

# Research News You Can Use



**Summer 2007**

Research News You Can Use .....	1
Gender Role and Identity Development in Male Adolescents and Emerging Adults.....	3
Parental Conflict and Children’s Peer Relationships: Is There a Link?.....	6
Vitamin D Status and Adiposity among Older Adults: Does Sun Exposure Play a Role?.....	8
The Effects of Volunteering for Nonprofit Organizations on Social Capital Formation: Evidence from a Statewide Survey .....	11
Child Care in the Early Years: Long-term Youth Outcomes.....	14
Relationship between child sleep disturbances and maternal sleep, mood, and parenting stress: A pilot study .....	17
Food Safety Knowledge and Practices: Two Consumer Groups in Florida .....	19
Children’s Safety Risks During Summer Months .....	24
A New Way to Get Good Food .....	28

# Gender Role and Identity Development in Male Adolescents and Emerging Adults

**Submitted by: Rosemary V. Barnett, Ph.D., Associate Professor, & Stephanie L. Bates, M.S. candidate**

Bates, Stephanie. "Gender role conflict and resilience in adolescent/emerging adult males." University of Florida Electronic Thesis and Dissertation Database (2007, in press).

## Introduction

The transition from high school to college can be a difficult period of vulnerability for youth. During this time, youth are also transitioning from adolescence to the developmental period "emerging adulthood" (age 18-25). The ability to navigate these transitions is called resilience, a quality that helps youth "bounce back" from risky situations or negative events. Youth are forming many parts of their identity during this period, including gender identity. We proposed that conflict with gender roles may affect resilience in this population, specifically in males.

## Methodology

Student participants completed a questionnaire in a classroom setting. The Gender Role Conflict Scale (GRCS) assessed gender role conflict in four patterns: Success, Power and Competition (SPC), Restrictive Emotionality (RE), Restrictive Affectionate Behavior Between Men (RABBM), and Conflict Between Work and Family Relations (CBWFR). The Developmental Assets Profile, developed by the Search Institute (2004), assessed resilience in terms of an inventory of developmental assets, or qualities that help youth be resilient. This instrument determines the number and types of assets youth have in various categories, including positive identity and support. Demographic information was also included, such as age, race, and year in college. Analysis first determined if relationships existed between gender role conflict and resilience. Next, we further explored these relationships. Finally, we determined which relationships were most important in a real-world context.

## Main Ideas

As adolescents and emerging adults experience developmental transitions (such as the change from high school to college) and identity development at the same time, they may be more vulnerable to gender role conflict. To explore both positive and negative effects of gender role conflict, resiliency was assessed in this study. This allows practitioners to build potential for positive youth development for all youth, not just those with obvious problems or risk factors.

Results showed that the gender role conflict pattern of Restrictive Emotionality had a significant negative effect on resilience in the sample of college males. This means that as males have more anxiety talking about their feelings or expressing emotions, they tend to be less resilient.

The pattern of Success, Power and Competition also affected resilience, but this relationship

was positive. Those who experience this type of gender role conflict internalize a drive for achievement. This positive relationship indicated that as their motivation for success increased, their number of reported assets (resilience) also increased.

## Implications for Extension Programs, Practitioners and Parents

This study has several implications for youth workers, program leaders and parents:

- *Encourage the acceptance of emotional expression among male youth.* Parents can be proactive in building a broader sense of self, by encouraging play as a way to explore male and female roles and the open discussion of feelings. Therefore, it is important to discourage strict gender roles related to emotional expression, for example, by exposing children to activities, toys, stories, etc. in which gender roles are not so defined.
- *Foster the drive to succeed in males.* As males strive to perform well academically and professionally, their resilience builds. This can be supported by parents and practitioners by providing healthy guidelines for including activities in daily routines that allow male youth to build on successes and identify achievable goals.
- *Encourage school staff to be more protective of those that do not conform to typical gender roles.* Since youth spend a majority of their waking hours in schools, it is important to make this environment friendly to everyone. Anti-hate speech policies, intolerance of ridicule, and assistance from guidance administration may help gender conflicted youth. Additionally, encouraging all youth to engage in activities not usually associated with their gender may help youth explore other interests or understand others' perspectives.
- *Talk about gender roles.* In college-age men, talking about gender roles and conflict with them have been shown to positively affect at least Restrictive Emotionality (Beatty et al., 2006). Thus, it is important for youth workers to host open discussions on these issues. This will assist both the individuals involved in these transitions and will ensure a more tolerant environment by educating the public at-large about these issues.
- *Expose youth to activities across the gender spectrum.* This can include programs within residential communities, discussion through clubs or organizations, and demonstrations in student areas, such as a student union. Faculty may even become involved by including activities, discussion, and video on this topic into their curriculum. This increased exposure will educate youth on these issues and help to create a climate of tolerance.
- *Get the information out there.* Training in hate speech identification, how to handle tough situations, and distributing appropriate information would help to create a climate in which rigid gender roles do not necessarily translate to decreased resilience. These programs may include youth workers, organizational leaders, teachers, coaches, peer mediators and mentors, guidance counselors, and other administrators. By creating a more accepting environment, we may improve problems with bullying, absenteeism, school safety, and victimization.

## Conclusion

Gender development can be a difficult process for those who do not conform to typical gender roles. It is therefore the responsibility of youth workers to soften the rigid lines separating male and female. By recognizing that gender roles are not as clearly defined as in past generations, youth workers and parents can assist youth by educating and exposing them to different interpretations of gender throughout their young lives. Perhaps then gender role conflict will be lessened, and more youth might be resilient.

## Additional References

- Beatty, A., Syzdek, M., & Bakkum, A. (2006). The Saint John's experience project: challenging men's perceptions of normative gender role conflict. *Journal of Men's Studies*, 14(3), 322-326.
- Galambos, N. & Leadbeater, B. (2000). Trends in adolescent research for the new millennium. *International Journal of Behavioral Development*, 24(3), 289-294.
- O'Neil, J., Good, G., & Holmes, S. (1995). In R. Levant & W Pollack (Eds.). The New Psychology Of Men. New York: Basic Books.

