407-417.
3. McDougall, T., & Brophy, M. (2006). Truth hurts: Young people and self-harm. *Mental Health Practice*, 9, 14-16.
4. Lundh, L.G., Karim, J., & Quilish, E. (2007). Deliberate self-harm in 15 year-old adolescents: A pilot study with a modified version of the Deliberate Self-Harm Inventory.
5. Yip, K. (2006). A strengths perspective in working with an adolescent with self-cutting behaviors. *Child & Adolescent Social Work Journal*, 23, 134-146.
6. Best, R. (2006). Deliberate self-harm in adolescence: A challenge for schools. *British Journal of Guidance & Counseling*, 34, 161-175.
7. Lloyd-Richardson, E.E., Perrine, N., Dierker, L., & Kelley, M.L. (2007). Characteristics and functions of non-suicidal self-injury in a community sample of adolescents. *Psychological Medicine*, 37, 1183-1192.
8. National Children's Bureau (2007). Warning signs of self-harm. Website accessed on Sept. 4, 2007
<http://www.selfharm.org.uk/professionals/teachers/sandwarningsigns/default.aspx>.

Financial Education and Program Evaluation

Submitted by: Michael S. Gutter, PhD, Assistant Professor and Financial Management Specialist

Lyons, Angela; Palmer, Lance; Jayaratne, Koralalage S. U.; Scherpf, Erik. Are we making the grade? A National Overview of Financial Education and Program Evaluation. *The Journal of Consumer Affairs* 40, 2 (2006), <http://www.blackwell-synergy.com/doi/pdf/10.1111/j.1745-6606.2006.00056.x> (accessed September, 5, 2007).

Introduction

With increasing attention being paid to the lack of financial savvy for many consumers, there has been an increasing offering of financial literacy programs. However, one question that has not been satisfactorily answered is whether these programs are effective. The lack of data measuring impact can make it challenging to convince stakeholders that a program works as well as one believes it does. This evidence can aid in a program being adopted by others since they can document its effective. Funding agencies or partners may wish to see evaluation work in order to document the return on their investment in a program. Programs that can document success are likely to have an easier time obtaining resources.

Methodology

The authors used focus groups and survey data to formulate their conclusions. The eight focus groups were conducted via teleconference and involved educators and those actively involved in financial literacy programming. Following up on the focus group results, a web-based survey was sent out broadly to various email lists related to financial education to ask people about their evaluation efforts. Again the target group was those engaging in financial education outreach. The survey was not a random sample, but the results are still considered useful.

Main Ideas

Overall, this article highlights the dearth of consistent evaluation used in financial education. There are several issues mentioned.

First, for many educators, program evaluation is seen as a nice addition but often an afterthought. When in fact as Hughes (1994) states, evaluation should be a component of program design. This can then be rushed and may not connect well to the actual elements of the program.

Secondly, there is no standard for evaluation. Since this article, the National Endowment for Financial Education has launched an evaluation website with hopes to improve consistency in financial education program evaluation. Currently many educators only focus on counting bodies or classes held. This type of formative evaluation may be helpful in determining if you are reaching the desired audience. However, it does little to convey impact on people's lives.

However, one must measure to capture what a program should realistically accomplish.

Measuring for behavior change from 1 class may be overly ambitious.

Summative evaluation or impact evaluation is often more challenging to obtain data for and there are insufficient standards for what things should be measured. One point of discussion was that

many while excellent educators did not have the right background to write a survey instrument or to connect the appropriate types of outcomes to various programs. In addition many available data sources lacked appropriate measures. Lack of resources including time is one reason that follow-up surveys while potentially a sound approach were not employed. In addition small numbers from which to pool a sample and low response rates make it a challenge for some, even with resources. Participants may have good intentions in consenting to evaluations, but may not provide all of the information, especially things that might be private to them (e.g. income). Finally, the lack of a control group in most instances leaves selection bias in the sample; they are all people who attended the program.

