

Stress Experiences of Family Members of Registered Sex Offenders

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The collateral consequences of sex offender registration and notification (SORN) have been well established, although little evidence has supported the efficacy of SORN. Based on the belief that family members provide some of the most consistent, important, and intense forms of support for criminal offenders in general and registered sex offenders (RSOs) more specifically, the experiences of sanctions, losses, and stresses of these individuals is examined. Using survey responses from 584 individuals known to visit online support and advocacy groups for RSOs and their loved ones, this study identifies the stress levels and stressors experienced by this population. Findings show that family members of RSOs experience high levels of social isolation, fear, shame, property damage, and forced residential relocation. Perceived stress is significantly higher for those who are of lower economic means, feel isolated, have high levels of fear and shame/embarrassment, or were forced to move. Copyright © 2009 John Wiley & Sons, Ltd.

One of the most commonly discussed public policy issues related to crime and justice in today's society centers on ways to sanction and control known sex offenders. The past two decades have brought the proliferation of increasingly strict sentences and sanctions imposed on sex offenders in the U.S. Central to the attempt to monitor and control this population are sex offender registration and community notification laws. These policies require the collection and public dissemination (in various forms across communities) of data about the identities, physical descriptions, residential locations, employment locations, vehicles driven and other information about sex offenders (Tewksbury & Higgins, 2005). Sex offender registries in each state (as well as an integrated national registry) are available to the public via the Internet. The passage of the Adam Walsh Sex Offender Registration and Notification Act in 2006

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expanded the number of registered sex offenders to whom public disclosure applies and lengthened the duration of their registration periods.

Recognizing that sex offender registration and notification (SORN) is likely to be a part of American society for many years to come, it is important to fully understand the various ways in which such laws impact communities and individuals. Convicted felons, including sex offenders, often rely on family members for financial assistance, housing, and social support, especially after release from prison (Travis, 2005; Travis & Waul, 2003). The stigma of felony conviction, and in particular the publicity attached to the status of sexual offenders, can impact non-offending family members even as they endeavor to help their loved ones reintegrate into the community (Farkas & Miller, 2007). Investigations into the efficacy of SORN suggest that such policies are not as effective as once hoped in achieving their stated goals of enhancing community safety through reduced recidivism (Sandler, Freeman, & Socia, 2008; Vasquez, Maddan, & Walker, 2008). Furthermore, such policies impose a range of serious collateral consequences on registered sex offenders (RSOs), and, by extension, their families. Despite growing evidence questioning the value of SORN, policies continue to become more strict and restrictive. Our aim was to assess the ways in which SORN impacts family members of RSOs psychologically, socially, and practically, with a focus on their perceived levels of stress.

EFFECTS OF SEX OFFENDER REGISTRATION AND COMMUNITY NOTIFICATION

The social effects of SORN can be examined within the framework of two broad conceptualizations: efficacy and imposition of collateral consequences. As discussed below, the literature establishing each of these effects has appeared only in the last decade, and remains a developing (though evolving) area of research.

Efficacy of SORN

When examining the success of SORN policies in achieving their intended goals, it is important to look at whether sexual offense recidivism has decreased since implementation of these laws. There is little evidence to support a claim that such policies and procedures are effective. A handful of studies suggest that SORN laws may have contributed to reduced sex crime recidivism (Duwe & Donnay, 2008; Washington State Institute for Public Policy, 2005), but most empirical research has not revealed significant changes in recidivism or in long term sex crime trends attributable to the introduction of contemporary SORN policies (Adkins, Huff, & Stageberg, 2000; Sandler et al., 2008; Vasquez et al., 2008; Zevitz, 2006). One large study of Uniform Crime Report trends in 15 states indicated that registration seems to have contributed to a reduction in sexual recidivism, but community notification has not (Prescott & Rockoff, 2008).

Looking at residential restriction laws, Duwe, Donnay, & Tewksbury (2008) showed that among a cohort of sex offenders released from Minnesota prisons not a single reoffense would have been prevented by an ordinance restricting where sex offenders could live. None of the recidivists sexually abused or made contact with a

child within close proximity to a school or park close to where they lived. Furthermore, the number of RSOs living in a particular jurisdiction is not directly related to the rate of sex offenses occurring in that community (Tewksbury, Mustaine, & Stengel, 2008). In other words, a higher number of RSOs living in a neighborhood does not seem to increase the sex crime rate there.