# Parental Conflict and Children's Peer Relationships: Is There a Link?

**Submitted by: Ebony J. Baugh, Ph.D., CFLE, Assistant Professor of Family Life**

Schudlich, Tina D., Shamir, Haya & Cummings, E. "Marital conflict, children's representations of family relationships, and children's dispositions towards peer conflict strategies." *Social Development*, 13, 2, (May, 2004), <http://www.blackwell-synergy.com/doi/full/10.1111/j.1467-9507.2004.000262.x> (accessed June, 4, 2007).

## Introduction

Many parents struggle with conflict within their marital relationships. Conflict is inevitable and previous research has suggested that certain types are a healthy factor in relationships (Driver & Gottman, 2004). While conflict may have a positive outcome for the marital relationship, some parents fear that it may have negative effects on their children.

Determining the amount and degree of conflict that has detrimental effects on children can be a difficult task for parents. Previous research suggests that many types of marital conflict contributes to negative outcomes for children in many areas: relationship anxiety and social support (Riggio, 2004), and emotional and physiological reactivity (Sheik, 2005).

This current article attempted to examine the relationship between marital conflict and children's representations of family relationships, peer relationships, and conflict strategies used with peers.

## Methods

Researchers recruited 47 married couples with children between the ages of 5 and 8 from the Midwest through newspaper ads and flyers. Parents completed questionnaires on marital conflict and problem solving before bringing their children to the research laboratory. Once in the lab, children responded to stories read to them about family relationships and puppets used in vignettes about conflict in peer relationships. Correlational analyses were used to assess the relations between parents' marital relations, children's perceptions of family relationships and children's perceptions of peer conflict. Multiple regressions were also conducted to examine the role of children's internal representations in mediating the relationship between marital conflict and peer conflict.

## Main Ideas

Current article suggested that strategies parents use in marital conflict is related to children's perceptions of conflict strategies in their peer relationships. When children experienced more conflict within their parents' relationships, they were more likely to attribute negative conflict strategies with peers. Some children exhibited aggressive behavior when faced with simulated peer conflict. Current study reported that overt conflict children experienced from both mothers and fathers encouraged negative peer interactions. In addition to conflict, a child's

negative representation of his/her family relationships is at an even higher risk for aggressive reactions to peer conflict.

## Implications for Extension Programs

This research highlights the need for extension to create and deliver programs to teach parents effective communication, proper problem solving strategies, and techniques that minimize marital conflict and its effects on children. Through parent education programs, extension faculty can inform parents about the negative effect that marital conflict has on the social development of their children. In addition to parent education, extension faculty can work with children on fostering more positive representations of their family relationships, which have been found to mediate the negative effects of marital conflict.

## Conclusion

While it is important to focus on marital conflict, there is also a need to address the internal representations that children have about their family relationships, in order to foster more positive peer interaction. Children, who perceive negative interactions in parent-child and parent-parent relationships, are more likely to employ negative approaches to conflict within peer relationships. A family systems approach to increasing positive interactions, and subsequent positive family representations, is needed.

## Additional References

- Driver, J. L. & Gottman, J. M. (2004). Daily marital interactions and positive affect during marital conflict among newlywed couples, *Family Process*, 43, pp. 301-314.
- Riggio, H. R. (2004). Parental marital conflict and divorce, parent-child relationships, social support, and relationship anxiety in young adulthood. *Personal Relationships*, 11, pp. 99-114.
- Sheik, M. (2005). The role of emotional responses and physiological reactivity in the marital conflict-child functioning link. *Journal of Child Psychology and Psychiatry*, 46, pp.1191-1199.

# Vitamin D Status and Adiposity among Older Adults: Does Sun Exposure Play a Role?

**Submitted by: Linda B. Bobroff, Ph.D., RD, LD/N, Professor and Extension Nutrition Specialist**

Harris SS, Dawson-Hughes B. "Reduced sun exposure does not explain the inverse association of 25-hydroxyvitamin D with percent body fat in older adults." *J Clin Endocrinol Metab.* 2007 [Epub ahead of print]  
<http://jcem.endojournals.org/cgi/rapidpdf/jc.2007-0722v1> (accessed June 8, 2007).

## Introduction

Osteoporosis is a leading cause of fractures and disability among older adults and the importance of optimal calcium status in promoting bone health is well established. Vitamin D promotes calcium absorption, although the exact mechanism is not known. Vitamin D can be obtained from fortified foods, including dairy products, breads and cereals, and orange juice and from exposure to sunlight. Both of these sources may be inadequate to meet vitamin D needs among older adults, who often limit their intake of dairy products, and may have limited sun exposure due to social isolation or health concerns. Vitamin D supplement use has been associated with improved vitamin D status among older adults (Dawson 1991; Dharmarajan 2005).

Recent research indicates that obese adults tend to have lower circulating 25-hydroxyvitamin D [abbreviated as 25(OH)D] (Lappe 2006, Snijder 2005). This vitamin D metabolite, which is synthesized in the liver, is used as an indicator of vitamin D status in the body. The explanation for this relationship may be related to an effect of fat tissue on the release of vitamin D into the circulation, and/or to reduced sun exposure among larger persons, as a result of limited time spent outside and/or reduced skin exposure when outside. Researchers at Tufts University recently studied the relationship between sun exposure and 25(OH)D levels among obese older adults.

## Methodology

Measurements used for this evaluation study had been made by researchers conducting a study to evaluate effect of calcium and vitamin D supplement use and bone loss. Subjects taking calcium or vitamin D supplements or any medication that could affect bone metabolism were excluded from the research study. Subjects also had to be free of medical conditions that can affect bone metabolism. Only Caucasians were included in the study because the relationship between level of fat in the body (adiposity) and 25(OH)D is known to differ by race.

Of the 445 people enrolled in the research study, data from 381 (173 men, 208 women) were used in this analysis. Measurements studied included sun exposure over the previous three months, dietary vitamin D, height, weight, body fat, and plasma 25(OH)D and 1,25 dihydroxyvitamin D [1,25(OH)<sub>2</sub>D]. Percent body fat was calculated (body fat weight divided by

total body weight) and subjects were divided into quartiles based on this measurement. Sun exposure evaluation included hours per week spent outdoors (not including in a vehicle), amount of skin usually exposed, and whether or not sunscreen was used. Note that in Boston, where the study took place, sun exposure during November through April is too weak to stimulate skin production of vitamin D.