Implications for Extension Programs

Building evaluation into program design

In planning a program, one should focus initially on what objectives one is trying to reach. In using these as guide, one can then plan program elements that speak to these objectives. Forming these in advance also allows you to communicate more effectively with stakeholders and funding agencies. Program leadership should help to increase awareness of need, techniques, and resources in conducting evaluation work.

Building Evaluation into budgets

Evaluation often requires data gathering. In some instances aggregate data may already exist in various forms. However, often evaluation does require some data gathering from participants, especially for summative evaluation.

What outcomes are reasonable for a program?

Short duration programs that may only meet for a few hours are unlikely to change participant's behavior. It may be more meaningful to consider things such as intentions, attitudes, and beliefs as measures of the success of a class. Programs that go on for longer or have coaching elements may be better candidates for evidence of behavior change.

Conclusion

Financial education has become an increasingly important aspect of the outreach work that is done in Extension. In addition, there are many resources available, both in terms of program materials and funding. It is important that one consider the goals of a program in developing it, as well as how to measure the successful achievement of those goals. This will lead to capturing more success stories and showing how Extension can truly transform people's lives.

Additional References

1. Fox, Jonathan, Suzanne Bartholomae, & Lee, Jinkook. (2005). Building the case for financial education. *The Journal of Consumer Affairs*, 39 (1): 195-214.
2. Hughes, Robert. (1994). A framework for developing family life education programs. *Family Relations*, 43(1), 74-80.

Health Benefits for Volunteering

Submitted by: [Joy Jordan](#), Ed.D., Associate Professor, Youth Development

Source: Grimm, R., Spring, K and Dietz, N, (2007) *The Health Benefits of Volunteering: A Review of Recent Research*, The Office of Research and Policy Development Corporation for National and Community Service. www.nationalservice.org

Recruiting and working with volunteers in Extension is always an excellent means to extend our community outreach. The 4-H and Horticulture programs thrive on the use of volunteers. A recent report of research findings focused on the health benefits of volunteering shares the following findings. The full report can be found at www.nationalservice.gov. The number of volunteers 65 and over is expected to increase 50 percent over the next 13 years, according to numbers projected by the US Census data, and continue for several years to follow for these “baby boomers.” These suggested benefits, especially targeting older volunteers, might be useful in your next recruitment presentation or newsletter.

Older Volunteers are more likely to gain health benefits.

Volunteers, 60 and over, gain greater health benefits, such as improved physical and mental health. Researchers have found there is a “volunteer threshold” for the relationships between frequency of volunteering and the health benefits. However, across the studies, the definition of this amount of volunteering that is has generated benefits has varied between: 1) volunteering with two or more organizations; 2) 100 hours or more of volunteer activity annually; or 3) at least 40 hours of volunteering.

Volunteering leads to greater life satisfaction and lower rates of depression.

Findings from several studies provide evidence that volunteering has a positive effect on the social psychological factors, such as sense of purpose and accomplishment and enhances one’s social support systems buffering stress and thus reducing disease risk. One reported study by Musick and Wilson(2005) revealed the depression in older adults was less for those who served as volunteers.

Individuals who volunteer live longer.

Researcher has found in analyses of longitudinal data, those individuals who volunteer during earlier years of study have lower mortality rates at the second wave of study, even when factors of physical health, age, gender or socioeconomic status is taken into control. Also, several studies reported that those with chronic illnesses benefit.

State volunteer rate is strongly connected with the physical health of the states’ population.

The report, using data from U.S. Census Bureau and the Center for Disease Control, provided findings that states with a high volunteer rate also have lower rates of mortality and incidences of heart disease 9age-adjusted). Florida has one of the lowest reported rates (less than 20%) for volunteering.

Pesticide Use in Homes and Children's Health

Submitted by: [Hyun-Jeong Lee](#), Ph.D., Assistant Professor/Housing Specialist

Saller, J., Reyes, P., Maldonado, P. A., Gibbs, S. G., and Byrd, T. L. March 2007.
"Children's Exposure to Pesticides Used in Homes and Farms." *Journal of Environmental Health* 69 (7): 27-31.

