

Is psychopathy a dynamic risk factor? **KRIMZ**

KRIMINOLOGISCHE ZENTRALSTELLE

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An empirical investigation of treatment-induced changes in psychopathic personality traits

Background

Historically, the research on treating offenders with psychopathy in forensic settings has been pervaded by the assumption of treatment resistance and a resulting clinical pessimism. However, more recent results have indicated that:

- Adherence to RNR principles¹
- Intense multimodal, CBT-based programs
- Highly trained staff

could reduce the risk of recidivism for offenders with psychopathy^{2,8,10}.

As treatment in German Social Therapy Units (STUs) utilizes these approaches, it could be effective in treating offenders with psychopathy.

It is still unclear whether treatments for offenders with psychopathy also affect their psychopathic personality traits¹¹. As such, psychopathy is currently being treated as a behavioral entity⁸ and a stable risk factor^{5,9}.

Can psychopathic personality traits be significantly changed through treatment in a German STU?

Correspondingly, can psychopathy be seen as a dynamic risk factor?

Methods

The study's design was a within-subject, pre-post comparison of measures of psychopathy for persons with violent and sexual offense histories.

Pre-treatment measurements were conducted within the first 8 weeks of admission into the STU Hamburg. Follow-up measurements occurred after 24 months of treatment or were conducted shortly before release or relocation if participants were treated for less than 24 months.

Participants were $N = 187$ male persons with violent (34.2%), sexual (56.7%) and other (9.1%) offense histories aged between 21 and 68 years ($M = 37.87$, $SD = 12.21$).

The utilized measures consisted of the Psychopathy Checklist-Revised^{3,4} and the Interpersonal Measure of Psychopathy⁷. Participants with PCL-R scores ≥ 17 were considered offenders with high psychopathy in this sample.

Repeated measures ANOVAs and dependent t tests were used to analyze significant changes in PCL-R and IM-P scores between and within groups.

The Reliable Change Index (RCI)⁶ was calculated to investigate whether any changes in the within-subject dependent analyses were reliable on an individual level. Participants could either improve, deteriorate, or remain unchanged on the RCI.