## Results

The mean **age** of the subjects was 71 years. The mean **vitamin D intake** was  $4.6 \pm 2.6$   $\mu\text{g}/\text{d}$  ( $185 \pm 105$  IU/d), which is below the DRI recommendation of  $10$   $\mu\text{g}/\text{d}$  ( $400$  IU/d) for persons 51-70 and well below the recommendation of  $15$   $\mu\text{g}/\text{d}$  ( $600$  IU/d) for persons over 70 years. The **percent body fat** was higher among women ( $39 \pm 7$ ) than men ( $28 \pm 6$ ) ( $P < 0.001$ ), and was inversely correlated with vitamin D intake ( $P = 0.003$ ).

Most of the subjects (84%) did not use **sunscreen**, and there was no difference in sunscreen use based on adiposity (percent body fat). Men spent significantly more **time outside** ( $21 \pm 1$  hr/wk) than women ( $15 \pm 1$  hr/wk) ( $P < 0.001$ ). As expected, season was a significant predictor, with people spending more time outside in May-Oct than Nov-Apr, but age and percent body fat were not predictors. Also, the **percent of skin exposed** did not vary with differences in percent body fat.

Older adults with higher percent body fat had significantly lower levels of 25(OH)D. Persons in the highest quartile of percent body fat (over 40.3% fat) had 20% lower concentrations of 25(OH)D compared with those in the lowest quartile (less than 27.5% fat). The researchers adjusted the data for factors that could have affected 25(OH)D concentrations, including sex, age, season, and vitamin D intake. Also, variations in sun exposure did not affect the association of 25(OH)D with adiposity in these older adults.

The authors suggest that the relationship between adiposity and circulating levels of 25(OH)D in older adults is due to vitamin D being held within the fat cells and therefore not entering the circulation. It is not known whether subcutaneous fat stores or visceral fat stores are more responsible for this effect on circulating 25-hydroxyvitamin D levels in obese individuals.

## Implications for Extension Programs

Osteoporosis is a serious health concern among older adults, particularly women, and vitamin D is believed to play a critical role in decreasing risk by promoting calcium absorption. The DRI for vitamin D increases with age, with the highest recommendation among persons over 70 years of age. Many older persons do not get adequate vitamin D. Our ENAFS educational program promotes lifestyle interventions to increase intake of vitamin D and other nutrients related to bone health, as well as weight-bearing physical activity to support bone health.

Obese persons in general have a lower risk than thin people of developing osteoporosis, at least in part due to increased stress on the bones, which supports bone formation. However, this research study and other referenced studies point out a confounding factor – the negative effect of obesity on vitamin D status, which could tend to increase osteoporosis risk.

This study supports previous research that has identified percent body fat as a risk factor for

low circulating levels of vitamin D. Further, the researchers provide new information about the relationship between body fat stores and vitamin D status in older adults. Based on the results of this study, it appears that higher body fat is associated with lower circulating vitamin D, irrespective of dietary vitamin D intake, sex, age, or season in which the measurements were taken, all of which could affect vitamin D levels in the body.

## Conclusion

Although obese persons tend to be at lower risk for osteoporosis, we need to be aware that vitamin D status may be compromised in large people and include them in osteoporosis prevention programs, including the ENAFS Fall Prevention program.

## Additional References

Canto-Costa MH, Kunii I, Hauache OM. Body fat and cholecalciferol supplementation in elderly homebound individuals. *Braz J Med Biol Res.* 2006; 39(1):91-98.

Dawson-Hughes B, Dallal GE, Krall EA, Harris S, Sokoll LJ, Falconer G. Effect of vitamin D supplementation on wintertime and overall bone loss in healthy postmenopausal women. *Ann Intern Med.* 1991; 115(7):505-12.

Dharmarajan TS, Akula M, Kuppachi S, Norkus EP. Vitamin D deficiency in community older adults with falls of gait imbalance: an under-recognized problem in the inner city. *J Nutr Elder.* 2005;25(1):7-19.

Lappe JM, Davies KM, Travers-Gustafson D, Heaney RP. Vitamin D status in a rural postmenopausal female population. *J Am Coll Nutr.* 2006;25(5):395-402.

Snijder MB, van Dam RM, Visser M et al., Adiposity in relation to vitamin D status and parathyroid hormone levels: a population-based study in older men and women. *J Clin Endocrinol Metab.* 2005; 90(7):4119-23.

Vieth R, Ladak Y, Walfish PG. Age-related changes in the 25-hydroxyvitamin D versus parathyroid hormone relationship suggest a different reason why older adults require more vitamin D. *J Clin Endocrinol Metab.* 2003; 88(1):185-91.

# The Effects of Volunteering for Nonprofit Organizations on Social Capital Formation: Evidence from a Statewide Survey

**Submitted by: Elizabeth B. Bolton, Ph.D., Professor of Community Development**

Isham, Jonathan, Kolodinsky, Jane and Kimberly, Garrett. The Effects of Volunteering for Nonprofit Organizations on Social Capital Formation: Evidence from a Statewide Survey. Nonprofit and Voluntary Sector Quarterly. Volume 35, Number 3. (September 2006).

## Introduction

This article discusses the popular concepts of social capital and volunteering. Contrary to the popular belief and to research that shows volunteering has a positive effect on the increase on social capital, (Mayer, 2003) this article concludes that volunteering has little effect on increases in social capital and indications that it increases from volunteering is from other determinants.

M.K. Smith (2007) provides a perspective on social capital which had been prominent in the literature for a number of decades before Robert Putnam's (1995) study of America's social capital pointed out that participation in voluntary associations was declining in America. The following definitions are quoted from Smith's (2007) exploration of the historical development of social capital, the studies that contributed to its prominence and the expectation that it is beneficial to individuals, organizations and communities. It has been the work of Putnam (1995) which brought social capital into perspective and it has remained an important concept and the subject of many studies and much debate. "Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called "civic virtue." The difference is that "social capital" calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. "A society of many virtuous but isolated individuals is not necessarily rich in social capital." (Putnam 2000, p. 19 as cited in Smith, 2007).

Volunteering, an act of performing a service without pay or remuneration, is increasing in the United States according to Independent Sector and it appears that this trend is happening while the number of service clubs and civic organizations is declining. The relationship between social capital and volunteering in Europe has been shown to be relative small according to research reviewed by the authors of the study reviewed here. Isham's et al (2006) study examines the effects of volunteering on social capital in the United States, using the household production framework by Becker (1974) to analyze the relationship between participation in a nonprofit and two forms of social capital, social connections and civic capacity. The authors hypothesize that the volunteers receive social capital benefits of social connections and civic capacity from a variety of sources in addition to the act of volunteering. They explore how participation in a local nonprofit affects one's social capital benefits of social connections and civic capacities.

