

ARTICLE

Sex Differences in Stigma Reduction toward Minor Attracted Persons (MAPs) via Contact Interventions

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ABSTRACT

Individuals who are sexually attracted to children (i.e., people with pedophilic interests or minor-attracted persons; MAPs) can, and do, live offence-free. Stigmatization and fear of conviction, however, can prevent MAPs from accessing appropriate support and treatment. Previous researchers compared the impact of two interventions – narrative humanization vs. scientific information-in reducing stigma towards people with pedophilic interests and found the former to be more effective. Using freely available secondary data, the present study replicated and extend this previous research by directly examining sex differences on impact of the two interventions. As predicted, females (vs. males) held more negative and stigmatic attitudes towards sex offenders at baseline and, while both interventions showed a positive impact on these negative attitudes, the impact was greater for females. Results are discussed in terms of reducing stigma regarding MAPs by positioning the issue in the public health domain by educating mental health professionals via contact interventions as a means of better protecting children and preventing child sexual abuse.

Keywords: Pedophilia; Stigma; Attitudes; Narrative humanization; Sexual abuse prevention

1. Introduction

“Minor attracted person” or MAP refers to an individual who experiences sexual attraction to prepubes-

cent (i.e., pedophilic interest to children <12 years old) or pubescent (i.e., hebephilic interest to children and early adolescents ~11–14 years old) youth; children under the age of consent^[1]. Pedophilic disorder falls

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under the paraphilic disorder category within the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5-TR^[2]). Hebephilia is not included in the DSM-5-TR, although the criteria extend to age 13 years old.

Historically, MAPs have been called “pedophiles”. The recent attempts to shift language to “MAP” is intended to reduce stigma and enhance the chances that MAPs at risk for harming children and youth will seek help. Emphasizing someone’s personhood instead of their membership in a group as defined by a diagnosis or condition decreases stigma^[3]. Stigmatization and punitive attitudes arise from the misconception that pedophilic disorder is synonymous with sexual offender. A person can meet the criteria for pedophilic disorder because they experience marked personal distress or interpersonal difficulty due to wrestling with sexual urges and fantasies without ever having acted on those urges. If people do not understand this, then they may form the inaccurate assumption that being a MAP means the person has acted, or is at high risk to act, in a sexual manner against children. Research shows that MAPs comprise a minority of those who offend in a sexual manner^[4], and that most who offend in a sexual manner are primarily attracted to adults^[5].

Recent research has attempted to understand why avoidance of and punitive attitudes toward non-offending pedophilic men is so strong among society (even when it is clear the individual has not committed any sexual crimes). For example, Jahnke^[6] asked 205 participants (58% male) to read one of four vignettes describing a pedophilic (i.e., MAP) or teleiophilic (i.e., sexual preference for sexually mature adults) man named “Jim” experiencing a sexually transgressive impulse toward a girl (i.e., a child/youth) or woman (i.e., an adult), respectively. Results showed that the participants’ desire to punish or avoid males with sexually transgressive impulses was stronger when these impulses were directed at girls versus women. Even when it was made clear that “Jim” had not offended and was highly unlikely to offend, participants still perceived him to be dangerous. A higher tendency to give socially desirable responses was found to be associated with higher punitive attitudes and higher perceived dangerousness.

Participants reported fear, disgust, anger, and reduced pity when thinking about a MAP. Moreover, female (vs. male) participants were more likely to experience fear and disgust and a greater desire to punish “Jim”, possibly because the vignette targets were female.

Interestingly, research on sex differences in attitudes toward sex offenders in general (vs. MAPs specifically) has produced mixed results. Many studies have found no differences in attitudes between male and female respondents, while some studies have found that females are more fearful of sexual offenders than males, and other studies have found that females hold less negative attitudes than males (for summary see Willis et al.^[7]). Willis and colleagues^[7] investigated public attitudes toward sex offenders in New Zealand (305 female, 96 male; *Mage* = 31.4 years, *SD* = 10.97). Results showed that females (vs. males) held significantly more negative feelings toward, and greater desire for social distancing from, sex offenders and tended to overestimate their risk for recidivism. These findings are not surprising given females’ significantly greater risk to experience sexual violence. According to the U.S. Centers for Disease Control’s 2016/17 Report on Sexual Violence^[8], 26.8% of women (vs. 3.8% of men) have been raped in their lifetimes. More broadly, 54.3% of women and 30.7% of men have experienced “contact sexual violence” (i.e., rape, being made to penetrate, sexual coercion, and/or unwanted sexual contact) in their lifetimes^[8].

