

### ESM 3. Further methods

#### **Recruitment**

The convicted offender groups were recruited from and tested at forensic psychiatric hospitals and prisons. The CC were recruited from university staff, factories, job centers and a center for poor and homeless people via e-mail, leaflets or personal communication. The CC partook in a lottery with the reward of two € 300 vouchers of a travel agency. Participants using psychopharmacological medications that could alter their cognitive capacities were excluded. Two participants were removed due to ambiguous group allocation as the age of the youngest victim was 14 for both participants but the actuarial measure of pedophilic interest indicated pedophilic interest and/or they had an earlier diagnosis of pedophilia. Participants gave their fully informed consent before engaging in the study. The ethical committee of the Medical School of the University of Regensburg, Germany, approved the study.

#### **Apparatus and Materials**

The software Presentation® version 14.8 (Neurobehavioral Systems, 2010) on 2.8 GHz iMac© computers with 24-inch LED-monitors were used to display the stimuli and record the RTs. The distance to the computer screen was 90 cm. Participants were tested individually.

We assessed sexual orientation with the Sell Assessment of Sexual Orientation (SASO; Sell, 1996), a self-report questionnaire on sexual interest in men and women. Based on this measure we divided the participants into distinct groups with mainly heterosexual or mainly homosexual interest. In both sex offender groups, we additionally used the sex of the victims to assess sexual orientation. Participants with at least one male victim were coded as mainly homosexual and participants with only female victims were coded as mainly heterosexual.

Moreover, participants filled in those items of the Multiphasic Sex Inventory (MSI; Nichols & Molinder, 1984) which addressed sexual fantasies or behavior towards children. To measure participant's intelligence, we used two subscales, "Coding" and "Picture Absurdities", of the Beta III (Kellogg & Morton, 1999), which is a non-verbal intelligence test useful in low-functioning and low-skilled individuals. We used the age-adjusted scaled scores in the analyses.

## **Procedure**

The study was conducted in Finland, Germany and Italy and included four paradigms in total, including CRT-NRP and CRT-VPS which are the focus of the present article. The other two paradigms (i.e., Snake-in-the-Grass and Rapid Serial Visual Presentation) also used the VPS as stimulus material. The order in which these four paradigms were presented was counterbalanced across participants to control for fatigue or practice effects. After giving their informed consent, participants were interviewed about the exclusion criteria and asked to complete the two subscales of Beta III. Each paradigm was separately instructed and started with a few practice trials.

In the CRTs, participants were presented one picture at a time with an orange dot (RGB: 255,130,10; Wingdings, font size 20) superimposed in one of five possible locations: the four corners or in the center of the image. The participants were instructed to identify the location of the dot and give their response as quickly as possible by using the numbers on the number-pad of the keyboard that corresponded with the dot's position on the picture (1, 3, 5, 7 and 9). The CRT-NRP consisted of 120 trials and the CRT-VPS had 135 trials. The trials started with a fixation cross shown for 1500 ms, followed by a target stimulus that was presented until response. After the response, there was a grey blank page for 500 ms before the next trial. In one fifth of the trials a scrambled picture was shown. Each dot location was presented the same amount of times. Moreover, the trials with pictures depicting persons were

balanced for gender, explicitness (clothed, nude) and maturity level of the stimuli. Every picture was presented once during the experiment and the order of the pictures was randomized regarding all above stimulus characteristics.

Upon completion of the computerized tests, participants filled in the SASO (Sell, 1996), the MSI (Nichols & Molinder, 1984) and another questionnaire that was not included in the present study.

## References

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- Nichols, H. R., & Molinder, I. (1984). *Multiphasic Sex Inventory*. Tacoma, WA: Crime and Victim Psychology Specialists.
- Sell, R. L. (1996). The Sell Assessment of Sexual Orientation: Background and scoring. *Journal of Gay, Lesbian and Bisexual Identity*, 1(4), 295–310.