With regard to the utility of sex offender registries (SORs), most citizens are aware of sex offender notification laws, believe that they contribute to public safety, and have accessed online registries at one time or another (Levenson, Brannon, Fortney, & Baker, 2007a; Lieb & Nunlist, 2008). Beck and Travis (2006) examined community members' knowledge about the presence of local sex offenders and found that when active notification (such as police informing individual residents of RSOs' presence) was practiced community residents were much more aware of sex offenders living nearby than when passive notification (such as simple posting on an internet-based sex offender registry) was used. Interestingly, the type of notification was not correlated with subjects' tendency to engage in protective or precautionary behaviors (Beck & Travis, 2006). Most sex offenders do not view notification as all that helpful in preventing reoffense (Levenson & Cotter, 2005), though some perceive registration and notification activities as potential deterrents to recidivism (Tewksbury & Lees, 2007).

The efficacy of sex offender registries can be compromised by inaccuracy; research has demonstrated that as many as one-half of all registrants surveyed reported that at least some information listed about them was erroneous, though the exact nature of the errors is unknown (Levenson & Cotter, 2005; Tewksbury, 2002). In Massachusetts, 49% of registered sex offenders' addresses were found to be incorrect (Mullvihill, Wisniewski, Meyers, & Wells, 2003), and as many as 25% of sex offenders in Kentucky were not living at their registered address (Tewksbury, 2002). At one point, nearly half of the sex offenders on Florida's registry were not living at the address given to law enforcement, or they were dead or incarcerated (Payne, 2005).

Collateral consequences

The concept of collateral consequences typically refers to unintended negative outcomes that accompany criminal justice sanctioning. Collateral consequences are most likely to affect offenders, although secondary consequences of criminal sanctions—including underemployment, lack of affordable housing, obstacles to assuming adult and parental roles, and stigma—have been noted for families of criminal offenders (Hirsch et al., 2002; Travis & Waul, 2003). No known studies have measured the experience of stress for family members of felons in general or sex offenders specifically.

The presence of collateral consequences is one of the most empirically well established aspects of SORN, but to date these have been examined primarily for offenders rather than their families or others. A range of collateral consequences has been noted for RSOs in Kentucky (Mustaine, Tewksbury, & Stengel, 2006; Tewksbury, 2004; Tewksbury & Lees, 2007), Connecticut (Levenson, D'Amora, & Hern, 2007b), Florida (Levenson & Cotter, 2005; Mustaine et al., 2006; Tewksbury & Mustaine, 2006), Indiana (Levenson & Hern, 2007; Tewksbury, 2005),

Wisconsin (Zevitz & Farkas, 2000), Illinois (Burchfield & Mingus, 2008), New Jersey (Mercado, Alvarez, & Levenson, 2008), Oklahoma and Kansas (Tewksbury & Mustaine, in press). Collateral consequences that have been consistently documented include difficulties in housing, employment, and maintenance of family and social relationships. Many RSOs also report having experienced verbal assault, psychosocial stress, harassment, and a persistent sense of vulnerability and stigmatization. The most frequently experienced collateral consequences included housing limitations, employment hardships, and perceptions of vulnerability (Levenson and Cotter, 2005; Levenson et al., 2007; Tewksbury, 2004, 2005; Tewksbury and Lees, 2007; Tewksbury and Mustaine, in press).

The most commonly studied collateral consequences for RSOs are those related to difficulties finding and maintaining affordable and safe housing. In part, this is due to the fact that in most jurisdictions housing options for RSOs are legally restricted, prohibiting sex offenders from living within specified distances (ranging from 500 to 2,500 feet) of schools, day care centers, playgrounds, public parks, or school bus stops. As a result, a large proportion of housing is unavailable for sex offenders (Barnes, Dukes, Tewksbury, & DeTroye, 2009; Chajewski & Mercado, 2008; Zandbergen & Hart, 2006; Zgoba, Levenson, & McKee, 2009). Regardless of whether residential restrictions are in place in a community or not, it is a common experience for RSOs to change residences (Turley & Hutzler, 2001), and, when they relocate, to move to more socially disorganized neighborhoods (Mustaine et al., 2006). When forced to move, RSOs typically lose at least some of their pro-social supports; they no longer live with or near family, they are farther away from jobs and public transportation, and they experience increased financial stress (Levenson, 2008; Levenson & Hern, 2007).