Stigmatization of MAPs, however, has consequences such as marginalization and dehumanization^[9], as well as internalized stigmatization^[10]. Internalized stigmatization has adverse effects on the individual. MAPs can live in fear of their sexual interests being discovered by others, leading to high levels of stress, loneliness, low self-esteem, and mental health issues, including chronic suicide ideation^[11]. Stigmatization can lead to avoidance of help-seeking^[12] but also result in professionals’ unwillingness to provide treatment to MAPs^[13]. Stiers-Glenn^[14], for example, found that over 95% of psychotherapists in Germany were unwilling to work with patients diagnosed with pedophilia due to negative feelings and attitudes toward this group. In Finland, a public health survey of 352 clinical practitioners (medical doctors, psychologists, psychotherapists, and other

health care personnel) found that most (65%) rated their skills and knowledge as poor or insufficient concerning the treatment of persons with pedophilia; 38% rated their personal attitudes as equally inadequate^[15].

Reducing stigma toward MAPs could facilitate treatment access and reduce risk to minors. Anti-stigma interventions can include advocacy, education, and contact^[16]. An example of advocacy would be protests that aim to target and reduce media endorsement of stereotypes. An educational approach could challenge myths, such as that all MAPs act in a sexual manner against a child and provide more fact-based information. Education has been found to be more effective with adolescents, while contact interventions have been found to be more effective with adults^[17]. Contact interventions promote interactions with members of the stigmatized group and encourage participants to adopt a more empathetic stance vis-à-vis the stigmatized population (i.e., put themselves in their shoes).

Compared to advocacy and education, contact interventions have been found to be most effective in reducing stigma towards MAPs. For example, Jahnke et al.^[18] tested a 10-minute online intervention (i.e., educational material plus video clip about a person with pedophilia) to reduce stigma and increase motivation to work with MAPs. Psychotherapists in training were randomly assigned to either anti-stigma intervention ($n = 68$) or control group ($n = 69$). In the anti-stigma intervention, participants watched a 5-minute video clip from the Austrian documentary “Outing” wherein a young student discusses his sexual interest in children, therapeutic experiences, and mental health struggles. In the control condition, participants received information about violence-free parenting. Results showed that endorsement of negative stereotypes pertaining to perceived controllability and dangerousness, as well as feelings of anger and desire for social distancing were significantly reduced post-intervention in the anti-stigma condition as compared to the control group. Interestingly, despite these findings, participants’ motivation to work with MAPs remained unchanged.

In 2018, Harper, Bartels, and Hogue^[19] compared

the effect of two anti-stigma interventions (narrative humanization and scientific information) on attitudes toward MAPs using a student sample ($N = 100$; 81% female). In the narrative humanization condition, participants watched a 5-minute video clip from a UK-based documentary entitled: *The Paedophile Next Door*. In this clip, “Eddie”, a self-identifying, non-exclusive, and non-offending MAP, shares his experiences discovering his sexual orientation and the lack of services available for people like him who would like further support to remain offence-free. In the scientific information condition, participants watched a 5-minute video clip from the same UK documentary wherein psychologist, Dr. James Cantor, describes his research into the neurobiological basis of MAP as a sexual orientation (*Mysteries of the Mind: The Pedophile’s Brain (HD)*^[20]). At the end of each video, the protagonist asserts the value of early intervention prior to the commission of sexual offences as an effective way of preventing child sexual abuse. As predicted, Harper et al.^[19] found that both interventions led to reductions in stigmatization and punitive attitudes about pedophiles. However, the size of the effect of the manipulation was much larger in the narrative humanization condition ($dz = 1.20$) than in the scientific informative condition ($dz = 0.57$).