Becker's 1974 Theory of Social Interactions (as cited in Isham et al) is used as the framework to determine if the characteristics of others affect the volunteer's personal welfare to produce social capital and not necessarily the act of volunteering.

## Methodology

A survey titled the Vermonter Poll was used to collect data on randomly selected registered voters. This is an annual survey of adults in Vermont and it has a confidence level of 95%. Responses in 2002, the year of the study, included 677 surveys which contained complete information. The respondents were asked to identify the type of organization that provided them the greatest personal benefit even if they were not a member of or participant in that organization. This question allowed the researchers to focus on determinants of social capital to the exclusion of membership and participation in the nonprofit organization.

The possible benefits included the two types of social capital chosen by the authors and cited above, social connection and civic capacity. About two thirds of all respondents indicated receiving some type of benefit from an organization. Most benefits related to the mission of the organization such as religious benefits deriving from churches and religious gatherings. The respondents also indicated a social connection and a civic capacity from their most important organization.

After rating the benefits received respondents were asked to rate the level of different benefits provided by the organization. On a scale of 1 to 10 with 1 being the least benefit, the average levels were 6.6 for respondents reporting a social connection benefit and 6.3 for those reporting a civic capacity benefit. Respondents were asked to identify the types of organizations they participated in through volunteer activities during the previous year and to indicate the number of hours they had volunteered. Sixty-two percent volunteered in at least one organization with an average of  $\frac{1}{2}$  hour of volunteer time per week. For those reporting a social capital benefit of social connection and civic capacity, the volunteer commitment was slightly more than 48 minutes per week.

## Main Ideas

There are three significant results from the study. First, the type of organization does not affect the level of social capital benefit. No type of organization produces a higher social capital benefit than any other including religious organizations. Second the number of hours volunteered has a relatively small impact on increasing either social connection or civic capacity benefits. A significant increase in the number of volunteer hours increases the social capital by only a small amount. Increasing the number of hours volunteered has no significant impact on increasing either social connection or civic capacity. Third, males receive a statistically significant lower level of social connections and civic capacity benefits compared to females but the magnitude of these effects are relatively small. The demographic characteristics do not appear to affect the level of social capital benefits received from an organization.

## Implications for Extension Programs

If we start with the notion that social capital is important to our communities and to our culture, then, how might it be increased? This study shows that social capital increases do not

necessarily come from volunteering but from a variety of sources. Practitioners might want to shift the focus to capacity building through educational programs such as leadership development. These programs impact nonprofits and volunteers in nonprofits as well as civic organizations and service clubs. A cadre of local leaders is a valuable outcome and an end in itself as well as an indicator of social capital.

If we look at the value of volunteering only through the lens of increasing the civic capacity and social connections, we may miss some of the important and perhaps undocumented benefits of volunteering. The value of volunteering is not just measured in civic capacity and social interactions. It is also measured in the economic value of services provided. Independent Sector ([www.independentsector.org](http://www.independentsector.org)) provides the value of a volunteer hour on an annual basis and the 2006 value was \$18.77. This indicator cannot be ignored and while it may not be social capital, it is financial capital created by human capital.

There are a limited number of organizations with which any one extension county faculty can reasonably advise. The issue becomes how one can reach more organizations and more potential volunteers or members that may well be external to extension. It becomes a matter of education to change attitudes and behavior of individuals who do not normally see the benefits volunteering. The availability of leadership education is one means to accomplish this. These curricula are available to extension programs and there are several models that can be used and adapted to any location, rural or urban, and any audience, youth or elderly. Some things do not change and the need for a cadre of trained community leaders is certainly one of them. Let us consider a shift in emphasis from volunteering to leading – to being active in one's community where need exists and interest in mission or cause comes first.

## References

- Becker, G.S. (1974) A Theory of social interactions. *Journal of Political Economy*. 82(6), 1063-1093.
- Independent sector. (2007). The value of volunteer time. Retrieved June 10, 2007. [http://www.independentsector.org/programs/research/volunteer\\_time.html](http://www.independentsector.org/programs/research/volunteer_time.html).
- Mayer, P. (November, 2003). The wider economic value of social capital and volunteering in South Australia. South Australia: University of Adelaide.
- Smith, M.K. (2007). Social capital. The encyclopedia of informal education. Retrieved June 10, 2007. [http://www.infed.org/biblio/social\\_capital.htm](http://www.infed.org/biblio/social_capital.htm).

# Child Care in the Early Years: Long-term Youth Outcomes

**Submitted by Kate Fogarty, Ph.D., Youth Development Specialist**

Recently I enjoyed a 5-day, all-expense-paid trip (thanks to the American Psychological Association) to Chapel Hill, North Carolina to “play” with data, namely, data collected on over 1300 children from their birth until age 15. This data comes from the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development (SECCYD).

The SECCYD examines child outcomes and many features of children including:

- Family Features (income, single parent, race/ethnicity)
- Nonmaternal Child Care (in-home relative or non-relative, out of home center care, home-based center care)
- Child Care Time & Quality (number of hours in care per week, child-caretaker sensitivity and positive interactions)
- Youth Outcomes (mother-child attachment, peer relationships, problem behaviors, school readiness)

At the workshop, I met the scholars who collected this extensive body of data and learned the interesting history of the study. In the late 1980s policymakers and researchers were concerned with child care safety and possible negative effects of child care on mother-child attachment and child behavior. However, most important, were parents’ concerns, such as:

- Is child care a safe option for my baby or child?
- How many hours a week can I be apart from my child without him/or her suffering ill-effects?
- When is the best age to leave my child with a caregiver and go back to work?
- What benefits might my child gain from childcare?
- Which type of placement would be most beneficial for my child: an unstructured family day-care (in-home) setting, or a more academically structured day-care center?

The extensive data collected from the SECCYD, as a longitudinal study, was created to answer these questions (and many more – including those I hope to answer in my research on adolescence.). Some of the answers the NICHD Early Child Care Research Network came up with follow.