Introduction

Many households have pest problems inside and outside their homes. Pests like cockroaches, flies, rats, mice, fleas, spiders can bring allergies and various diseases into the households (U.S. Department of Housing and Urban Development (HUD), 2006). Pesticides are designed to prevent and kill the pests. If the pesticides are not properly used or stored, however, they can be very dangerous to human health (U.S. Environmental Protection Agency (EPA), 2002). Pesticides contain chemicals to kill the pests and these chemicals also can harm people.

Based on data collected from the American Association of Poison Control Centers, EPA (2004) indicates that approximately 71,000 U.S. children were exposed to or poisoned by common household pesticides in 2004. Residents can be poisoned by the hazardous household chemicals including household pesticides not only by eating or drinking the chemical products but also by touching or breathing even a very small amount of them. Symptoms of exposures to the hazardous chemicals can be minor and temporary, such as dizziness, nausea, and itchy skin. However, they also can cause long-term cancer or lung damage, and neurological, developmental and reproductive disorders which may not be discovered for a long time after the exposures (EPA, 2002; HUD, 2006).

This study by Saller, Maldonado, Gibbs, and Byrd (2007) aimed to explore behaviors, attitudes and beliefs about in-home pesticide use and source of health-related information among households in three communities in the Lower Valley of El Paso County, Texas. Especially, the researchers were interested in any possible use of methyl parathion whose use is legally prohibited. Methyl parathion is a pesticide highly toxic to humans and birds (EPA, 1997). Methyl parathion is only allowed to be used on certain open agricultural field and it is legally prohibited to use methyl parathion inside buildings (EPA, 1997). Based on a report by the Texas Department of Health (TDH), however, the researchers indicated that 25% of the residents in the study region were illegally using methyl parathion and considered as a major pesticide threats in the area.

Methodology

The researchers trained bilingual interviewers and the interviewers conducted door-to-door questionnaire surveys to 150 randomly sampled households in Socorro, Sam Elizario, and Febens in the Lower Valley of El Paso County, TX. The Researchers reported that majority of the respondents were Hispanic (97%) and 71% of the surveys were conducted in Spanish for the reason.

Main Ideas

Pesticide Use and Perception of Pesticide Safety

About 89% of the respondents indicated that they used some type of pesticides. The most commonly used brand of pesticide was Raid (74%) followed by Combat (23%). Many of the respondents also reported use of pesticides at their neighborhood farms. But it was found that the respondents were seldom notified of the pesticide use. In terms of methyl parathion, only a few respondents reported that they used any methyl parathion indoors or outdoors, which was quite different for the findings of the TDH. However, the researchers assumed that the actual number of households that used methyl parathion might be greater than reported. The researchers believed that the respondents knew that the use of methyl parathion was illegal and the respondents might have given socially-desirable answers rather than honest answers.

Majority of the respondents agreed or strongly agreed to the seriousness of illness caused by pesticides (94%) and to the negative impacts of the pesticide use on children's health (88%). However, 62% reported that they believed in the safety of pesticides that could be bought for in-home use. Respondents who used pesticides and who did not showed difference in perceptions and attitudes about the pesticide use. Compared to households who did not use pesticides, households who used pesticides showed less sensitiveness to the pesticide safety concerns and reported most people around them used pesticides.

Source and Confidence of Health Information

Most of the respondents reported that they have seldom received information regarding health issues from any mass-media, government health agencies or university education sources. Forty-five percent of the respondents showed trusts toward information from the Texas Department Health followed by television and the city/county health departments.

Implications for Extension Programs

Households in the U.S. use more than a billion pounds of pesticides indoors and outdoors every year (EPA, 2002). Approximately 47% of households with children under the age of five and 75% of households without children under the age of five have one or more pesticides stored in unlocked cabinets which young children can easily reach (EPA, 2004; HUD, 2006).

The overall findings from Saller et al.'s study indicated some contradiction, between what people are aware should be done and what they actually do as far as pesticide use. Even though majority of the survey respondents reported their awareness of the health impact of pesticide use, the majority of the respondents used pesticides in their homes.

Thus, outreach education activities need to focus not only on increasing knowledge of the dangerous health impacts of the pesticides and of proper use of the pesticides but also on changing actual behaviors of the households especially those with young children. As also suggested by Saller et al. (2007), the information should be distributed through the channels that residents in the area trust to increase the educational impacts.