As a follow up study in 2022, Harper and colleagues^[9] extended their research by comparing the same two anti-stigma interventions using a longitudinal experimental design. The sample was comprised of 950 participants at baseline and post-intervention (50% female; $M_{age} = 36.78$ years, $SD = 13.75$); and at 4-month follow-up with 539 participants (51% female; $M_{age} = 39.83$ years, $SD = 13.05$). Like their 2018 study, Harper and colleagues^[9] used the Attitudes to Sex Offenders Scale (ATS-21^[21]) to establish baseline levels of attitudes toward people convicted of sexual offences, as well as the Stigma and Punitive Attitudes Scale (SPS^[22]) which was used to assess participants’ perceptions and responses to people with pedophilic sexual interests (i.e., with subscales of dangerousness, intentionality, deviance, and punitiveness). In Harper et al.’s 2022 study^[9],

the SPS subscales were completed at baseline, post-intervention, and 4-month follow-up. Results showed that perceptions of dangerousness and punitive attitudes toward pedophiles were significantly reduced following the presentation of a video with significant effects holding (although to a lesser degree) after four months. In contrast to Harper et al.'s 2018 study^[19], however, there was no significant difference in these effects between the two experimental conditions, suggesting that both interventions—narrative humanization and scientific information—were equally effective in reducing negative attitudes.

In both studies^[9,19], Harper and colleagues covaried age, sex, and total ASI-21 scores in their analysis. The present study sought to extend their work by specifically testing the impact of sex on the respective interventions. We predicted that females (vs. males) would show: 1. significantly more stigma and negative attitudes toward sex offenders at baseline; 2. a greater magnitude of reduction in stigma and negative attitudes from pre-to-post-to 4-month follow-up; with 3. more impact by the narrative humanization versus scientific information condition.

2. Methodology

This study utilized secondary data derived from Harper et al.^[9], which is freely available through the Center for Open Science (see <https://osf.io/nhuqg/files/osfstorage>) webpage. The data set was created, deidentified, and shared by Harper et al.^[9]. Data cleaning was conducted prior to analysis to ensure no errors in the original data file. Similar to the approach used by Harper et al.^[9], listwise deletion was used to address any missing data and ensure that all analysis was run with complete datasets. This resulted in the exclusion of three participants bringing the total population size to 947. Analyses were done using SPSS 28.

2.1 Measures

Demographics

Participants had been provided the option of selecting “Male” or “Female” to identify sex. Age data

also were collected.

Attitudes Towards Sex Offenders Measure

The ATS-21^[21] is a 21-item measure derived from the original ATS-36^[23], which is commonly used to assess attitudes toward sexual offenders. While this measure does not directly ask about MAPs, it has been found that participants typically report completing the ATS-21 with “pedophiles” in mind^[24]. Each item is scored on a 5-point Likert scale from 0 (*strongly disagree*) to 4 (*strongly agree*) with a potential scoring range of 0–84. High scores indicate positive attitudes toward sexual offenders^[20]. In Harper et al.'s most recent study^[9], the ATS-21 demonstrated excellent internal consistency ($\alpha = 0.94$).

Stigma and Punitive Attitudes Scale

The SPS^[22] is a 30-item scale designed to examine attitudes toward the stigmatization of pedophiles. SPS subscales assess perceptions of dangerousness (5-items; e.g., “pedophiles are dangerous for children”; $\alpha_{\text{baseline}} = 0.67$; $\alpha_{\text{post-intervention}} = 0.78$; $\alpha_{\text{follow-up}} = 0.75$); intentionality (6-items; e.g., “pedophilia is something that you choose for yourself”; $\alpha_{\text{baseline}} = 0.88$; $\alpha_{\text{post-intervention}} = 0.85$; $\alpha_{\text{follow-up}} = 0.88$); deviance (6-items; e.g., “pedophiles are sick”; $\alpha_{\text{baseline}} = 0.57$; $\alpha_{\text{post-intervention}} = 0.57$; $\alpha_{\text{follow-up}} = 0.53$); and punitiveness (13-items; e.g., “pedophiles should be pre-emptively taken into custody”; $\alpha_{\text{baseline}} = 0.91$; $\alpha_{\text{post-intervention}} = 0.91$; $\alpha_{\text{follow-up}} = 0.92$). Each item is answered using a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Each subscale score reflects the sum of scores for each domain. The measure has a potential scoring range of 0–35 for dangerousness, 0–42 for intentionality, 0–42 for deviance, and 0–91 for punitiveness, with high scores indicating negative views in relation to each stigma domain^[22].

