Sex Offenders in Prison: Are They Socially Isolated?

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Abstract
Empirical literature has revealed that social isolation can affect the rehabilitation of sex offenders after serving their sentence. This process of social isolation can already start during incarceration due to strained relationships with fellow prisoners and correctional staff. The current study examined to what extent sex offenders felt socially isolated during incarceration, using survey and registered conviction data on a large sample of male adult prisoners from the Prison Project. It was found that support from and relationships with correctional officers and fellow prisoners were perceived less positive by sex offenders than nonsex offenders. No evidence was found for higher levels of loneliness in sex offenders compared with prisoners convicted for a nonsexual offense. In sum, although the effects were small, sex offenders reported more social isolation during imprisonment compared with nonsex offenders.

Keywords
sex offenders, prison, social isolation, loneliness

Introduction
Prior empirical studies have revealed that sex offenders often report social isolation (Marshall, 2010; Ward, Keenan, & Hudson, 2000). In addition, sex offenders experience difficulties to gain and to maintain meaningful relationships with others (Marshall,
2010). This is problematic, as developmental and life-course criminological theories stress the importance of having meaningful relationships, because strong social bonds have been found to reduce offending (Braithwaite, 1989; Farrington, 2003; Laub & Sampson, 2001; Thornberry & Krohn, 2001). Given that sex offenders often report feelings of loneliness and social isolation, these distinguishing features have been theoretically linked to the etiology and maintenance of sexual offending (Marshall, 1989, 2010). Empirically, social isolation and loneliness even have been linked to higher levels of aggression in sex offenders (Blake & Gannon, 2011; Ward et al., 2000), hence increasing the risk of sexual offending and (sexual) reoffending (Marshall, 1989, 2010).

Within clinical practice, there is an increased recognition for the problem of social isolation in sex offenders who return to society after serving their sentence. Reintegration programs, like Circles of Support and Accountability (COSA) and treatments based on the Good Lives Model (GLM) framework aim to reduce recidivism by enhancing social reintegration among other things (Hannem & Petrunik, 2007; Laws & Ward, 2011; Vogelvang & Höing, 2012; Ward, 2002). For the COSA program, Wilson, Cortoni, and McWhinnie (2009) found reductions of 83% in sexual recidivism and 71% in general recidivism.

While it is clear that social isolation can be an issue when sex offenders return to society after serving their sentence, the process of social isolation may already start during the prison sentence itself. Sex offenders may be stigmatized by fellow prisoners and correctional staff, resulting in, for instance, violent attacks and being treated in a negative manner (Ireland, 2000; Schwaebe, 2005; Spencer, 2009). Especially, in combination with their found social deficits (e.g., Baker, Beech, & Tyson, 2006; Bumby & Hansen, 1997; Marshall, 2010; Overholser & Beck, 1986; Seidman, Marshall, Hudson, & Robertson, 1994), this may initiate social isolation during incarceration. Preventing social isolation during incarceration could therefore be beneficial to the rehabilitative process after release.

Social Isolation Among Sex Offenders

Sex offenders are often found to face difficulties forming meaningful relationships with other individuals. Marshall (1989) observed in his studies that many sex offenders described themselves as “loners,” reporting feelings of loneliness and social isolation as a common experience (Marshall, 2010; Ward et al., 2000). Several studies found that sex offenders refer to social isolation as perceiving their social networks or relationships as deficient in some way (Blake & Gannon, 2011; Russell, Cutrona, Rose, & Yurko, 1984). For example, Marshall (2010) found that the sex offenders that do report having social contacts indicate that these relationships are often superficial.

Although sex offenders, in general, are at an increased risk of social isolation, within the empirical literature a distinction is made between child abusers and rapists. Child abusers tend to report a higher level of loneliness compared with rapists (Marshall, 2010). Moreover, child abusers also report being more fearful of intimacy in relationships than rapists, which leads to avoiding social contact that can lead to meaningful relationships (Bumby & Hansen, 1997; Bumby & Marshall, 1994). In
addition, one might expect that, compared with rapists, child abusers are more prone to social isolation due to stigmatization, as they are perhaps the most despised offenders (Tewksbury, 2005; Winick, 1998).

Sex Offenders in Prison

During imprisonment social isolation could be caused by the inmates being cut off from their social network on the outside (Richards, 1978; Windzio, 2006). Moreover, if inmates are socially isolated within the prison, they will be deprived of their basic need for social interaction (Windzio, 2006). Preventing social isolation among sex offenders during imprisonment might prove difficult. A key component in any prison climate is the support provided by staff and other inmates, and the overall inmate-staff relationships (Blagden, Winder, & Hames, 2014; Schalast, Redies, Collins, Stacey, & Howells, 2008). For sex offenders, the relationships with other inmates and staff were often found to be strained. Sex offenders may experience stigmatization by fellow prisoners and correctional staff that can result in being treated negatively (Ireland, 2000; Schwaebe, 2005; Spencer, 2009).