Additional References

U.S. Department of Housing and Urban Development. (2006). *Help yourself to a healthy home: Protect your children's health*. Washington D.C.: Author.

U.S. Environmental Protection Agency. (1997). *Illegal indoor use of methyl parathion*. Retrieved August 29, 2007, from <http://www.epa.gov/pesticides/factsheets/chemicals/methyl.htm#3>

U.S. Environmental Protection Agency. (2002). *Protecting children from pesticides*. Retrieved August 29, 2007, from <http://www.epa.gov/pesticides/factsheets/kidpesticide.htm>

U.S. Environmental Protection Agency. (2004). *Pesticides and child safety*. Retrieved on August 29, 2007, from <http://www.epa.gov/pesticides/factsheets/childsaf.htm>

When it comes to keeping hands clean, which type of cleansers should you buy for your family?

Submitted by: [Amarat Simonne](#), Ph.D., Associate Professor, Food Safety and Quality

With continued media attention and other educational campaigns on the subject, hand washing is definitely on people's minds these days. But when it comes to choosing the right soap or hand cleansers for your family, deciding which method to use, and knowing how often to wash hands, there is still confusion among consumers.

In a recent study, which appeared in *Food Protection Trends* (1), the authors examined consumer attitudes and the effectiveness of hand cleansers in the home. They conducted two separate experiments. First, they assessed consumers' attitudes and behaviors regarding hand cleansers through both telephone and paper surveys. The phone survey was done using phone numbers from local Colorado phone books and the paper survey was done using students who were enrolled in college food preparation classes. Overall, 72% of consumers surveyed for this study said they used a liquid hand cleanser in their homes. Sixty-four of them used soap containing antimicrobial ingredients, while 26% did not know what type of ingredients their home hand cleanser contained. In both surveys, consumers said that price and ability to remove bacteria were equally important. Sixty-one percent of consumers said that antibacterial soaps are much better than other hand cleansers, but in reality, they may not realize that regular soap can do the same thing (1).

In the second experiment, the researchers conducted a hand washing experiment using six laboratories of 15 students each, for a total of 90 participants. The students were divided into three groups and were assigned one of three cleansers: regular liquid hand soap (Ivory® brand, Procter and Gamble Co., Cincinnati, OH), antibacterial soap containing ~2% triclosan as well as other soap ingredients (Softsoap® brand, Colgate Palmolive Co., New York, NY), or alcohol gel containing 62% ethyl alcohol and other ingredients (Purell® brand, GoJo Industries, Inc. Akron, OH). They were given specific standardized instructions to touch an agar plate before washing their hands or rubbing alcohol on their hands. Then they followed prescribed hand-washing procedures, either rubbing their hands with either kind of soap for 20 seconds, then rinsing under warm tap water (35°C - 37° C) for 10 seconds more, or using the specified amount of hand sanitizer. After following these hand-cleansing procedures, they touched their hands to an agar plate again. The agar plates were then incubated for 48 hours at 35°C and rated for their relative colony numbers (RCN). Given the same levels of pre-treatment hand contamination, the study found no significant differences between regular and antimicrobial hand cleansers in reducing RCN. However, the alcohol gel reduced RCN values significantly more than regular and antimicrobial hand cleansers (1).

Take home message:

This study revealed that consumers often think that antibacterial soap is the best choice for removing germs from their hands, but they may not know that regular soap can do the same job.

The majority of antibacterial hand-washing products contain triclosan. Because some research has revealed that triclosan and its derivatives accumulate in the environment, the use of strong

antimicrobials such as triclosan for everyday purposes may be questionable. More research is needed on the impact of these persistent chemicals (1).

This study revealed that alcohol gel hand sanitizers are a quick and easy way to reduce germs on hands. However, if your hands are soiled with dirt and debris, hand-washing for 20 seconds with regular soap, followed by the application of alcohol gel, may help prevent the transmission of bacterial and viral infections (1).