Video Manipulation

Harper et al.^[9] used two 5-minute video clips derived from a 2015 UK television documentary *The Paedophile Next Door*. In the narrative humanization video clip, a self-identifying, non-exclusive, and non-offending MAP (“Eddie”) provides information about his discovery of his sexual orientation, experience as a MAP,

and lack of services for individuals like him who seek to remain offence free. In the scientific information video clip, a clinical psychologist and sexologist (Dr. James Cantor) speaks about his research on the neurobiological basis of pedophilia as a sexual orientation.

3. Results

The average age of the 947 participants (50% female) was 36.59 years ($SD = 12.7$); males: 36.36 years ($SD = 14.97$), females: 37.20 years ($SD = 12.41$). An independent samples t -test indicated that the two sexes did not differ significantly in age,

$t(945) = -0.94, p = 0.35$.

To test the first hypothesis, a one-way ANOVA was conducted with sex as the independent variable and baseline scores of the ATS-21 and SPS subscales as dependent variables. At baseline, females (vs. males) revealed significantly more negative attitudes toward sex offenders as measured by the ATS-21 and significantly higher perceptions of sex offenders as being dangerous, intentional (volition) in their actions, deviant, and deserving of punishment **Table 1** contains the zero-order correlations between all dependent variables. **Table 2** contains descriptive statistics as a function of sex at baseline.

Table 1. Zero-order correlations of dependent variables at baseline.

Measure	1	2	3	4	5
1. ATS-21	---				
2. SPS-Dangerousness	-.59**	---			
3. SPS-Intentionality	-.53**	.49**	---		
4. SPS-Deviance	-.37**	.43**	.21**	---	
5. SPS-Punitiveness	-.77**	.60**	.57**	.39**	---

Note. ** $p < .001$; ATS-21 = Attitudes Towards Sex Offenders Measure; SPS = Stigma and Punitive Attitudes Scale.

Table 2. Descriptive statistics of sex at baseline.

Measure	Total		Male		Female		t-test	
	M	SD	M	SD	M	SD	F	p
1. ATS-21	33.52	13.59	36.18	13.19	30.93	13.47	36.79	<.001
2. SPS-Dangerousness	5.39	0.92	5.28	0.92	5.51	0.91	14.95	<.001
3. SPS-Intentionality	4.03	1.39	3.94	1.34	4.12	1.44	4.16	.04
4. SPS-Deviance	5.10	0.85	5.09	0.87	5.19	0.82	11.22	<.001
5. SPS-Punitiveness	4.33	1.19	4.09	1.14	4.57	1.19	41.57	<.001

Note. ATS-21 = Attitudes Towards Sex Offenders Measure; SPS = Stigma and Punitive Attitudes Scale. M = Mean; SD = Standard Deviation; F = F-Statistic value; p = Probability value.

For the second hypothesis, a series of repeated measures ANOVAs were conducted to test the impact of the between-subject variables: condition (narrative humanization vs. scientific information) and sex (male vs. female), on the within-subject variables: SPS subscales of dangerousness, intentionality, deviance, and punitiveness, at three-time points [baseline (i.e., T1), post-intervention (i.e., T2), and 4-month follow-up (i.e., T3)] with age and total

ATS-21 scores as covariates in the model.