Ricciardelli and Moir (2013) looked into how incarcerated sex offenders experience their relationships with fellow prisoners. They found that sex offenders felt unsafe in the prison environment due to a constant sense of threat and actual victimization by fellow inmates. As a result of this awareness, Blagden and Pemberton (2010) found that a number of sex offenders serve their sentence with other prison “outcasts” in protective custody, sometimes even in isolation or solitary confinement, for their own safety, leading them to socially withdraw from the “prison society.”

In addition, the empirical literature revealed that prison officers, police officers, and psychologists were found to report an overall negative attitude toward the inmates convicted for a sex offense (Higgins & Ireland, 2009; Hogue, 1993; Ricciardelli & Moir, 2013). Higgins and Ireland (2009) even found that compared with the general public and forensic staff, prison officers held the most negative attitudes toward the sex offenders. Lea, Auburn, and Kibblewhite (1999) established that professionals working with sex offenders experience difficulties, they were often torn between their personal feelings influenced by stereotyping and stigma, and their professional obligation. Moreover, Hogue (1993) found that prison officers not working with sex offenders were more likely to have a negative attitude toward sex offenders than those who do work with sex offenders. This indicates that the stigma prevails when not being confronted with sex offenders, while the professional obligation seems more important if the prison officer comes across offenders convicted for a sexual offense in their everyday practice. The negative treatment by other inmates and negative attitudes of prison staff can lead to additional social isolation often already present in sex offenders due to their limited social skills.

The Current Study

Surprisingly, there have been very little studies on the subject of social isolation during incarceration. The current study will therefore add to the literature by examining to
what extent sex offenders are socially isolated during incarceration. Two hypotheses were formulated and tested based on the literature review described above.

**Hypothesis 1:** Sex offenders were more socially isolated during incarceration than nonsex offenders.

**Hypothesis 2:** Child molesters were more socially isolated during incarceration than other sex offenders (like rapists).

In this study, social isolation was defined as following: A state in which a person has troubled, no or little contact (communication) with others. Three indicators of social isolation were included based on findings in the literature review: (a) perceived relationships with correctional officers, (b) fellow prisoners (these measures give an indication of the frequency and quality of the relationships with others in the correctional facility), (c) feelings of loneliness (the subjective counterpart of social isolation). Therefore, in this study, being more socially isolated meant being less positive about relationships with correctional officers and fellow prisoners and experiencing more feelings of loneliness.

The present study attempts to improve upon prior research in three ways. First, it focuses on the correctional setting. There is an increased attention for the problem of social isolation among sex offenders who return to society after serving their sentence, but less is known about social isolation of sex offenders during incarceration. Second, by using data from a large-scale and nationwide study, previous studies have been hampered by small samples of prisoners. The current study uses a large sample of prisoners, which allows for a comparison between sex offenders and nonsex offenders. Third, by conducting the study in Dutch correctional facilities, existing research is restricted to samples from North America. Since correctional environments differ per country, research in other countries is needed to see whether prior results are generalizable.

**Method**

**Sample**

The present study used data from the Prison Project, a longitudinal, nationwide study on the effects of imprisonment in the Netherlands. The target sample of the Prison Project consisted of all adult male prisoners between 18 and 65 years old, who were born in the Netherlands, and who entered a Dutch pretrial detention centers between October 2010 and April 2011. Prisoners were surveyed several times, both during and after incarceration. Participation in the study was voluntary and prisoners were guaranteed confidentiality. All participants received a personal identification number to link the several waves of the Prison Project and to link the survey data to collected registered data on the Prison Project participants. Afterwards, all information was made anonymous. All participants signed an informed consent declaration, and the study protocol was submitted to, and reviewed positively, by the Ethical Committee for Legal and Criminological research of the VU University Amsterdam.
In the current study, data from the first wave during imprisonment were used. This first wave took place approximately 3 weeks after prisoners’ arrival in pretrial detention. Between October 2010 and April 2011, 3,983 prisoners met the selection criteria. Of these, 2,841 were approached and informed about the study by researchers. The vast majority of the persons who could not be approached had already been released. Of those who could be approached, 1,904 prisoners (67%) participated in a structured interview and 1,748 of them (62%) also completed a self-administered questionnaire. The interview was held in private visiting rooms and conducted by Prison Project employees. The questionnaire was filled out by prisoners in their own cells. If the prisoners could not read the questionnaire, a Prison Project employee would help fill out the questionnaire. In this first wave, prisoners were, for instance, asked about demographics, personality characteristics, life circumstances prior to incarceration (e.g., employment, housing situation, health, family situation, social network), and the circumstances during their current detention.