When relegation to less desirable neighborhoods is coupled with psychosocial impacts and the common perception of vulnerability to vigilantism, it is logical that sex offenders and their families experience high levels of stress. Stress and instability, especially when strong, persistent, and constant, can contribute to the risk of sexual re-offending (Colorado Department of Public Safety, 2004; Cortoni & Marshall, 2001; Hanson & Harris, 1998, 2001). Efforts to assist all criminal offenders to manage and mitigate their experiences of stress is at the core of initiatives designed to facilitate offender re-entry, and it is also a major component of sex offender treatment (Marshall, Anderson, & Fernandez, 1999). When stressors are not effectively managed, it is likely that the risk of re-offending is heightened.

Impact of SORN on family members

Few studies have explored the impact of SORN laws on the families of convicted sex offenders. Levenson and Tewksbury (2009) found that employment problems for the RSO emerged as the most pressing issue identified by family members, followed by concerns about housing. The likelihood of housing disruption was higher for families of RSOs to whom residential restriction laws applied; larger buffer distances were correlated with increased housing crises. Those who lived with an RSO were more likely to experience threats and harassment by neighbors. Children of RSOs were also reported to experience adverse consequences; more than half (58%) said they were treated differently by other children at school, or that their friendships had

been impacted in some way (78%) by public notification. More than half the children of an RSO said that they had experienced ridicule, teasing, depression, anxiety, fear, or anger (Levenson & Tewksbury, 2009). In a qualitative survey, Farkas and Miller (2007) interviewed 72 family members of RSOs (within 28 families) in six states. Several common themes emerged. Many family members spoke of persistent feelings of depression, hopelessness, and frustration as they adjusted to life with a convicted sex offender. Sometimes a family member's decision to remain in contact with the sex offender led to the deterioration of relationships with other relatives. Many reported that housing and employment were disrupted by limitations imposed by the offender's probation or registration status, resulting in economic hardships for family members. Family members felt they were subject to intense scrutiny and intrusion by parole or law enforcement agents, and that their right to privacy was severely impacted by public notification procedures, leading to a great sense of shame and stigma. Many reported feeling "overwhelmed and demoralized" (p. 92), struggling to cope on a day-to-day basis. Some noted that reentry assistance policies (e.g. the Second Chance Act) exclude sex offenders from receiving services. The authors concluded that stress for family members can impede the very important role they play in facilitating successful reentry (Farkas & Miller, 2007).

Research to date has focused almost exclusively on the effects of SORN policies for either communities in general or the RSO him/herself. What is missing from the literature is attention to the impact of SORN laws on those who are connected to, related to, and socially supportive of RSOs. This population, family members of RSOs, is the focus of the present study.

PURPOSE OF THE STUDY

We add to the literature here by examining a previously neglected population: the family members of RSOs. We hypothesize that those who are related to or live with RSOs are positioned to potentially experience the effects of the legal and social responses to sex offenders. As such, it is important to assess whether and how RSOs' family members are affected by SORN policies, since these individuals are "innocent" and have no culpability in the RSO's offending behavior. Without specific *a priori* hypotheses, this exploratory study sought to (1) examine whether family members of registered sex offenders experience stress, (2) identify the common sources of stress, and (3) identify factors contributing to stress levels.

METHODS

Procedures

Data for this study were collected during summer 2008 via an online survey. With the assistance of five websites and list-servs identified as advocacy or support resources for the families of registered sex offenders, the project was advertised through postings on the organizations' websites and distribution of announcements to the organizations' mailing lists. Announcements explained the goals of the project

and invited individuals to complete the survey online. Interested parties were directed to the survey via a link on the website or in the email invitation. All procedures were reviewed by one author's institutional review board, and guidelines for ethical treatment of subjects were followed.