3.1 SPS-Dangerousness (i.e., potential for harm to others)

For SPS-Dangerousness, there was a significant multivariate effect of time, $F(2, 531) = 5.00, p < 0.007, \eta_p^2 = 0.02$; a significant 2-way interaction between time and ATS-21, $F(2, 531) = 11.00, p < 0.001, \eta_p^2 = 0.01$;

and a significant interaction between time and sex, $F(2, 531) = 3.31, p = 0.02, \eta_p^2 = 0.01$. Mauchly's test indicated no violation of the assumption of sphericity, $X^2(2) = 3.26, p = 0.20$. Within subjects effects revealed a significant main effect of time on perceptions of dangerousness, $F(2, 1064) = 4.63, p = 0.01$; and a significant 2-way interaction between time and ATS-21, $F(2, 1064) = 11.54, p < 0.001$; and time and sex, $F(2, 1064) = 3.79, p = 0.01$. No other interactions were significant. Perceptions of dangerousness decreased significantly from T1 to T2 and rebounded from T2 to T3, but not to baseline levels; all were significantly different at the $p < 0.001$ level. Pairwise comparisons indicated a significant difference between males and females at T2, $F(1, 532) = 5.12, p = 0.02$, with females showing a more precipitous reduction in perceptions of dangerousness from T1 ($EM = 5.40, SE = 0.04$) to T2 ($EM = 4.61, SE = 0.05$) as compared to males (T1 $EM = 5.40, SE = 0.04$; T2 $EM = 4.77, SE = 0.05$). See **Figure 1**.

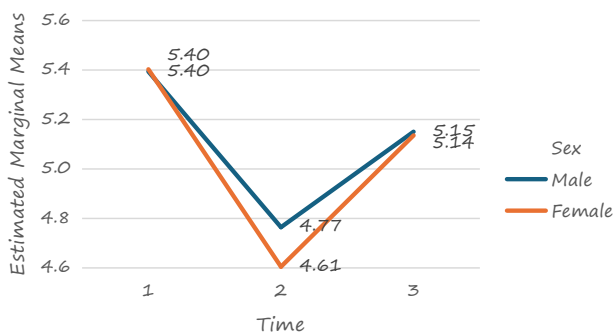


Figure 1. Estimated marginal means of SPS-Dangerousness across three time points by sex.

Note. 1 = Baseline; 2 = Post-Intervention; 3 = 4-month follow-up

3.2 SPS-Intentionality (i.e., volition or controllability of urges)

For SPS-Intentionality, there was a significant multivariate effect of time, $F(2, 531) = 9.86, p < 0.001, \eta_p^2 = 0.04$; a significant 2-way interaction between time and ATS-21, $F(2, 531) = 4.60, p = 0.01, \eta_p^2 = 0.02$; and an interaction between time and condition, $F(2, 531) = 4.61, p = 0.01$. Mauchly's test indicated violation of assumption of sphericity, $X^2(2) = 18.80, p < 0.001$ and degrees of freedom were corrected using Green-

house-Geisser. Within subjects effects revealed a significant main effect of time, $F(2, 1028.218) = 8.19, p < 0.001$; and a significant 2-way interaction between time and ATS-21, $F(2, 1028.218) = 3.75, p < 0.03$; and a significant 2-way interaction between time and condition, $F(2, 1028.218) = 3.76, p = 0.02$. No other interactions were significant. Perceptions of intentionality decreased significantly from T1 to T2 and rebounded from T2 to T3, but not back to baseline levels; all were significantly different at the $p < 0.001$ level. Pairwise comparisons indicated a significant difference between the two conditions at T2 with a trend ($p = 0.06$) for a difference at T3. The reduction at T2 was greater in the scientific informative condition ($EM = 3.42, SE = 0.07$) as compared to the narrative humanization condition ($EM = 3.72, SE = 0.07$); however, the reduction rebounded significantly ($p < 0.001$) from T2 to T3 ($EM = 3.62, SE = 0.07$) although not to baseline levels. By comparison, reductions in perceptions of intentionality in the narrative humanization condition remained stable from baseline to post-intervention to follow-up (T1 $EM = 4.11, SE = 0.07$; T2 $EM = 3.72, SE = 0.07$; T3 $EM = 3.81, SE = 0.07$) with no significant rebound at T3 ($p = 0.11$). See **Figure 2**.