Register data of the Dutch Prison Service revealed no significant differences between those participating in the first wave of the Prison Project and those refusing to participate regarding their age and marital status. However, compared with refusers, participants were less likely to have been arrested for a property crime (30.7% vs. 36.2%), \( \chi^2(3) = 11.14, p < .05. \)

Within the Dutch correctional facilities, sex offenders are not treated differently than offenders of other types of crimes. There are neither special sex offender facilities nor special daily activities for sex offenders. However, Dutch correctional facilities do have a special care unit. These units are not only reserved for prisoners with mental health problems but also for vulnerable prisoners who will not function well on regular units. Correctional officers working in special care units received additional training, and, tend to be more supportive and caring. Although there are no official statistics, we suspect that sex offenders, and especially child abusers, are more often placed in a special care unit than nonsex offenders. In the “Results” section, we will look into this assumption for the current sample.

**Measures**

**Dependent variables.** The present study uses data from the Prison Project a predesigned large-scale longitudinal research project examining the effects of imprisonment on the further life course of offenders and their families (www.prisonproject.nl). This somewhat limits our information on social isolation as this was not a main goal of the study. However, we were able to include three dependent variables that may indicate social isolation. These dependent variables are perceived relationships with correctional officers and fellow prisoners and loneliness.

First, prisoners were asked about their relationships with both correctional officers (a) and fellow prisoners (b) during the current incarceration. Relationships with correctional officers were measured using five items, like “The correctional officers are nice to me” and “I receive support from the correctional officers when I need it.” Relationships with fellow prisoners were measured with five items, such as “I get on
well with most fellow prisoners” and “There are fellow prisoners who listen to me when I have problems.” Prisoners were asked to indicate on a 5-point scale to what extent they agreed or disagreed with the presented items (1 = strongly disagree, 5 = strongly agree). The scales and items were based on the Dutch Inmate Survey (Mol & Henneken-Hordijk, 2008). Negatively formulated items were reverse coded, so that a higher score reflected a more positive judgment about the relationship. Finally, two summate scales were constructed that measured the perceived relationships of the inmates with both correctional officers as well as fellow prisoners. The summate scales were created by adding the values of the items and dividing this by the number of items. The internal consistency of both scales was good with Cronbach’s alpha’s of .87 (relationships with correctional officers) and .80 (relationships with fellow prisoners).

Second, prisoners were asked about their feelings of loneliness (c) during the current incarceration, using the Loneliness Scale developed by De Jong Gierveld and Van Tilburg (2006). The scale consists of six items, like “I experience a general sense of emptiness” and “There are enough people I feel close to.” The prisoners were asked to rate the extent to which they agreed or disagreed with each item on a 3-point scale (1 = Yes; 2 = More or less of; 3 = No). All items were coded in such a way that higher scores reflected a higher level of loneliness. The values of the items were added and divided by the number of items to create a summated rating scale. Reliability proved reasonable with a Cronbach’s alpha of .74. Loneliness and social isolation are often seen as to separate aspects; however, as we merely have information on feelings of loneliness during incarceration, we assume feelings of loneliness to be an indicator of social isolation during incarceration.

Independent variables. The independent variable in this study was the type of offense the prisoner was prosecuted or convicted for during the current incarceration. This information was obtained from the Judicial Documentation System (JDS) of the Research and Documentation Center (WODC) of the Dutch Ministry of Security and Justice. This database contains information on all registered crimes and convictions in the Netherlands. For every criminal case, it is registered when the case was recorded at the Public Prosecutor’s Office, along with details of the criminal acts and how and by which authority the case was resolved (Wartna, Blom, & Tollenaar, 2011). Data for all Prison Project respondents (prisoners) were extracted from the JDS until December 2013.