The survey was developed using Survey Monkey, a web-based program designed for online data collection. An authorization for informed consent was presented on the first page of the survey and the survey was designed not to launch unless participants stated that they were over 18 years of age and clicked "yes" giving their consent to participate. Encrypted secure online data collection was ensured by programming the survey so that it would not track or record respondents' IP or email addresses. No other personal or identifying information was requested from participants. Survey Monkey uses hypertext transfer protocol over secure socket layer (HTTPS), which creates a secure connection, provides encrypted communication, and is widely used on the World Wide Web for security-sensitive communications such as payment transactions and corporate logons.

Anonymity was further protected by using implied informed consent by clicking agreement to enter the survey. Participation was entirely voluntary and subjects could withdraw from the study at any time by closing the survey. The survey was programmed to allow only one response from each IP address or workstation to prevent one person from taking the survey multiple times.

Sample

Online survey methods have their benefits and their weaknesses in terms of sampling (Pokela, Denny, Steblea, & Melanson, 2008). They are cost effective and time efficient, allowing data to be collected from large numbers of subjects without the labor resources needed for interviewing and data entry. They provide a good option for capturing a target audience who might tend to visit websites of topical interest to them. On the other hand, however, Internet users have not been found to represent the general population; they tend to be younger, more educated, and more affluent (Pokela et al., 2008). Moreover, of course, not everybody has Internet access. It was found in 2007 that about 29% of the adult population does not have or does not use email or the World Wide Web. Furthermore, there is no current mechanism (e.g. similar to random digit dialing for telephone surveys) for generating a random sample for an Internet survey. For the current study, an online survey was believed to be an appropriate method for collecting data from a large group of family members of RSOs, though we acknowledge that by definition our sample is made up of the family members who have Internet access and who have specifically visited information and advocacy websites targeted to registered sex offenders and their families.

It is estimated that over 600,000 individuals are required to register as sex offenders in the United States (National Center for Missing and Exploited Children, 2008). Presumably, the vast majority of them have family members and many of these family members may visit online advocacy sites. However, the true population for this sampling frame is unknown. We were unable, therefore, to calculate the response rate or to determine how well the sample represented the population. We recruited participants from all 50 states, though some states were especially well represented: California (31), Florida (48), Michigan (64), and Texas (46).

A total of 584 individuals agreed to participate in the study. The sample is 80% female and 20% male, and the mean age is 47.9. The sample is 92% white, 3% African-American and 5% other (including mixed race, Asian, American Indian and other races). Only 3% of the respondents identified themselves as Hispanic/Latino. Nearly two-thirds (64%) of the sample is married, with 7% living together but not married, 12% divorced, and 6% single, never married. Most (58%) respondents do not have minor children, and only 35% have at least one minor child living in their home. About 41% report having a college degree, with only 2% having less than a high school education. Most respondents (60%) are employed fulltime. With regard to income, 40% report an income of \$40,000 or less and 9% report an income of more than \$100,000. Respondents are typically spouses of the RSO (42%) or a parent/step-parent of the RSO (33%). Nearly two-thirds (62%) of respondents reported that they live in the same residence as the RSO.

The RSOs who are the relatives/loved ones of the respondents are primarily male (97%) and adult (98%). The RSOs have a mean age of 40. Three-quarters (75%) of the RSOs reportedly offended against minors, 7% were convicted of offending against an adult, 9% were convicted of child pornography offenses and 6% have convictions for internet-related offenses other than child pornography. They had been on a registry for an average of 8 years. National descriptive statistics of registered sex offenders are not readily available, but some statewide studies using full registry lists might help us understand whether the RSOs referred to in the current study are typical of the population. For instance, in South Carolina, 98% of RSOs are male, 60% are white, mean age at registration is 37, and about 85% of the victims were minors (Levenson, Letourneau, Armstrong, & Zgoba, under review). Likewise, Kentucky registrants are 98% male, have a mean age of 43, and are 66% white (Tewksbury & Lees, 2007). Therefore, though the current RSOs described by their families are more likely to be white (which is probably a reflection of the Internet survey method), they are otherwise similar to the demographics noted by other authors.

Measures

The measures used for the present study included experiences of direct losses, measures of stress, and structural/procedural issues related to SORN.

Experiences of Direct Losses Due to SORN

The survey included seven items assessing types of stress and direct loss experienced due to a loved one's registration as a sex offender. These items can be seen in Table 1.