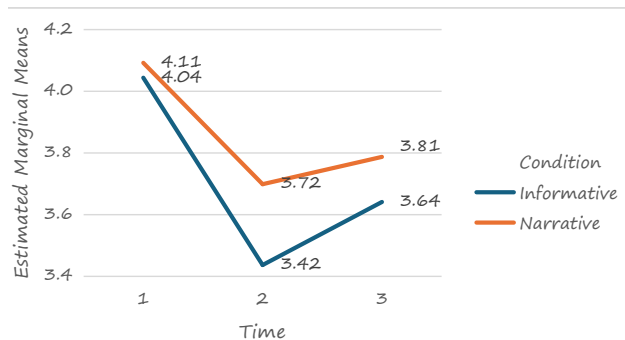


Figure 2. Estimated marginal means of SPS-Intentionality across three time points by condition.

Note. 1 = Baseline; 2 = Post-Intervention; T3 = 4-month follow-up

3.3 SPS-Deviance (i.e., sexual behaviour is pathological)

For SPS-Deviance, there was a significant multivariate effect of time and sex, $F(2, 531) = 4.36, p = 0.01, \eta_p^2 = 0.02$, as well as time and condition, $F(2, 531) = 19.17, p < 0.001, \eta_p^2 = 0.07$. Mauchly's test

indicated violation of assumption of sphericity, $X^2(2) = 44.53, p < 0.001$, and degrees of freedom were corrected using Greenhouse-Geisser. Within subjects effects indicated a significant 2-way interaction between time and condition, $F(1.85, 984.780) = 14.07, p < 0.001$, and time and sex, $F(1.85, 984.780) = 3.31, p = 0.04$. There were no other significant main effects or interactions. Pairwise comparisons indicated a significant difference between males and females in perceptions of deviance at T2 $F(1, 532) = 4.13, p = 0.04$, but not at T1, $F(1, 532) = 0.12, p = 0.73$, or T3, $F(1, 532) = 2.06, p = 0.15$. Males' perceptions of deviance did not change significantly from T1 ($EM = 5.08, SE = 0.04$) to T2 ($EM = 5.11, SE = 0.04$) to T3 ($EM = 5.06, SE = 0.04$), while females' perceptions of deviance dropped precipitously from T1 ($EM = 5.10, SE = 0.04$) to T2 ($EM = 4.99, SE = 0.04$) and held at T3 ($EM = 4.97, SE = 0.04$). See **Figure 3**. Deviance scores were significantly lower in the narrative humanization condition ($EM = 4.93, SE = 0.04$) as compared to the scientific informative condition ($EM = 5.16, SE = 0.04$) at T2. See **Figure 4**.

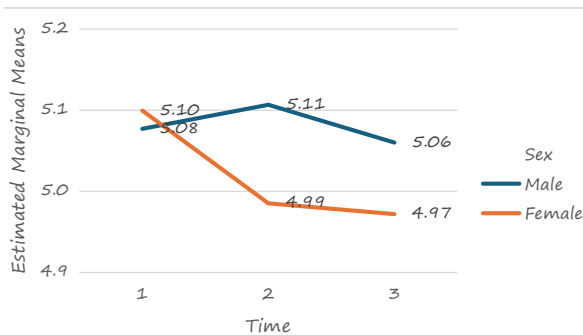


Figure 3. Estimated marginal means of SPS-Deviance across three time points by sex.

Note. 1 = Baseline; 2 = Post-Intervention; 3 = 4-month follow-up

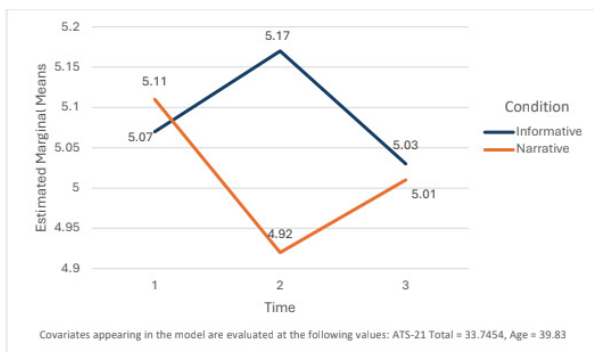


Figure 4. Estimated marginal means of SPS-Deviance across three time points by condition.