Over the past two decades, research has supported that non-maternal child care (in or out of home) was a physically safe option for children (e.g., from child abuse or neglect). SECCYD

research followed to support that non-maternal child care is an emotionally safe place for children. They found that:

- The family environment has the greatest impact on child outcomes with much stronger effects than those of child care
- In spite of family environment having the strongest influence, high quality child care (caregivers are sensitive and responsive) decreases the effects of mother's depression (linked with acting out behavior and cognitive deficits)
- Quality, 2) Instability (unpredictability), 3) Type (home-based center, out of home structured or unstructured) nor 4) Timing (age when child starts care) of child care had no significant effect on mother-child attachment security (i.e., did not affect whether the attachment relationship was secure or insecure).
- Number of hours in child care did not predict a child's likelihood of communicable illness (gastrointestinal, upper respiratory, or ear infection).
- Greater experience of children in child care with their peers gave them an advantage in social skills and peer play (over those cared for by family in home).
- Children with highest quality care have greater language skills and school readiness

Only several findings showed negative effects of child care, namely that,

- Starting non-maternal child care early (2 to 3 years of age) predicted children's behavior problems.
- Infants and children who were in child care on average of 30 or more hours a week were more likely to act out than those who received 10 or fewer hours.
- Children were more likely to contract a communicable illness (stomach virus, upper respiratory infection, or ear infection) in care settings where there are 6 or more children present (thus, not a matter of hours in care but number of children).

These findings suggest that starting children out in the early years with high quality child care, for less than 30 hours a week is beneficial. Also, when I spoke with a researcher from one of the SECCYD data sites about the communicable illness findings, he mentioned a common belief among pediatricians -and a well-supported theory in health research- that increased exposure to illness in the early years increases the strength of a child's immune system. This last finding, in fact, may be another long-term benefit of out of home day care or center based care.

Ultimately the findings from the SECCYD data show that quality of child care is most important. There are several findings on good quality child care from the research that provide parents and families hope.

- When mothers and caregivers frequently communicated with one another about the

child, the caregiver was more sensitive, supportive and stimulating with that child (= greater child care quality).

- When mothers felt like they were partners with their child's caregiver, there was higher quality mother-child interaction.
- Caregiver sensitivity and responsiveness (high quality) was strongly associated with children's positive, skilled, peer interaction.
- Children with higher quality child care in the early years had better school readiness as well as higher vocabulary scores that lasted into the 5<sup>th</sup> grade

The researchers interpreted the first two findings (high quality childcare's link with mothers being highly sensitive and responsive to their children) to be that high quality child care givers serve as role models to mothers for involved caregiving, as well as provides mothers with emotional support, further enabling them to be emotionally responsive to their children.

NICHD Early Child Care Research Network (Ed.) (2005). Child care and child development: Results of the NICHD Study of early child care and youth development. New York: Guilford.

(Summaries of Chapters 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26)

# Relationship between child sleep disturbances and maternal sleep, mood, and parenting stress: A pilot study

**Submitted by: Heidi Liss Radunovich, PhD, Assistant Professor of Human Development**

Meltzer, L.J., & Mindell, J.A. (2007). Relationship between child sleep disturbances and maternal sleep, mood, and parenting stress: A pilot study. *Journal of Family Psychology, 21*, 67-73.

## Introduction

Although some children have diagnosable sleep problems, many have nighttime issues related to nightmares, bedwetting, or behavioral problems that lead to frequent nighttime waking. For those adults who have children, sleep quantity and quality are greatly affected by the sleep behavior of their children. Despite this, researchers have not previously examined the impact that child sleep habits have on parental functioning.

## Methodology

A total of 47 mothers, ages 30-50, participated in this study. Each had at least one child. Children ranged in age from ages 3-14. Requirements to participate in the study were that neither parent nor child(ren) had diagnosed sleep disorders, children did not have developmental delays or chronic illness, the family had telephone access, and the mother had English language skills sufficient to complete measures orally in English. The researchers measured children's sleep habits (Children's Sleep Habits Questionnaire), and mother's level of depressive symptoms (Center for Epidemiological Studies - Depression Scale), stress, fatigue and sleeping habits over the telephone, and then mothers were asked to complete information about their sleep quality (24-Hour Sleep Patterns Inventory) for 4 nights over the course of the following 2 weeks. Given changes in sleep habits based on developmental level (changes in sleep needs based on age), initial results were analyzed separately for 3-11 year olds and 12-14 year olds; however, the groups did not vary significantly, so further analyses were done with the combined sample.

## Main Ideas

Mothers of children who had sleep disturbances and those whose children did not have sleep disturbances had similar schedules as far as when they went to bed and woke up, and how much sleep they received overall. However, mothers whose children had significant sleep problems reported significantly more disruptions to their sleep. Those mothers who had highly disrupted sleep reported higher levels of depressive symptoms, fatigue, sleepiness, parental stress, and caregiver overload.

## Implications for Extension Programs

It is important for Extension agents who conduct programming with parents to be aware of the problems facing parents whose children disrupt their sleep. This is a serious problem,

particularly if it continues in the long term, as it can have a significant impact on parental functioning. If the disruptions are related to child misbehavior, then parenting skills related child behavior management may be beneficial. Families may wish to seek professional consultation if there are medical issues involved, if the problems are very severe, or if the disruptions have gone on for a long period of time. For issues related to bedwetting, please see EDIS publication Bedwetting (FCS 2112), which covers this topic.

## Conclusion

Overall, the study results indicate that it is not just the amount of sleep that is important, but the quality of that sleep. When children wake parents frequently in the night, parents have more fragmented sleep. Parents with fragmented sleep show decreases in their ability to function: they feel more tired, depressed, and stressed. Poor parental functioning could, in turn, increase children's risk of poor parenting or even abuse.

## Additional References

Evans, G.D., & Radunovich, H.L. (Revised 2006). Bedwetting. Gainesville, FL: Department of Family, Youth & Community Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.

# Food Safety Knowledge and Practices: Two Consumer Groups in Florida

**Submitted by Amy Simonne, Associate Professor, Food Safety and Quality**

It is estimated that 76 million cases of foodborne illnesses occur in the United States each year and out of these cases about 5000 result in death (1). Reducing the number of foodborne illnesses involves many groups of people, from those involved with food production to the end-users or consumers. Consumers or end-users represent many types of individuals from different demographic backgrounds. In order to teach appropriate information to the right people, it is important for educators to understand the current practices or knowledge of specific audiences. The main objective of this article is to compare two recently published research findings on food safety knowledge and practices of selected participants in the WIC program in Miami and selected employees of Osceola County. These two groups represent very different segments of the Florida population.