Two offending type measures were constructed based on the offense the prisoners were imprisoned for during the study period. This classification was chosen as the offense the prisoner was currently incarcerated for was more likely to become known, as staff members (including correctional officers) can find this information on their computer. Moreover, the interview and questionnaire are conducted with the current incarceration in mind and not previous prison experiences. The first offending type measure distinguished between sexual, property, violent, drug, and other offenses. The second measure differentiated between child abuse, other sexual offenses, and non-sexual offenses. In the Netherlands, rape and sexual assault are defined by 10 different
definitions described in the Dutch Criminal Code section “Misdrijven tegen de zeden,” Crimes against morality (Bijleveld, 2007). The difference between these definitions or articles is reflected in elements such as the use of violence (article 242 and 246 of the Dutch Criminal Code), the vulnerability of victims to protect those most vulnerable (article 243, 244, 245, and 247 of the Dutch Criminal Code), abuse of authority (article 249 of the Dutch Criminal Code) and inciting or being present at the abuse (article 248a through 248c of the Dutch Criminal Code). We used these articles to distinguish between child sexual abuse and other sexual offenses and. According to the Dutch Criminal Code, child sexual abuse concerns victims under the age of 12 (article 244 of the Dutch Criminal Code).

**Control variables.** This study controlled for several background characteristics. First, we accounted for two demographic characteristics: age upon arrival in pretrial detention according to the Dutch Prison Service registration, and ethnicity according to the Municipal Population Register (0 = Dutch background, 1 = non-Dutch background when one or both parents were born outside the Netherlands). Second, using data from the first wave of the Prison Project, we accounted for prisoner characteristics related to their social ties prior to arrest. Variables included having an intimate relationship at the time of arrest that lasted at least 3 months (0 = no, 1 = yes), having children (0 = no, 1 = yes), and being employed at the time of arrest (0 = no, 1 = yes). Third, the present study controlled for prisoners’ mental health problems by using the Dutch adaptation of the Brief Symptom Inventory (BSI; de Beurs & Zitman, 2006; Derogatis, 1975) in the first wave of the Prison Project. Prisoners were asked to indicate on a 5-point scale to what extent they experienced 53 psychological symptoms (0 = not experienced at all, 4 = experienced a lot). The items related, for instance, to depression, anxiety, psychoticism, and interpersonal sensitivity. The total score on the BSI was used as an indicator for the level of mental health problems. A score higher than 0 reflected an increased level of mental health problems. The Dutch BSI has been validated and showed good psychometric qualities (de Beurs & Zitman, 2006). In the current study, the Cronbach’s alpha for the BSI total score was .96. Fourth, we controlled for whether or not the prisoner was housed on a special care unit. In all pretrial detention centers, Prison Project employees asked which units were special care units. Finally, we included the number of prior incarcerations of prisoners by using data of the Dutch Prison Service.

**Analytical Approach**

To examine the extent to which sex offenders are socially isolated during imprisonment, several regression analyses were conducted. Linear regression analyses were used to investigate to how sex offenders and specific types of sex offenders perceive their relationships with correctional officers and fellow prisoners. Linear regression analyses were also used to examine whether sex offenders and specific types of sex offenders experienced more feelings of loneliness than nonsex offenders.
Results

Sample Descriptives

Table 1 presents the descriptive statistics of the sample. The table shows that most of the prisoners were prosecuted or convicted for a violent (40%) or property offense (31%). Almost 5% of the prisoners were imprisoned for a sexual offense. Of these sex offenders, two thirds were prosecuted or convicted for child abuse and one third for other sexual offending.

Looking at the background characteristics of the prisoners, Table 1 shows that, on average, the prisoners were aged 30 years, and 39% of the prisoners had at least one parent who was not born in the Netherlands. About half of the sample had a partner at the time of their arrest, and 45% had children. Almost 40% of the prisoners were employed at the time of arrest. The mean score on the BSI was 0.70 for the sample. Therefore, the prisoners reported, on average, more mental health problems than the general male population (de Beurs, 2004). Almost 10% of the prisoners resided in a special care unit. If we compare sex offenders with nonsex offenders, a cross tabulation revealed that 40% of the sex offenders were housed in a special care unit compared with only 8% of the nonsex offenders. If we look at the specific types of sex offenders, results show that 48% of the child abusers reside on a special care unit, and 27% of the other sexual offenders.

Finally, Table 1 gives an overview on the three different measures that were used as an indicator of social isolation: perceived relationships with correctional officers and fellow prisoners and experienced loneliness. Overall, prisoners in the study perceived their relationships with correctional officers neutral ($M = 3.19$). They were slightly more positive ($M = 3.39$) about their relationships with fellow prisoners. On average, prisoners scored neutral with regard to feelings of loneliness ($M = 1.88$).

Testing the Two Hypotheses

To investigate the extent to which sex offenders and specific types of sex offenders are socially isolated in prison, several regression analyses were performed. Table 2 shows the results of the regression analyses for type of offender and the three measures of social isolation. The table is divided in two models based on the two hypotheses. Model 1 is based on the first hypothesis and examines whether sex offenders differ from other offender types with regard to the three measures of social isolation. Model 2 studies the differences between child abusers, other sex offenders (like rapist), and nonsex offenders for the social isolation measures. As shown in the table, the explained variance was limited, varying from 3.7% to 24.7% for the different models. The results of the regression analyses are described per social isolation measure.