Note. 1 = Baseline; 2 = Post-Intervention; 3 = 4-month follow-up

3.4 SPS-Punitiveness (i.e., desire to inflict punishment)

For SPS-Punitiveness, there was a significant effect for time, $F(2, 531) = 16.87, p < 0.001, \eta_p^2 = 0.06$, and an interaction between time and sex, $F(2, 531) = 5.37, p = 0.005, \eta_p^2 = 0.02$. Mauchly's test indicated that the assumption of sphericity had been violated, $X^2(2) = 60.97, p < 0.001$, so degrees of freedom were corrected using Greenhouse-Geisser. Within-subjects effects indicated a significant main effect of time, $F(2, 599.837) = 13.28, p < 0.001$, and a significant 2-way interaction between time and sex, $F(2, 599.837) = 4.03, p = 0.02$. There were no other significant interactions. Perceptions of punitiveness decreased significantly from T1 ($EM = 4.28, SE = 0.03$) to T2 ($EM = 3.85, SE = 0.04$) and rebounded from T2 to T3 ($EM = 4.06, SE = 0.04$), but not to baseline levels; all were significantly different at the $p < 0.001$ level. Pairwise comparisons indicated females ($EM = 4.36, SE = 0.05$) scored significantly higher than males ($EM = 4.22, SE = 0.05$) in punitiveness scores at T1, but not at T2 (female $EM = 3.86, SE = 0.05$; male $EM = 3.84, SE = 0.05$) or at T3 (female $EM = 4.07, SE = 0.05$; male $EM = 4.05, SE = 0.05$). Both males and females showed significant reduction in punitive attitudes from baseline to post-intervention, which held at four month follow-up; all were significantly different at the $p < 0.001$ level. See **Figure 5**.

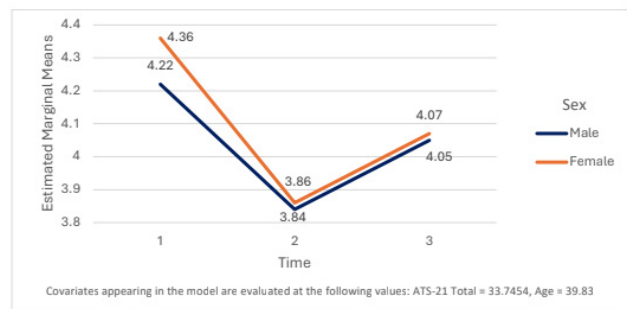


Figure 5. Estimated marginal means of SPS-Punitive across three time points by sex.

Note. 1 = Baseline; 2 = Post-Intervention; 3 = 4-month follow-up

4. Discussion

This study sought to extend the work of Harper and colleagues^[9,19] by specifically testing the impact of sex

on two contact interventions designed to reduce stigmatized attitudes about sex offenders; namely, narrative humanization and scientific information. Examining potential sex differences directly was thought to be important given the implications. For example, females are more apt to be the victims of sexual violence and, therefore, could be expected to hold more negative perceptions and to be more fearful of those at risk to perpetrate sexual violence. Surprisingly, the literature in the area is somewhat mixed. There is some evidence that exposure to fact-based information about sex offenders can reduce stigma and, perhaps, fear. More accurate perceptions could enhance accuracy of risk perception and safety. Moreover, females comprise the vast majority (over 70%) of practicing psychologists and psychotherapists. If prevention of sexual abuse is to be achieved through encouraging MAPs (and others at risk for offending in a sexual manner) to access mental health professionals, then these professionals need to be well informed and prepared to accept such referrals.

Findings from the present study showed that females (vs. males) held significantly more negative and stigmatized attitudes toward sex offenders at baseline, but they also appeared to benefit more from both interventions. Results showed immediate reductions in perceptions of dangerousness, intentionality, deviance (only for females), and punitiveness from baseline to post-intervention across both conditions. Perceptions of dangerousness (i.e., risk to inflict harm on others) decreased significantly from baseline to post-intervention, and although levels rebounded significantly from post-intervention to 4-month follow-up, they did not resume baseline. In both conditions, females (vs. males) showed a significantly greater decline in perceptions of dangerousness from baseline to post-intervention, attaining levels comparable to males at 4-month follow-up. Collectively, these findings suggest that exposure to fact-based information about sex offenders, whether from a personal account or scientific expert, can modify perceptions of risk.