## Summary of the studies

<b>Components</b>	<b>WIC Study, Miami, FL (2)</b>	<b>Osceola County Employees (3)</b>
<b>Study population</b>	WIC participants in Miami-Dade County. This site serves 7000 clients per month (63% African American, 35% Hispanic, and 2% of other ethnic groups)	Mailing surveys to 600 county employees.
<b>Sample population characteristics</b>	Participants = 299 <ul style="list-style-type: none"> <li>- 85% age &lt; 35,</li> <li>- 89% high school graduates;</li> <li>- 64% = non-Hispanic, non-Haitian black;</li> <li>- 27.1% Hispanic;</li> <li>- 5.8% Haitian;</li> <li>- 2.7% non-Hispanic white or other race or ethnic group</li> </ul>	Respondents = 376 <ul style="list-style-type: none"> <li>- 43% male</li> <li>- 56% female</li> <li>- 16% age 30 and under</li> <li>- 61% age 31-50</li> <li>- 23% age 50 and older</li> <li>- 23% reported having children under age 6</li> </ul>
<b>Instrument</b>	Questions (23 items on self-administered surveys) were based on	Random questions (37 questions)

<p><b>components</b></p>	<p>the five constructs of food safety behaviors (4 from the Partnership for Food Safety Education’s Fight BAC! (“clean”, “separate”, “cook” and “chill”); the 5<sup>th</sup> one from food safety during pregnancy: avoid unsafe foods during pregnancy)</p> <p>The questions evaluated practices <u>but not</u> knowledge and attitudes on the subjects.</p>	<p>on the following topics:</p> <ul style="list-style-type: none"> <li>- Personal hygiene</li> <li>- Food preparation</li> <li>- Food cooling</li> <li>- Storage and handling</li> <li>- Food sanitation</li> </ul> <p>The questions evaluated the knowledge and practices of participants.</p>
<p><b>Significant findings</b></p>	<p>1) The most problematic food safety practices among participants were in the “cook” and “chill” categories.</p> <p>The <u>least commonly reported</u> practices were a) using a cooking thermometer, b) refrigerating foods within 2 hours, and c) thawing foods safely.</p> <p>2) First-time pregnant participants were most likely to use suboptimal food safety practices.</p> <p>3) Pregnant participants often consumed foods that could expose them to listeriosis.</p> <p>4) Women who were pregnant with their first child had the poorest food safety practice scores.</p> <p>5) Personal hygiene should not be excluded from any food safety</p>	<p>1) Based on the results, some behaviors and practices may be putting the consumers at risk for foodborne illness in their own homes. Major food safety risk factors identified included:</p> <ul style="list-style-type: none"> <li>- Cooling food at room temperature</li> <li>- Improper use of dish towels</li> <li>- Not using thermometers during cooking or refrigerated storage</li> <li>- More than 60% of respondents often continue to prepare foods even if they are sick</li> </ul> <p>2) Other findings</p> <ul style="list-style-type: none"> <li>- While females tended to be better at some of the food</li> </ul>

	<p>curriculum.</p>	<p>safety practices (thawing foods, using towels correctly), male participants were less likely to prepare foods while sick than female respondents.</p> <ul style="list-style-type: none"> <li>- Participants who had been through some food safety training tended to use correct food safety procedures</li> <li>- Level of income may affect certain choices of practices (owning a dishwasher or using dishcloths)</li> </ul>
<p>Limitations:</p>	<ol style="list-style-type: none"> <li>1) Food safety practices were self-reported without actual observation of the practices, so the number of good practices may be inflated.</li> <li>2) Those who refused to participate in the study may have worse food safety practices.</li> <li>3) In some cases, there were inconsistencies in the responses between two questions from the same subject.</li> <li>4) The participant demographic may not represent other WIC clinic participants in Florida or the U.S.</li> <li>5) This study assessed self-report practices, but not knowledge or</li> </ol>	<ol style="list-style-type: none"> <li>1) This is a self-reported food safety practice.</li> </ol>

	attitudes. Thus, it cannot connect the knowledge (or lack thereof) to certain practices or specific barriers.	
--	---	--

## Take-home Message

1) **A word on self-reported studies:** Both of these studies are self-reported studies, and previous research indicates that there are some limitations of self-reported studies. Here are some common limitations: 1) People tend to over-report their positive food safety practices for various reasons, 2) People often lie about their practice or behaviors, and 3) People often cannot accurately recall their actual practices (4).

Although the self-reported approach can get good data from representative samples of a selected population and comprehensive data on any food safety-related subject, because of the aforementioned limitations, the validity of data from self-reports may be more questionable than that from actual observation studies (5). However, observational studies can be very expensive and very difficult to perform.

**Bottom line:** Like the foodborne illness data, the findings of less-than-optimum food safety practices may be only the tip of the iceberg, because people do not tend to reveal suboptimum practices or behaviors. As educators, we need to consider this fact. If people report one sub-optimal practice, they may also use more suboptimal practices that they do not report.

2) **A word on some sub-optimal food safety practices:** While these two studies are from two different sample populations in Florida, the data revealed that the three most common risky behavior or practices included **improper cooking** (not using thermometers) and **improper cooling and thawing of foods**.

**Bottom line:** Extension food safety programs for consumers should continue to cover the area of proper cooking, cooling, and thawing of foods, as well as some other components, such as personal hygiene.

3) The WIC population used in this study is an example of inner-city pregnant women and mothers served by WIC clinics. Although this is not a national sample (as stated by the researchers, 2), this data provide a good description of significant portions of the Florida population.

**Bottom line:** This finding is applicable to some of the county faculty who teach clients in the Food and Nutrition Program and EFNEP.

**General conclusion:** Based on these two studies, it is important to continue food safety education for consumers. Continue to find innovative ways to teach food safety, and use specific materials for specific populations. Gender plays an important role in certain food safety practices and behaviors.