Relationships with correctional officers. The first column of Table 2 shows the results for the regression analysis on the perceived support and relationships with correctional officers. The findings for Model 1 show that sex offenders (reference category) were
significantly less positive about their relationships with and perceived support from the correctional officers than inmates imprisoned for a violent, property, and other type

| Variables                                      | n     | %     | M    | SD   | Minimum | Maximum |
|------------------------------------------------|-------|-------|------|------|---------|---------|
| **Dependent variables**                        |       |       |      |      |         |         |
| Relationships with correctional officers       | 1,729 | 3.18  | 0.74 | 1.0  | 5.0     |         |
| Relationships with fellow prisoners           | 1,721 | 3.38  | 0.56 | 1.0  | 5.0     |         |
| Loneliness                                    | 1,686 | 1.88  | 0.54 | 1.0  | 5.0     |         |
| Being victim of violence by staff members      |       |       |      |      |         |         |
| No                                            | 1,546 | 88.4  |      |      |         |         |
| Yes                                           | 162   | 9.3   |      |      |         |         |
| Missing                                       | 40    | 2.3   |      |      |         |         |
| Being a victim of violence by fellow prisoners |       |       |      |      |         |         |
| No                                            | 1,473 | 84.1  |      |      |         |         |
| Yes                                           | 238   | 13.6  |      |      |         |         |
| Missing                                       | 37    | 2.1   |      |      |         |         |
| **Independent variables**                      |       |       |      |      |         |         |
| Type of offense                                |       |       |      |      |         |         |
| Sexual offense                                 | 76    | 4.5   |      |      |         |         |
| Violent offense                                | 692   | 39.6  |      |      |         |         |
| Property offense                               | 542   | 31.0  |      |      |         |         |
| Drug offense                                   | 199   | 11.4  |      |      |         |         |
| Other offense                                  | 196   | 11.2  |      |      |         |         |
| Missing                                       | 43    | 2.5   |      |      |         |         |
| Type of sexual offense                         |       |       |      |      |         |         |
| Child abuse                                    | 46    | 2.6   |      |      |         |         |
| Other sexual offense                           | 30    | 1.7   |      |      |         |         |
| Nonsexual offense                              | 1,672 | 95.7  |      |      |         |         |
| **Control variables**                          |       |       |      |      |         |         |
| Age at arrest                                  | 1,748 | 30.37 | 10.75| 18.0 | 65.0    |         |
| Ethnicity                                      |       |       |      |      |         |         |
| Dutch background                               | 1,070 | 61.2  |      |      |         |         |
| Non-Dutch background                           | 674   | 38.6  |      |      |         |         |
| Missing                                       | 4     | 0.2   |      |      |         |         |
| Partner at arrest                              |       |       |      |      |         |         |
| No                                            | 882   | 50.5  |      |      |         |         |
| Yes                                           | 866   | 49.5  |      |      |         |         |
| Children                                       |       |       |      |      |         |         |
| No                                            | 934   | 53.4  |      |      |         |         |
| Yes                                           | 791   | 45.3  |      |      |         |         |
| Missing                                       | 23    | 1.3   |      |      |         |         |
| Employed at arrest                             |       |       |      |      |         |         |
| No                                            | 1,062 | 60.8  |      |      |         |         |
| Yes                                           | 682   | 39.0  |      |      |         |         |
| Missing                                       | 4     | 0.2   |      |      |         |         |
| Current mental health problems                 |       |       |      |      |         |         |
| Housed in special care unit                    |       |       |      |      |         |         |
| No                                            | 1,580 | 90.4  |      |      |         |         |
| Yes                                           | 168   | 9.6   |      |      |         |         |
| Number of prior incarcerations                 | 1,241 | 3.40  | 6.45 | 0.0  | 80.0    |         |

| Table 1. Descriptive Characteristics of 1,748 Prisoners. |
of offense. When comparing child abusers, other sex offenders, and nonsex offenders, Table 2 (first column, Model 2) shows no significant differences in perceived relationships with the correctional officers between the three types of offenders (child abusers are the reference category).

In addition, several control variables were found to be significantly related to the perceived relationships with correctional officers. Younger prisoners, prisoners with a non-Dutch background, prisoners who had a partner at the time of the arrest, and prisoners who had been incarcerated before were significantly less positive about their relationships with correctional officers.