Negative perceptions of intentionality (i.e., amount of control or volition over pedophilic sexual urges) also declined from baseline to post-interven-

tion but, in this case, there was a significant difference between the two interventions. Perceptions of intentionality showed a greater decline in the scientific informative (vs. narrative humanization) condition. This decline rebounded significantly, however, from post-intervention to 4-month follow-up, although levels did not resume baseline. The same pattern of results did not occur in the narrative condition where the significant reduction from baseline to post-intervention remained stable from post-to-follow-up. This finding suggests that exposure to a person's story about their lived experiences as a MAP (i.e., hearing a personal account vs. educational information) may yield a more enduring impact. Of course, more research is required to confirm this proposition.

Regarding perceptions of deviance (i.e., perspective that pedophilia is pathological and in need of treatment), females showed a precipitous decline from baseline to post-intervention in both conditions; a decline that was sustained at 4-month follow-up. By comparison, males showed no significant change across the three time points. Overall, deviance scores differed significantly between the two conditions at post-intervention with significantly lower scores in the narrative humanization versus scientific informative condition. These findings offer optimism that such contact interventions could be employed to enhance mental health professionals' (those who identify as female, at least) amenability to providing services to individuals at risk to offend in a sexual manner. Finally, although females (vs. males) showed significantly greater tendencies to respond punitively to sex offenders at baseline, both males and females showed a significant reduction in punitive attitudes from baseline to post-intervention, which held at follow-up. It is important to note that the deviance subscale demonstrated poor internal consistency at each time point so results must be interpreted with caution.

The topic of sex offenders can elicit strong and polarized views from the general public to mental health care professionals to criminal justice policy makers. Too often these views arise from inaccurate

stereotypes and misinformation. Research shows that exposure to fact-based knowledge of sexual violence versus media-fuelled narratives can allow individuals to think more critically and accurately when forming perceptions ^[25]. Research also shows that professionals who work with sex offenders endorse fewer negative stereotypes and hold more positive attitudes than those without similar professional experience ^[26]. Similar results have been found with police officers ^[27] and prison officers ^[23]. Moreover, at least one study found that attitudes toward sex offenders played a bigger role in sentencing decisions than either the offenders' intent (spontaneous or planned) or the degree of remorse they exhibited ^[28].

The findings of the present study add to this growing literature by highlighting that consideration of sex differences is important in the education and training of professionals (mental health, forensic, police, courts, corrections) to work with individuals at risk to offend in a sexual manner, including MAPs. We know that females have more reason to fear these individuals, and to harbour more negative perceptions and stigmatic responses, than males. On the other hand, females appear to be more amenable to modifying perceptions if presented with accurate information and, perhaps, especially when exposed to a narrative that humanizes the individuals that they fear. By decreasing the stigma that surrounds MAPs, increasing their access to professional resources, and moving pedophilia into the public health domain, we can better protect our children and prevent child sexual abuse.

Author Contributions

All authors' contributions included conception and design of study, data analyses, and writing/editing manuscript. Jessica Gaudette performed the bulk of the contributions as part of her undergraduate honours thesis. Drs. Margo Watt and Christopher Lively co-supervised Jessica's work.

Conflict of Interest

The authors have no conflicts of interest to disclose.

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Ethics statement

Canada's Tri-Council Policy Statement (TCPS) outlines ethical expectations when conducting human-based research. The TCPS also outlines ethical considerations regarding the use of secondary datasets and informed consent. Our research utilized a freely available and deidentified secondary dataset provided by the original researchers ^[9], who ensured that informed consent was obtained from participants. Following the guidelines provided by the TCPS regarding our use of this secondary data, we obtained ethical clearance from the Research Ethics Board at St. Francis Xavier University. Approval of this research was granted on 5 December 2023 (Research Ethics Protocol #26787).

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