It is important for consumers to evaluate the situation when it comes to washing to their hands (2). If your hands are visibly dirty, it is necessary to wash them for 20 seconds with regular soap and water. If your hands are not visibly dirty, if you do not have enough time, or if there is no clean water available, you can use alcohol gel to clean your hands (2).

Cautions: Most alcohol gels contain 60-90% alcohol. If these products are being used in your household, parents or caretakers need to keep these hand sanitizers well out of reach of small children at all times. Ingestion of alcohol gel sanitizer by young children could cause alcohol poisoning.

References:

1. Brown, J.M., J.S. Avens, P.A. Kandall, D.R. Hyatt, and M. B. Stone. 2007. Survey of consumer attitudes and the effectiveness of hand cleansers in the home. Food Protection Trends. 27(8)603-611.
2. Simonne, A. Hand Hygiene and Hand Sanitizers. <http://edis.ifas.ufl.edu/FY732>

Associations between media viewing and language development in children under age 2 years

Submitted by: Suzanna Smith, Ph.D., Assoc. Prof, Family Life

Zimmerman, F.J., Christakis, D. A., & Meltzoff, A.N. (2007). "Associations between media viewing and language development in children under age 2 years." *The Journal of Pediatrics*, Article in Press. Accessed September 12, 2007 from University of Florida library databases.

Introduction

Parents and their preschoolers may be fans of the popular TV shows, *Blue's Clues*, *Barney*, and *Sesame Street*. These time-honored productions have been carefully studied for their impacts on children, and researchers have consistently found that they do have educational value for children ages 2½ to 5 years. These days, more and more TV and DVD/video programming is aimed at *younger* children, even though heavy TV viewing in the under-3 set has been associated with attention problems, and impaired reading and math skills. In light of these findings, the American Academy of Pediatrics has recommended no screen time for children under the age of 2 (see http://www.aap.org/pubed/ZZZGVL4PQ7C.htm?&sub_cat=17). At the same time, many infant videos claim that they will teach children about language, logic, and other skills...what is a parent to believe?

There is very little research specifically addressing the impacts of new media on very young children. A recent article appearing in the *Journal of Pediatrics* tested the connection between media exposure and language development in children under age 2.

Methodology

More than 1000 parents of children ages 2 to 24 months were surveyed by telephone. Several questions were asked about children's time spent interacting with adults, what types of TV or DVD/videos their child, and the amount of viewing by typical weekday or weekend. Parents completed a standard form of the Communicative Development Inventory (CDI). The study also tracked parental interaction with their children in three areas, "reading, storytelling and music" (p. 2). The research evaluated the associations between media exposure and CDI scores using multiple regression, taking into account parent-child interactions and demographics.

Main Ideas

On average, infants age 8 to 16 months were watching educational TV shows about 30 minutes a day, 15 minutes viewing baby DVDs/videos and about another 30 minutes on non-educational and grownup TV. Toddlers ages 17 to 24 months watched 70 minutes of children's educational TV, 16 minutes of baby DVDs/videos, and nearly an hour of non-educational and adult TV. For infants 8 to 16 months, every hour per day of viewing baby DVDs/videos significantly lowered the CDI score by nearly 17 points. This was a large effect. There was no association between baby videos/DVDs and language development for toddlers, 17-24 months.

Reading once a day was associated with significant increases in the CDI score by about 7 points for babies and 12 points for toddlers; telling stories was associated with higher language scores in the older children.

According to the authors, there are several possible reasons for this connection between baby DVDs/videos. First, parents whose children are having difficulty with language may use these media to help their children, believing that videos can help their young children with language development. Second, parents who are distracted or pressed for time may rely on DVDs/videos

to keep their children occupied and can't accurately report their language development. A third possibility is that "heavy viewing of baby DVDs/videos" has a negative impact on early language development (p. 4). Possibly, videos take away time from interacting with adults, especially adults talking to infants. Baby videos "may contain limited language" and images that "do not promote vocabulary learning or...actually impede it" (p. 4). For example, baby DVDs/videos "have little dialogue, short scenes, disconnected images" (p. 4), and other images that are difficult to describe.