Table 2. Linear Regression Analyses for the Three Measures of Social Isolation (N = 1,576-1,620).

| Type of offense (ref = sexual offense) | Relationships with correctional officers | Relationships with fellow prisoners | Loneliness |
|---------------------------------------|------------------------------------------|-----------------------------------|------------|
| Violent offense                        | 0.201*                                   | 0.181*                            | 0.012      |
| Property offense                       | 0.194*                                   | 0.201**                           | 0.027      |
| Drug offense                           | 0.167                                    | 0.188*                            | −0.048     |
| Other offense                          | 0.279**                                  | 0.167**                           | −0.051     |
| Age at arrest                          | 0.013***                                 | −0.003*                           | 0.001      |
| Non-Dutch background                   | −0.223***                                | −0.035                            | 0.007      |
| Partner at arrest                      | −0.086*                                  | −0.070*                           | −0.110***  |
| Children                               | −0.016                                   | −0.007                            | 0.053      |
| Employed at arrest                     | 0.057                                    | 0.037                             | −0.119***  |
| Current mental health problems         | −0.043                                   | 0.004                             | 0.321***   |
| Housed in special care unit            | 0.184**                                  | 0.045                             | −0.059     |
| Number of prior incarcerations         | −0.010**                                 | −0.012***                         | 0.005*     |
| R²                                     | 8.4%                                     | 3.8%                              | 24.7%      |

| Type of offense (ref = child abuser)   |                                           |                                   |            |
| Other sexual offense                   | −0.086                                   | −0.015                            | −0.029     |
| Nonsexual offense                      | 0.175                                    | 0.179*                            | −0.019     |
| Age at arrest                          | 0.013***                                 | −0.003*                           | 0.001      |
| Non-Dutch background                   | −0.213***                                | −0.028                            | 0.003      |
| Partner at arrest                      | −0.098**                                 | −0.075*                           | −0.111***  |
| Children                               | −0.015                                   | −0.003                            | 0.043      |
| Employed at arrest                     | 0.055                                    | 0.036                             | −0.128***  |
| Current mental health problems         | −0.040                                   | 0.005                             | 0.319***   |
| Housed in special care unit            | 0.169**                                  | 0.040                             | −0.051     |
| Number of prior incarcerations         | −0.011***                                | −0.012***                         | 0.007**    |
| R²                                     | 8.2%                                     | 3.7%                              | 24.3%      |

Note. 1 and 2 indicate the model, where Model 1 tests Hypothesis 1 and Model 2 tests Hypothesis 2. *p < .05. **p < .01. ***p < .001.
relationships with the correctional officers. Furthermore, prisoners housed in special care units reported significantly better relationships with the officers than those in the regular units. These findings were similar in the model with six offense types (Model 1) and the model concerning the three offense types (Model 2).

**Relationships with fellow prisoners.** The second column of Table 2 shows the results for the regression analysis on the perceived support and relationships with fellow inmates. Model 1 showed that compared with sex offenders, all other offender types reported significantly more positive relationships with fellow prisoners. When comparing child abusers, other sex offenders, and nonsex offenders (Model 2), the results indicated a significant difference between child abusers (reference category) and nonsex offenders. Nonsex offenders perceived their relationships with fellow prisoners more positively than child abusers. Table 2 shows, however, no significant difference between child abusers and other sex offenders with respect to their relationships with fellow prisoners.

With regard to the control variables, it was found that older prisoners, prisoners with a partner at the time of arrest, and those with prior incarceration spells, were less positive about their relationships with their fellow prisoners.

**Loneliness.** The results for perceived loneliness are displayed in the third column of Table 2. The results show that type of offender was not related to feelings of loneliness in both Models 1 and 2. Sex offenders did not experience a higher level of loneliness compared with nonsex offenders. In addition, no difference was found between child abusers and other sex offenders.

Some control variables were significantly related to the reported feelings of loneliness. Prisoners with a partner and employment at the time of their arrest reported fewer feelings of loneliness. While, prisoners with mental health problems and prisoners with a higher number of prior incarcerations reported significantly higher feelings of loneliness.

**Conclusion and Discussion**

Using a large sample of adult male prisoners, this study attempted to increase knowledge on the extent to which sex offenders felt socially isolated during incarceration compared with nonsex offenders. Three indicators of social isolation were used: (a) perceived relationships with correctional officers, (b) perceived relationships with fellow prisoners, (c) feelings of loneliness. Data were used from the Prison Project, a large-scale, nationwide study in which prisoners were surveyed 3 weeks after arrival in pretrial detention.