## References

1. Mead, P. S., L. Slutsker, V. Dietz, L. F. McCaig, J. S. Bresee, C. Shapiro, P. M. Griffin, and R. V. Tauxe. 1999. Food-related illness & death in the United States. U.S. Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/ncidod/eid/vol5no5/mead.htm>
2. Trepka, M. J., F. L. Newman, Z. Dixon, and F. G. Huffman. 2007. Food safety practices among pregnant woman and mothers in the Women, Infants, and Children Program, Miami, Florida. *J. Food Protection*. 70(5):1230-1237.
3. Walter, C. M., R. H. Schmidt, K.R. Schneider, and J. Cornell. 2007. Home food safety practices of government employees in Osceola County, Florida. *Food Protection Trends*. 27(6) 389-399.
4. Redmond, E.C., and C.J. Griffith. 2003. Consumer food handling in the home: a review of food safety studies. *J. Food Protection*. 66: 130-161.
5. Surgeoner, B. V. 2007. Show Me, Don't Tell Me. Thoughts on today's food safety. *Food Protection Trends*. 27(6): 508.

# Children's Safety Risks During Summer Months

**Submitted by: Suzanna Smith, Ph.D., Associate Professor**

Morton, S. Spicer, R., Korn, A., Thomas, S., Jones, P. (May, 2007). Safe kids U.S. summer safety ranking report. Washington, DC: Safe Kids Worldwide. Retrieved from [http://www.usa.safekids.org/content\\_documents/Safe\\_Kids\\_U.S.\\_Summer\\_Safety\\_Ranking\\_Report.pdf](http://www.usa.safekids.org/content_documents/Safe_Kids_U.S._Summer_Safety_Ranking_Report.pdf)

## Introduction

Summer brings many exciting family events such as vacations, picnics, and outings to pools, lakes, parks and play areas. Unfortunately, summer also brings an increase in unintentional deaths and injuries among children. In fact, in the summer of 2004, over "2.4 million emergency room visits by children 14 and younger were due to unintentional injury" (p. 4), and over 2,000 died from injuries that could have been prevented.

This research looked at unintentional injury death rates during the summer months for children ages 0 to 14 in the 50 states and the District of Columbia. The goal of the report is to increase public awareness of risk to children in the summer. Suggestions are offered to parents, communities and policy makers for steps that can be taken to keep children safe.

## Methodology

This research looked at unintentional injury death rates during the summer months for children ages 0 to 14 in the 50 states and the District of Columbia, and changes in death rates over a 5-year period. Each state and the District of Columbia were ranked from 1 through 51 on the basis of the child unintentional death rate and the increase or decrease in that death rate over a five-year period.<sup>1</sup>

## Main Ideas

### **Average Summer Injury Death Rate**

The *average* summer injury death rate was 3.67 deaths per 100,000 children in 2000-2004, ranging from a low of 1.51 children in Massachusetts to a high of 8.47 in South Dakota. In terms of the *rankings*, from best to worst, Vermont ranked number 1 and Wyoming 51. Florida ranked 34, toward the bottom half of states, with a death rate higher than the U.S. average (4.31 per 100,000 in 2000-2004), but a 10% decline in the death rate over a 5-year period.

### **#1 Risk: Motor Vehicle Crashes**

The number one cause of children's unintentional deaths at any time of year is motor vehicle crashes, and nearly 4000 children died as motor vehicle occupants between 2001 and 2004. During the summer months deaths of child motor vehicle occupants increased 20%, so that nearly 1600 deaths occurred in the four summer months, and fatalities peaked on July 3 and 4. Other vehicle related deaths were from leaving children unattended in a vehicle, where they

place the car in gear, fall from an open window, or play in the car's trunk. Another deadly situation was leaving children in closed cars in extremely high temperatures on a summer day (nationwide there were 33 deaths from heat stroke from 1998-2004). Driveways and parking lots were also hazardous, especially to younger children, with over 7000 children treated for injuries "after being struck while bicycling or walking in driveways, parking lots, and other off-road settings (p. 19).

## **#2 Risk: Drowning**

The number two cause of children's injury deaths year round is drowning, and over 3200 children died from drowning incidents in 2001-2004. The risk of drowning increased 89% in the summer months, more than any other kind of unintentional injury, with over 1500 deaths (64% of the total) in May through August when "more children are swimming and playing outside near pools and open bodies of water" (p. 11). What is astonishing is that almost all, 9 out of 10, fatal events occurred because of a "lapse in supervision" (p. 11) as parents lost visual contact with their children while they were swimming, or children wandered out of sight and drowned in their own family pools (p. 11).

## **Other Accidents: Bikes, Falls, and Pedestrian Accidents**

This report also reviewed the summer increases in other unintentional injury deaths from bikes, falls, and pedestrian accidents. More than 3400 additional children died from injuries related to these causes, and 1400 deaths were during the summer months. Of these, pedestrian injuries accounted for the greatest number of deaths (over 2400), as children were more likely to be playing in driveways or streets and walking or playing behind a vehicle.

The greatest increase of these during summer months (45%) was bike-related injuries. Nearly half of those hospitalized from a bike injury have a traumatic brain injury, and a head injuries account for more than 60% of bicycle-related deaths (p. 15). Falls were the leading cause of unintentional injury (but not death) year round, accounting for "more than 40% of all nonfatal child injuries" (p. 17). In the summer, children are at greater risk on playgrounds and sports fields (older children), balconies and fire escapes, and open windows (younger children).

## **Measures to Prevent Injury Deaths**

According to this report, the number of injuries and deaths can be reduced when parents, governments at all levels, and communities placing a priority on this issue. Indeed, preventive measures such as those listed below can protect children from harm. For a complete list and explanation of recommendations, go to the report itself at [http://www.usa.safekids.org/content\\_documents/Safe\\_Kids\\_U.S.\\_Summer\\_Safety\\_Ranking\\_Report.pdf](http://www.usa.safekids.org/content_documents/Safe_Kids_U.S._Summer_Safety_Ranking_Report.pdf)

## **Parents and caregivers**

- Supervise your child in their summertime activities.
- Teach your child to swim.