Stress Measures

A disparity between an experience, one's expectations, and one's coping resources can contribute to perceived stress. Persistent stress can be resolved through coping or adaptation, but when it is not distress results, which can lead to anxiety or depression (Lazarus, 1993). Stress experiences in the current study were measured through

Table 1. Types of stress and direct loss experienced by RSOs' loved ones (%)

	Yes	Very often	Fairly often	Sometimes	Almost never	Never
Sex offender registration and notification (SORN) has caused stress in my life.		68.2	17.6	11.7	1.4	1.1
I feel alone and isolated because of SORN.		55.3%	21.9	15.6	4.3	2.9
I have lost friends or a close relationship because of SORN.		35.9	14.0	30.0	9.9	10.2
I am afraid for my safety because of SORN.		32.7	16.1	29.7	12.2	9.3
Shame and embarrassment due to SORN keep me from engaging in community activities.		48.8	17.5	19.0	5.9	8.8
Experienced property damage.	27					
Had to move out of a residence where I lived due to residence restrictions or community pressure	31					

both a specific survey item and a scaled measure of self-perceived stress. The individual item asked respondents to indicate how often (never, almost never, sometimes, fairly often or very often) they believed that "Sex offender registration and notification (SORN) has caused stress in my life." The measure of perceived stress is a four-item version of the Perceived Stress Scale (Hewitt, Flett, & Mosher, 1992). The original Perceived Stress Scale (PSS) (Cohen, Kamarck, & Mermelstein, 1983) consists of 10 items reflecting adaptation symptoms and coping abilities and has been found to have good internal consistency. The scale has also been found to be correlated with depression (Hewitt et al., 1992). The current study utilized the short, four-item version of the scale, with the score being the sum of the responses to the four items. The PSS-4 has been found to be associated with elevated psychological distress and adverse life events (Cohen & Williamson, 1988). The items and answer choices are listed in Table 2.

Cohen and Williamson (1988) used the PSS with a national probability sample of 2,387 adults to explore the reliability and validity of the scale. They demonstrated that the four-item measure yields one factor and "has adequate reliability for use in situations requiring a very brief measure of perceptions of stress" (p. 46).

Table 2. Responses to the perceived stress scale (%)

	Never	Almost never	Sometimes	Fairly often	Very often
In the last month, how often have you felt that you were unable to control the important things in your life?	5.5%	7.7%	27.8%	22.6%	36.4%
In the last month, how often have you felt a lack of confidence about your ability to handle your personal problems?	6.3%	12.9%	33.3%	19.7%	27.7%
In the last month, how often have you felt that things were not going your way?	2.0%	7.7%	32.4%	24.4%	33.5%
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	5.4%	15.3%	28.0%	19.6%	31.6%

Furthermore, Cohen and Williamson (1988) demonstrated that for their sample the mean score was 4.5 (on a scale of 0–16). Females score higher (4.7 versus 4.2) than males, and older adults score somewhat lower than younger adults ages 18–29 (ages 30–44 mean = 4.5, ages 45–54 mean = 4.4 and ages 55–64 mean = 4.2). Additionally, whites scored lower than African-Americans (4.4 versus 5.1), and less educated adults scored higher than those with advanced education (high school graduates' mean = 4.6, college graduates' mean = 4.0). Married individuals (mean = 4.2) have lower mean scores than those who are divorced (mean = 5.3) or separated (mean = 6.1). Finally, individuals at the lower end of the income continuum have higher scores on the measure than those with higher incomes.

Structural/Procedural Issues Related to Sex Offender Registration

The survey included nine items that assessed procedures related to SORN, displayed in Table 3. First, respondents were asked the number of years their loved one had been registered as a sex offender, whether the respondent lived in the same residence as the RSO, whether the sex offender was subject to residential restriction laws, and six items regarding whether and how notification procedures were conducted. The notification procedures assessed were flyers being posted in the neighborhood, police (or others) going door-to-door to notify neighbors of an RSO's presence/residence, automated telephone calls being placed to neighbors, notices sent home with school children in the neighborhood, public meetings and publication of the RSO's identity and residence in the local newspapers. These items were endorsed in a dichotomous (yes/no) form.