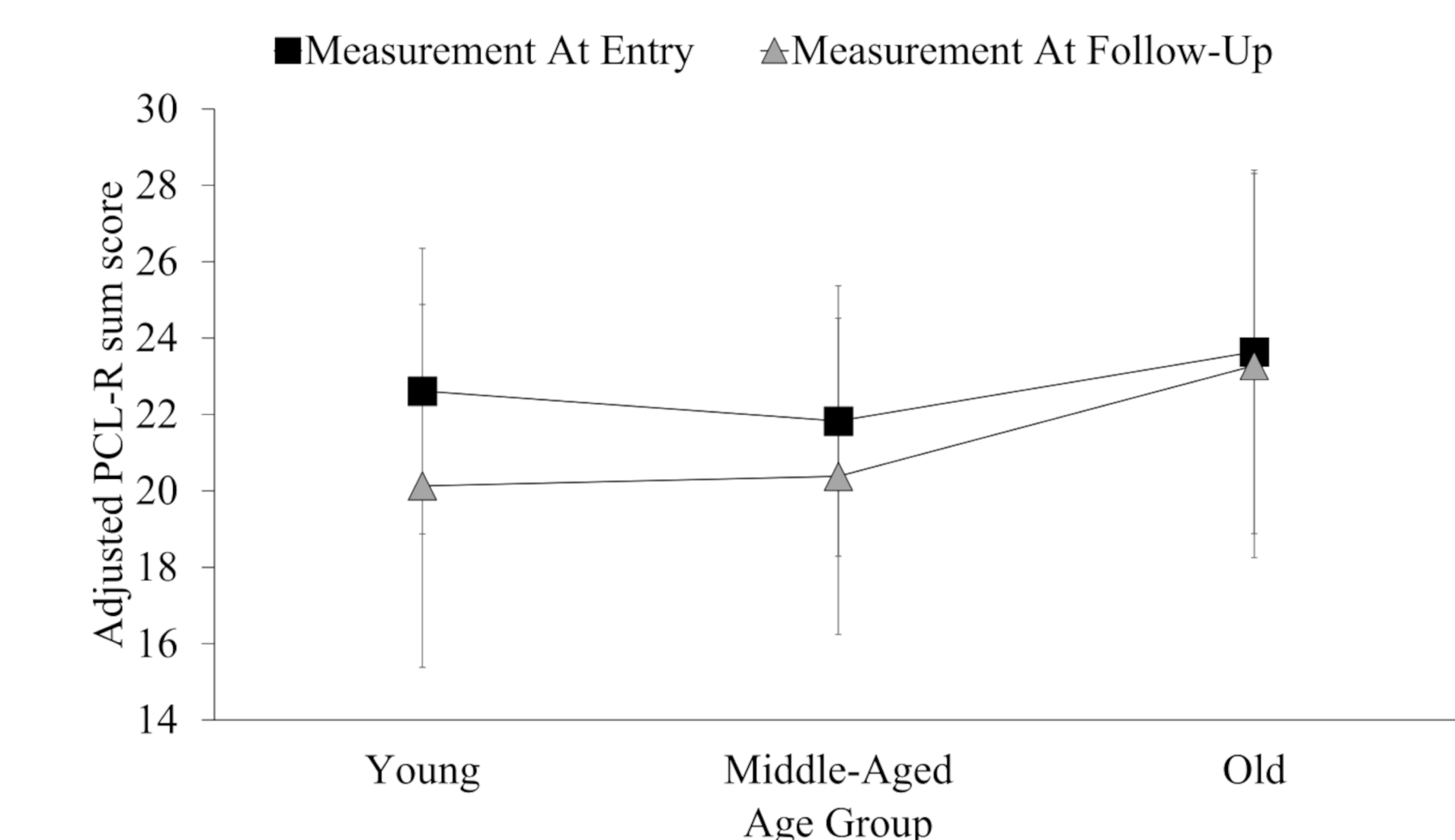
Results

| Measure | Entry | | Follow-Up | | $t(68)$ | p | Cohen's d |
|----------|-------|------|-----------|------|---------|-------------------|-------------|
| | M | SD | M | SD | | | |
| PCL-R | 22.70 | 4.06 | 21.26 | 4.82 | 4.91 | .000 | .59 |
| Factor 1 | 8.59 | 3.21 | 7.55 | 3.19 | 4.67 | .000 | .56 |
| Facet 1 | 3.54 | 2.25 | 3.12 | 2.14 | 3.19 | .002 | .39 |
| Facet 2 | 5.01 | 1.79 | 4.41 | 1.65 | 3.79 | .000 | .46 |
| Factor 2 | 12.41 | 3.24 | 12.01 | 3.60 | 2.13 | .037 ^a | .26 |
| Facet 3 | 6.30 | 1.69 | 6.05 | 1.79 | 1.86 | .067 | |
| Facet 4 | 6.07 | 2.45 | 6.48 | 4.47 | -.81 | .424 | |

Note. Mean values and standard deviations are shown for $n = 69$ participants with high psychopathy as well as the results of t tests (assuming equal variance) comparing the changes in adjusted PCL-R sum scores from measurement at entry to measurement at follow-up.

^aBonferroni-Holm corrections led to non-significance.

RCI analyses conducted for the adjusted PCL-R sum scores revealed that only 5.35 % ($n = 10$) offenders with high psychopathy improved, while the rest showed no change. Overall, most reliable improvements for offenders with medium to high levels of psychopathy were observed for young ($n = 6$) and middle-aged ($n = 4$) offenders on Factor 1 of the PCL-R. Results were similar for adjusted IM-P sum scores.



Note. Mean adjusted PCL-R sum scores are shown as measured at entry into the STU and at follow-up for the young ($n = 24$), middle-aged ($n = 22$), and old ($n = 23$) age groups with high psychopathy. Error bars represent standard deviations.

Discussion

The STU treatment was shown to be effective in significantly reducing PCL-R and IM-P scores for offenders with high psychopathy, thereby implying an underlying change in psychopathic personality traits. Results indicate that psychopathic personality traits might be fluid throughout adulthood, but changes stagnate after a certain age.

The underlying traits on the interpersonal and affective facets of the PCL-R i.e., lack of empathy or grandiosity were specifically targeted by the STU treatment. STUs seem uniquely equipped to deal with the high-risk, high-need group, that offenders with psychopathy represent.

These changes to psychopathic personality traits through treatment call the traditional view of psychopathy as a stable risk factor into question. It can be assumed that psychopathy might be more of a stable-dynamic risk factor than previously thought. However, this study did not measure the offenders' risk of recidivism.

The present results are correlative due to the lack of a control group and dropouts weren't considered in the present data. Moderating variables such as duration of treatment couldn't be controlled for. Furthermore, sample sizes for age group analyses were small. Future studies should aim to control for moderating variables and extend to more German STUs.

References

- Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*. Routledge.
- DeSorcy, D. R., Olver, M. E., & Wormith, J. S. (2020). Working Alliance and Psychopathy: Linkages to Treatment Outcome in a Sample of Treated Sexual Offenders. *Journal of Interpersonal Violence*, 35(7-8), 1739-1760. <https://doi.org/10.1177/0886260517698822>
- Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised*. Multi-Health Systems.
- Hare, R.D. (2003). *The Hare Psychopathy Checklist-Revised* (2nd ed.). Multi-Health Systems.
- Hare, R.D. (2021). The PCL-R Assessment of Psychopathy. In A. R. Felthous & H. Saß (Eds.), *The Wiley International Handbook on Psychopathic Disorders and the Law* (2nd ed., pp. 63-106). John Wiley & Sons Ltd. <https://doi.org/10.1002/9781119159322.ch4>
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59(1), 12-19. <https://doi.org/10.1037/0022-006X.59.1.12>
- Kosson, D. S., Steuerwald, B. L., Forth, A. E., & Kirkhart, K. J. (1997). A new method for assessing the interpersonal behavior of psychopathic individuals: Preliminary validation studies. *Psychological Assessment*, 9(2), 89-101. <https://doi.org/10.1037/1040-3590.9.2.89>
- Lewis, M. (2018). Treatment of psychopathy: a conceptual and empirical review. *Journal of Criminological Research, Policy and Practice*, 4(3), 186-198. <https://doi.org/10.1108/JCRPP-06-2018-0019>
- Miller, H. A. (2006). A Dynamic Assessment of Offender Risk, Needs, and Strengths in a Sample of Pre-release General Offenders. *Behavioral Sciences & The Law*, 24(6), 767-782. <https://doi.org/10.1002/bsl.728>
- Olver, M.E. (2018). Can Psychopathy Be Treated? What the Research Tells Us. In E. Jeglic & C. Calkins (Eds.), *New Frontiers in Offender Treatment* (pp. 287-306). Springer. https://doi.org/10.1007/978-3-030-01030-0_15
- Polaschek, D. L. L. (2014). Adult criminals with psychopathy: Common beliefs about treatability and change have little empirical support. *Current Directions in Psychological Science*, 23(4), 296-301. <https://doi.org/10.1177/0963721414535211>

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