The current study hypothesized that sex offenders were more socially isolated during incarceration than nonsex offenders. In regard to this hypothesis, the study revealed that within the Dutch correctional setting sex offenders experienced somewhat more social isolation than prisoners of other types of offenses. First of all, sex offenders were less positive about the support from and relationships with correctional officers.
compared with other prisoners. In addition, sex offenders evaluated their relationships with fellow prisoners less positive than prisoners imprisoned for a violent, property, drug, or other type of offense. However, for the other measure of social isolation, experienced loneliness, no effect of offender type was found.

The finding that sex offenders perceive their relationships with correctional staff and fellow prisoners less positive than nonsex offenders aligns with prior empirical research. Previous studies have shown that sex offenders are often treated negatively by fellow prisoners and correctional staff while incarcerated (e.g., Higgins & Ireland, 2009; Schwabeb, 2005).

Theoretically the different treatment of sex offenders is often explained by stigmatization (Tewksbury, 2005). According to Goffman (1963), a stigmatized individual is one that is believed not to be human; the individual is devalued by the general population and seen as undesirable and different. The label of being an ex-offender has been found to be one of the most stigmatizing statuses (Åkerström, 1986; Goffman, 1963; Winnick & Bodkin, 2008). Yet, even more negative is the status of being a sex offender (Tewksbury, 2005). Several studies have shown that among the general population, convicted sex offenders are thought of as incurable, evil, and predatory (Fox, 2013; Pickett, Mancini, & Mears, 2013; Soothill & Walby, 1991; Spencer, 2009). Additional evidence for the stigmatized status of sex offenders in society are the collateral consequences formed by the criminal justice responses administered in addition to incarceration sentences (e.g., Tewksbury & Lees, 2006; Van den Berg, Bijleveld, Hendriks, & Mooi-Reci, 2014). The findings in the current study could thus indicate that stigmatization of sex offenders in Dutch correctional facilities is a problem. Another explanation suggested in the literature is the limited social skills in sex offenders (e.g., Marshall, 2010). Sex offenders are found to suffer from social deficits, caused by childhood risk factors, such as poor-quality attachments to parents (e.g., Baker et al., 2006; Bumby & Hansen, 1997; Marshall, 2010; Seidman et al., 1994). In adulthood, these poor-quality attachments persist, leading to social deficits that make it difficult for sex offenders to interact with other people, thus limiting their chances on gaining and maintaining meaningful relationships with others (Blake & Gannon, 2011; Marshall, 2010). Unfortunately, the current study was unable to explain the found effects of social isolation, as measures for stigmatization and social skills were not included in the data.

Although we find some evidence that sex offenders experience more social isolation during imprisonment than nonsex offenders, it has to be noted that the found effects are quite small (i.e., low levels of explained variance). There are several possible explanations for this. First, 40% of the sex offenders reside on a special care unit. The prison climate is “softer” on these units, as the population consists of weaker and more vulnerable prisoners, and the correctional officers are additionally trained and more focused on supporting and counseling prisoners. Second, the present study was conducted within the Dutch correctional setting. The prison conditions in the Netherlands are generally considered to be relatively humane and mild. Staff-prisoner relationships are characterized as informal and supportive, and the overall level of violence is low compared with other countries (Dervan, 2011; Dirkzwager &
Kruttschnitt, 2012; Kruttschnitt & Dirkzwager, 2011). Third, most indicators of social isolation were measured when prisoners were incarcerated for 3 weeks. This is a relatively short period. It is possible that stronger effects could be found when sex offenders are incarcerated and exposed to a negative treatment for a longer period. Perhaps fellow prisoners and correctional staff are not aware of the individuals’ status as a sex offender. Once sex offenders are incarcerated for a longer period, the possibility of this awareness by fellow prisoners and correctional staff increases. Moreover, feelings of loneliness may not be reported because they do not yet feel cutoff from their social network on the outside.

The current study also examined a second hypothesis aimed at uncovering whether the level of social isolation differed for child abusers and other sex offenders. The findings showed no differences between sex offenders who abused a child and those who did not; they were found to experience the three indicators of social isolation similarly. This is interesting as previous studies found differences in social skills and levels of stigmatization of child abusers and other sex offenders, which can lead to increased social isolation (e.g., Bumby & Hansen, 1997; Bumby & Marshall, 1994; Tewksbury, 2005; Winick, 1998). A possible explanation for this finding is again awareness. Fellow prisoners and correctional staff might not be aware of the status of sex offender in general, let alone the status of child abuser. Prior studies revealed that incarcerated sex offenders often protect their status as sex offender by not disclosing their offense to fellow inmates or correctional staff out of fear of victimization (Schwaebé, 2005). Child abusers are even more prone to victimization than other sex offenders (Winick, 1998; Tewksbury, 2005). Thus, it is possible that child abusers do not disclose their status, or they merely state being a sex offender (Schwaebé, 2005).