Although there were several limitations to this study, it did find significant associations between baby DVD/video viewing and one measure of development.

Implications for Extension Programs

Media is a prevalent part of U.S. family life, and media education can help parents choose and use media in ways that promote learning and healthy development. Extension faculty can encourage parents to read to their babies and toddlers every day and to talk to them frequently. These parent or caregiver interactions are vital not only to language and cognitive development, but to a baby's social and emotional development as well. In keeping with experts' recommendations and the results of this article, parents could forego baby DVDs/videos, at the very least for children younger than 16 months. In addition, county faculty may want to attend in-service training on children and media, if offered, in spring 2008.

Conclusion

Parents who use baby DVDs/videos often choose them because they believe they will benefit their children's brain development and education. This study found that more media use of this type was associated with lower scores on language development in infants ages 8 to 16 months. More research is needed to evaluate the risks and benefits of baby DVDs/videos and explain why they were associated with lower language scores. In the meantime, parents of infants could put aside these media in favor of more parent-child interaction.

Additional References

American Academy of Pediatrics. Media guidelines for parents. Retrieved September 12, 2007 from http://www.aap.org/pubed/ZZZGVL4PQ7C.htm?&sub_cat=17

American Academy of Pediatrics Committee on Public Education. (1999). Media education. *Pediatrics*, 104(2), 341-343. Retrieved September 12, 2007 from <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;104/2/341>

Ebata, A. (2005). Media and Children: Choosing TV Programs, Movies, Videos, & DVDs. University of Illinois at Urbana-Champaign. Retrieved September 12, 2007 from <http://www.parenting247.org/article.cfm?ContentID=639&challenge=12&AgeGr>

Kaiser Family Foundation. (2005). A teacher in the living room? Educational media for babies, toddlers and preschoolers. Retrieved September 12, 2007 from <http://www.kff.org/entmedia/upload/7427.pdf>

PBS (2002-2007). TV and kids under 3. Retrieved September 12, 2007 from <http://www.pbs.org/parents/childrenandmedia/article-faq.html>

PBS. (2002-2007).TV and movies: Preschoolers. Retrieved September 12, 2007 from <http://www.pbs.org/parents/childrenandmedia/tvmovies-preschool.html>

Supermarket Trends and the Consumer

Article reviewed by: [Glenda L. Warren](#), MS, RD, CFCS, Associate Professor, Extension Nutritionist, Expanded Food and Nutrition Education Program.

Aase S. Supermarket Trends: How Increased Demand for Healthful Products and Services Will Affect Food and Nutrition Professionals. Practice Applications Beyond the Headlines. J Am Diet Assoc. 2007;107: 1286-1288.

How will the consumer be affected by the current supermarket trends?

The author has reviewed supermarket trends in two studies from the Food Marketing Institute (FMI), a national trade association for supermarkets. Knowledge of the trends discussed in her review will be helpful for those working with consumers to prepare them to effectively navigate through the many products that may be available. Michael Sansolo, a senior vice president at the FMI was credited with this statement: “The average supermarket might carry as many as 45,000 products”.

What do consumers expect from supermarkets? How are supermarkets (and manufacturers) responding? What are consumers buying?

- more health related support (disease prevention education)
- more support for healthy meals (healthier options for ready to eat or easy to prepare items)
- healthier products--less sodium, more whole grains, and more fruit and vegetables
- convenience (quick and easy)

The convenience in the produce department includes precut and packaged produce. Interest in portion control is shown in the popularity of the 100 calorie portion items. More organic foods are being purchased and so are more ethnic foods. Exotic items are also gaining in popularity. Stores may provide more food demonstrations, recipes, and directions for meals. Expect the future to bring more technology in supermarkets.

Note that some stores and brands are creating their own labeling systems and symbols.

The nutrition facts panel of the food label is still an important tool for providing important nutrition information.

Implications for Extension

Implications for Extension are evidenced in all of the trends. Supermarket trends are a reflection of the needs and interests of the consumers.

Even though nutrition education may not be the highest priority of supermarket shoppers, it is a priority and nutrition education can be piggy-backed along with their interests.