- Make sure your child uses appropriate safety gear
  - a helmet that fits snugly for biking, skateboarding, roller/inline skating, and scooting
  - the right size, approved life jacket for boating and open water swimming
  - a bike sized so they can reach the ground when sitting on the seat
  - a car seat that is properly secured
- Take a boating safety course and never drink alcoholic beverages while boating.
- Teach your child the rules of the road so they obey traffic laws when riding on a bike. Teach them the rules for pedestrian behavior, such as looking left and right, crossing at a corner, and waiting for traffic. Cross with them if they are younger than 10.
- Drive safely, use approved car seat, booster seat, and/or seat belt for traveling in the car, and do not leave your child in the car unattended.
- Be alert to the dangers in and around the home that can cause accidents – open windows, playing behind parked cars,

## Implications for Extension Programs

- Provide safety information to inform parents about protecting their children via newsletters, posters and fact sheets.
- Continue to train families and inspect child safety seats and restraints.
- Team up with other community organizations and government entities to carry out public awareness campaigns or to make changes in structures that will protect children. For example, city playgrounds could have protective surfacing around play equipment to reduce the impact of falls.
- Encourage community organizations and governments to provide equipment for families that might not be able to afford car seats, helmets, or life jackets.

## Conclusion

The summer months offer more leisure time for children and their families, but parents must be just as vigilant about protecting their children. Nonfatal injuries and deaths can be prevented with careful parental supervision, guidelines and rules for children, and proper safety equipment.

### Note

1. For the death rate, the states' average annual child unintentional injury death rate during the

summer months (May through August) was calculated for 2000-2004 (p. 5). In addition, “the percent change in the state’s unintentional death rate over five years was measured by the difference between the average annual death rate for” 1997-1999 and for 2002-2004 (p. 5)

## A New Way to Get Good Food

**Submitted by Mickie Swisher, Associate Professor, Sustainable Agriculture**

CSA, which stands for Community Supported Agriculture, is becoming more popular as a way for consumers to get good, locally grown produce. A CSA is a farm that essentially custom produces fresh produce for a group of consumers. The consumers pay the farmer in advance for producing the food. The advance payment helps the farmer because he/she does not have to get an operating loan to run the farm. In Florida, a CSA will provide a family with a bag of fresh produce, usually about 10-15 pounds of food, for most of the year. In central Florida, for example, most CSAs start delivering the fresh produce in mid-October or early November and continue doing so through late June or perhaps even into July, about 30-36 weeks.

There are many advantages to CSA for consumers. Perhaps most important, many find that the weekly delivery of fresh, nutritious fruits and vegetables helps the family maintain a good diet. Having those nutritious foods on hand encourages you to consume them. For busy people, CSAs have another major advantage – convenience. Some CSAs deliver produce to the home, while others have a central pick-up point like a farmer's market. Whatever the case, the convenience of getting the entire week's produce supply in one easy stop – already packed in a bag and ready to go – is a big help to busy families. Cost is another advantage. At an annual subscription cost of about \$500 per year, the weekly cost for 10-15 pounds of fresh produce is \$15-\$18, a little over \$1 per pound. That's a bargain. Further, many CSAs are certified organic. Organic products are generally more expensive than conventionally produced ones, but that price differential is essentially eliminated for the CSA member. Some people also belong to CSAs for other kinds of reasons. This is a good way, for example, to support local farms and the local economy.

There are many CSAs in Florida and the number is growing. Unfortunately, it's not always easy to find out about them. Often, word of mouth is the main way that a CSA uses to attract new members. The Florida Department of Agriculture and Consumer Services (FDACS) does have a list of CSA's ([www.florida-agriculture.com/consumers/community\\_supported\\_agriculture.htm](http://www.florida-agriculture.com/consumers/community_supported_agriculture.htm)). However, this list is not complete. Only those CSAs that have contacted FDACS appear on the list.

While some CSAs are actually owned and operated by the members, it is far more common for the farm to be owned and operated by a farmer. In this case, the CSA consumer members simply enter into an agreement with the farmer about what to produce, how much to pay, and any other kinds of requirements that they may want. Many consumers, for example, want the farmer to use organic production practices. The level of involvement of the consumers in the actual farming varies. Most CSAs probably do have a way for members to volunteer some time on the farm, but this is usually limited to the members who find working on the farm enjoyable. The consumer members almost always do have an advisory board that works with the farmer to make sure that the members' needs are met, and most CSAs hold an occasional social event. Fall harvest festivals involving a membership potluck are an example. Most CSAs also publish some sort of newsletter for the members. Usually the consumer members take responsibility for getting that done.

Starting your own CSA is not as hard as it may sound. The most common problem is finding a way to bring together a group of consumers who want to be members of a CSA and a farmer who is willing to produce food for them. Your local Extension Office can help with this. In one county, for example, about 20 consumers asked Extension to host a meeting to explore the potential for setting up a CSA. Extension put out a notice to local farmers explaining that a group of consumers wanted to establish a CSA. Some farmers responded and the consumers eventually selected one experienced farmer. That CSA has been operating successfully for several about a decade.

There are a few rules of thumb that apply to setting up a successful CSA. First, start small. Like anything else, there are bound to be some unforeseen problems that arise as a farmer starts producing a wide variety of fresh produce on a fixed delivery schedule. As few as 10 or 15 members can get a CSA started, and you can work out the kinks with a small, manageable group of people. You can always grow your membership later. Second, an experienced farmer is critical. Obviously, members want a variety of fruits and vegetables in their weekly bag or box of produce and they want variety throughout the year. Inexperienced farmers are likely to have problems producing the 10 or 15 items per week for the entire growing season that is typical of a CSA. Third, work out the delivery schedule and site before the produce starts coming. Home delivery is nice – but adds a lot of cost to CSA membership. On the other hand, many members will not want to drive to the farm. So, in practical terms, a central pick-up point is often the best alternative for all involved.

For more information about how to get a CSA started, try these resources:

Swisher, M.E., Koenig, R., Gove, J. & Sterns, J. (2003) *What is Community Supported Agriculture?* Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Bulletin FCS7212-Eng, 6 p. This is a basic guide to some key steps in setting up a CSA.

Groh, T., & McFadden, S. (1997). *Farms of Tomorrow Revisited: Community Supported Farms, Farm Supported Communities*. Kimberton, PA: Biodynamic Farming and Gardening Association. They provide case studies of CSA's over a 10-year period. This is a good discussion of "what works and what doesn't."

Henderson, E., & Van En, R. (1999). *Sharing the Harvest*. White River Junction, VT: Chelsea Green Publishing Company. This is a very good guide to the details of setting up a CSA, including how to decide on the cost, how to set up an advisory group and other topics.