Data Analytic Strategy

Data analyses utilized descriptive statistics to identify common sources of stress and loss. Group comparisons of stress levels were examined using *t*-tests and chi-square. Regression analyses identified the contributing factors to stress levels brought on by being a family member of a registered sex offender. All data were analyzed using SPSS.

Table 3. SORN policies as applied to RSOs and experienced by family members

	% yes	Mean	Median	Mode
No. years RSO registered		8	7	1
Family member lives in same residence as RSO	62			
RSO subject to residential restrictions	75			
Notification via posted flyers	22			
Notification via door-to-door	25			
Notification via automated telephone calls	11			
Notification via letters with school children	15			
Notification via public meetings	15			
Notification via newspaper	30			

RESULTS

Types of Stress and Loss Experienced

As shown in Table 1, in this sample of RSOs' family members, the majority of respondents reported stresses and losses, and reported experiencing these events/feelings frequently. More than two-thirds of the sample (68%) reported very frequently experiencing stress due to their family member's registration as a sex offender. The most commonly reported personal loss for this sample was feelings of loneliness and isolation, followed by avoidance of social activities due to shame and embarrassment. Each of these negative experiences is reported to be experienced either very often or fairly often by at least 49% of the sample. The only assessed form of loss that is not reported by at least 90% of the sample is losing a friend or close relationship due to a loved one's registration as a sex offender. Also, more than one-half of the sample reported very often or fairly often feeling alone and isolated due to SORN, having lost friends or relationships due to SORN, having shame or embarrassment from SORN limit their community activities, nearly one-half of the sample reports feeling afraid for their safety due to SORN, and more than 85% report SORN having caused stress in their lives. Notably, more than one-quarter of the sample reports having experienced property damage due to their relationship to an RSO. Finally, 31% of the sample reports that they were forced to move due to residential restriction laws or community pressure.

Looking at Table 1 more closely, reported feelings of being alone and isolated are related to the experience of frequent stress. Among those reporting very or fairly often feeling alone and isolated, 82% of respondents also report feeling stressed very often due to SORN, compared to only 23% of respondents who reported feeling isolated/alone less frequently. Similarly, among those who reported losing a friend/relationship very or fairly often due to SORN, 85% stated that they felt stressed very often compared with 51% of those who indicated less frequent loss of friendships/relationships. Furthermore, for respondents who said they feared for their safety very frequently or fairly frequently as a result of SORN, 86% reported feeling stressed very often. However, only half of those who reported less frequently fearing for their safety also said that they felt stressed very often. Finally, among those respondents who reported limiting their social activities very or fairly often due to shame and embarrassment related to their loved one's status as an RSO 81% reported feeling stress very often, but among those who never, almost never or only sometimes reported limiting their social activities due to shame and/or embarrassment fewer than one-half (43%) reported feeling stress very often related to their loved one's status as an RSO.

Additionally, examination of differences in direct losses between those respondents who do and do not live with the RSO show that for two items there are statistically significant differences. Respondents who lived with RSOs were significantly more likely to experience isolation ($X^2 = 17.244$, $df = 1$, $p = .002$) and fear for their own safety ($X^2 = 11.112$, $df = 1$, $p = .03$).

An additional item of stress or personal loss assessed whether the respondent had had their property damaged by others due to others learning that the respondent had a family member who is an RSO. For the 27% of the sample who had had their property damaged by others who learned that their loved one is an RSO, 95% also

reported experiencing stress fairly or very often. In contrast, 82% of those who had not had their property damaged reported experiencing stress very or fairly often.

Perceived stress scores

In addition to the frequency of single item measures of experienced stress and losses, perceived stress was also assessed through the four-item Perceived Stress Scale (PSS-4). This four-item measure provides standardized scores that range from 0 to 16. For the entire sample, the mean PSS score is 10.6 (median = 11). This is more than twice as high as the population mean of 4.5 reported by Cohen and Williamson (1988) for a national probability sample of adults.

Mean PSS scores for respondents were compared based on sex, education, whether the respondent had any minor children in the home, whether the respondent was a partner/spouse of the RSO, whether the respondent lived in the same residence as the RSO, and whether the respondent was forced to move due to residence restrictions for the RSO. Only one group comparison demonstrated statistically significant differences in PSS scores. This finding is in contrast to those of Cohen and Williamson (1988), who found differences in mean PSS scores across sex, age, race, education and marital status. Respondents who were forced to relocate due to residence restrictions mandated for the RSO reported a PSS score of 12.4 compared to a score of only 9.8 for those not forced to move ($t = -5.971, p = .000$).