If so, child abusers and other sex offenders might experience similar treatment by fellow prisoners and correctional staff. Another possible explanation for the finding that child abusers and other sex offenders did not differ in their level of social isolation is the fact that almost half of the child abusers are placed in a special care unit compared with almost a third of the other sex offenders. In these special care units, social isolation is likely limited due to presence of more vulnerable fellow prisoners and correctional officers trained for supporting prisoners housed on these units. Finally, a more practical explanation is the relatively low number of individuals in the subgroups. It is difficult to find differences in groups of only 46 and 30 prisoners.

Before discussing the implications of our study, some limitations need to be addressed. First, our measure of social isolation was limited. Within the empirical literature, social isolation is referred to as the absence of meaningful relationships, with loneliness as a one of the possible outcomes (De Jong Gierveld & van Tilburg, 2006). In the current study, we merely looked at how sex offenders experience their relationships with fellow prisoners and correctional staff. Other relationships were not taken into account, for instance, no information was included on the social network outside the facility and the quality of these relationships. If the sex offender has multiple meaningful relationships on the outside, social isolation within the prison environment becomes less likely. This could also explain why no differences were found for the loneliness scale, as social networks on the outside may still be strong, because the offenders were only incarcerated
for a few weeks. Therefore, future studies should look into the relationships of sex offenders outside of prison, to establish social isolation. Second, the classification of the sample members was based on the offense they were currently incarcerated for; thus, the prior offending type was not taken into account. It could be that nonsex offenders in this study actually committed a sexual offense in the past. If fellow prisoners and staff members are aware of the criminal history, this could change the treatment of the prisoner. We were unable to look into this problem; however, we assume that as sexual offending in the criminal history was scarce that the influence would be limited. Yet, future studies should take prior offending type into account. Third, as described above, the present study did not include information on possible explaining mechanisms. Stigmatization and social skills were not included in the measures of the current study. Therefore, one can only hypothesize the influence of these mechanisms on the results, while it is known sex offender often have limited social skills and experience stigmatization in prison as well as in society. Prospective studies should include these measures of stigmatization and social skills. Fourth, this study was conducted within Dutch penitentiary institutions. As described before, the Netherlands is still known for having a relatively mild prison policy (Kruttschnitt & Dirkzwager, 2011). Therefore, the findings of this study may not be generalizable to other countries. Replications of our study in correctional facilities in other countries are needed. Fifth, as stated earlier, the study period was relatively short, after 3 weeks of incarceration prisoners were asked about their experiences. The longer the incarceration, the more these experiences might change, resulting in possible stronger effects. Thus, future research must incorporate multiple moments in time to administer the survey to the respondents. Moreover, future research should incorporate time after incarceration, to study the effect of social isolation during imprisonment on rehabilitation.

Notwithstanding the limitations, the current study holds implications for prison management and prison staff. Evidence was found for somewhat more social isolation in sex offenders compared with prisoners of nonsexual offenses. The relationship with correctional staff was experienced as less positive by sex offenders than other prisoners. Prison staff should be made aware of this and educated to help build similar relationships with sex offenders and nonsex offenders during their incarceration. This could prevent social isolation of sex offenders in the correctional facility. Moreover, sex offenders were found to be more likely to report victimization by fellow prisoners. Awareness of this finding among prison staff should give way to timely intervention that can prevent victimization of sex offenders by fellow prisoners. Subsequently, social isolation in sex offenders could possibly be reduced. Placement of all sex offenders in special care units could possible also reduce social isolation, as the prison climate there is softer and the correctional officers are additionally trained and focuses on supporting and counseling prisoners. However, further research is needed to confirm the indication that sex offenders in special care units are less socially isolated than sex offenders in regular prison units.

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Notes

1. In the Netherlands, the length of imprisonment is relatively short compared with other countries. More than 70% of the prisoners in 2010-2011 were confined for a maximum of 3 months. The median length of imprisonment was 1 month, and the average was 3.6 months (Linckens & de Looff, 2013).
2. As an additional check, a factor analysis was conducted on the items related to the three latent dependent variables: perceived relationships with correctional officers, perceived relationships with fellow prisoners, and loneliness. Results showed separate factors for the three variables.
3. In December 2013, not all prisoners were convicted, yet some were still in pretrial detention. For those prisoners, we included the type of offense the prisoner was prosecuted for.

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