Structural/Procedural Issues Related to Sex Offender Registration

Table 3 illustrates the ways in which SORN policies are applied to the family members of RSOs. Though active notification procedures were actually not overly common, further analyses were subsequently conducted to determine whether specific types of notification procedure, along with other stressors and losses, contributed to stress levels.

Factors Contributing to Increased Perceived Stress Scale Scores

In order to identify factors that contributed to higher respondent scores on the PSS-4, three sets of independent variables were regressed against the dependent variable (the PSS-4 score). The first of these sets of independent variables were respondent demographics: sex, age, race (white versus nonwhite), education (college graduate versus less than college graduate), whether employed full-time or not, whether respondent is a partner/spouse of the RSO, whether there are minor children living in the respondent's home, and whether the respondent is a caretaker of a minor child whose parent is an RSO. The second set of independent variables was composed of the nine measures of structural/procedural SOR issues. The third and final set of independent variables was composed of the six measures of direct losses due to SORN. From the results of these initial regression analyses we kept the variables that displayed significant explanatory powers with an alpha level of $p \leq .07$. This alpha

Table 4. Sets of independent variables predicting perceived stress scale scores

	<i>b</i>	S.E.	β	<i>p</i>
Demographics				
Sex	-.666	.620	-.062	.418
Race (white)	-.356	.882	-.023	.648
Age	-.044	.022	-.130	.021
Education (college graduate)	.053	.503	.006	.844
Employment (FT)	.264	.559	.029	.606
Income	-.413	.183	-.141	.023
Has minor child(ren)	-.099	.212	-.028	.915
Partner of RSO	-.522	.530	-.061	.329
Caretaker of child w/ RSO parent	1.042	.553	.113	.112
Structural/procedural SOR issues				
No. years RSO registered	-.021	.073	-.026	.773
Live same residence as RSO	1.846	.806	.199	.024
RSO subject to residential restrictions	.648	.894	.065	.469
Notification via posted flyers	.463	1.791	.036	.797
Notification via door-to-door	1.243	1.710	.095	.469
Notification via automated telephone calls	.964	1.705	.057	.573
Notification via letters with school children	-3.605	2.529	-1.425	.156
Notification via public meetings	4.023	1.958	.265	.042
Notification via newspaper	-1.183	1.107	-.107	.287
Direct losses due to SOR				
Feel alone and isolated	1.219	.215	.297	.000
Lost friends/relationship(s)	.369	.158	.117	.020
Feel afraid for safety	.596	.173	.185	.001
Shame/embarrassment limits social activities	.555	.162	.173	.001
Had property damaged	-.109	.396	-.012	.783
Had to move	.678	.366	.076	.064

level was chosen to capture the greatest number of potentially influential variables. The results of these initial results are presented in Table 4, but will not be discussed in detail because they were used primarily to select variables for inclusion in the final model. Next, the significant variables were entered into the equation and any variables that were not statistically significant ($p \leq .05$) were removed from the model. By comparing *R*-squared values and degrees of freedom across the models, the best and most parsimonious model was determined.

Table 5 presents the results for the final model. After removing variables that were not statistically significant in the combined model, the final model included five

Table 5. Final model of factors predicting perceived stress scale scores

	<i>b</i>	S.E.	β	<i>P</i>	Tolerance
Income	-.234	.114	-.081	.040	.985
Feel alone and isolated	1.468	.213	.351	.000	.582
Feel afraid for safety	.698	.166	.213	.000	.582
Shame/embarrassment limits social activities	.595	.166	.180	.000	.599
Had to move	.877	.373	.097	.019	.890
Constant	2.818	.668			

R-square = .455.

Adjusted *R*-square = .448.

SEE = 3.13.

Global *F*-test = 60.351 ($\alpha = .001$).

variables statistically significant at the $p \leq .05$ level. The variables in the final model explained 44.8% of the variation in RSO family members' PSS scores, and the model was statistically significant. Lower income increased stress levels, as did feelings of isolation, fear for one's safety, shame interfering with social activities, and having to move.

DISCUSSION

The present study clearly shows that SORN has serious negative consequences for a large proportion of family members of registered sex offenders. Collateral consequences of SORN are experienced not only by offenders themselves, but also by those close to them—those who provide RSOs with their primary physical, financial and social support as the offender seeks community re-entry. Stress levels are high for many RSOs' family members; mean scores are more than twice as high in this sample as in the national probability sample of Cohen and Williamson (1988). Clearly, perceived stress levels are significantly influenced by the structure and consequences of SORN. Though over half of the variance was left unexplained and must be attributed to other factors not identified in this study, we can conclude that the factors in the model contributed substantially to stress levels and that family members are impacted in important ways by SORN laws.

Previous research has demonstrated that stress is a common consequence of SORN for offenders (Tewksbury & Mustaine, *in press*). In this study we see that stress is commonly shared with those closest to RSOs, and therefore is likely to add yet more challenges and additional barriers to RSOs' successful (e.g. non-criminal) community re-entry. As family members of RSOs experience negative repercussions of their loved one's public identification as sex offenders, they necessarily must direct greater amounts of their own time, energy, and efforts to managing their own stress, thereby decreasing the time, energy, and efforts that are available for providing support to their loved one. Such a situation might prove to be a recipe for failure, for individual RSOs and for SORN more generally.

Psychological isolation, loss of friends/relationships, fear for one's safety, being forced to move from one's residence, and limitations on social engagement are all serious impediments to successful, healthy, and law-abiding lifestyles. The fact that individuals of lower income levels feel greater amounts of stress due to SORN adds to the previously demonstrated relegation of RSOs (and hence their family members) to more socially disorganized communities (Burchfield & Mingus, 2008; Mustaine et al., 2006; Tewksbury & Mustaine, 2006, 2008, *in press*; Tewksbury et al., 2008). As such, it is highly likely that not only are RSOs pushed into communities with more criminogenic influences, but also their move to such communities is accompanied by fewer agents of effective social support and community protection resources. Consequently, the chances of recidivism might be enhanced, and the likelihood of SORN to effectively provide community safety might be appreciably diminished.

Online surveys are useful methods for generating information from a targeted population. This goal is accomplished by seeking access to potential respondents via websites of interest to them. While this type of sampling methodology is an efficient way to reach people and gather data, it has several limitations and creates the potential for biased responding. This sample of convenience was self-selected after

being recruited from websites, list-servs, and blogs that function as advocacy and support resources for RSOs and their families. Therefore, this group of participants had prior motivation to visit such a website, perhaps indicating that the sample is made up primarily of people experiencing distress related to being the family member of an RSO. Such individuals might have been inclined to answer our survey in order to express their suffering and their discontent with SORN laws. In other words, the survey might have been more likely to attract those who were experiencing difficulties rather than those who were not. Because procedures were used to safeguard privacy, identities of respondents were of course unknown, and it is possible that some participants were not necessarily family members (i.e. perhaps some were sex offenders who took the survey in order to vent their own frustrations). The survey was set up, however, to disallow more than one survey from any workstation in an effort to prevent one subject from taking the survey multiple times. The universe of RSO family members is presumably over one million people, but we were limited in our ability to estimate the sampling frame or to generate a survey response rate. Therefore, it is unknown whether the responses of this sample truly represent the experiences and feelings of the overall population.

Despite the limitations, this study represents one of few attempts to gather empirical data about the families of registered sex offenders and to understand their experiences. It is well known that families of criminal offenders experience consequences as a result of barriers to reintegration (i.e. underemployment, housing disruption, obstacles to assuming adult and parental roles) imposed by civil sanctions for convicted felons (Hirsch et al., 2002; Travis & Waul, 2003). As SORN policies have become more expansive and inclusive over the years, sex offenders and their families are increasingly exposed to public scrutiny. Moreover, limitations placed on sex offenders' employment, housing, and academic opportunities can impact their families. Community protection policies were intended to prevent recidivistic sex crimes, but the collateral consequences of these laws extend beyond RSOs to their family members. Given the paucity of research indicating that SORN laws achieve goals of reduced recidivism, unintended consequences that impact those other than the offender deserve careful contemplation.

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