



UNIVERSITY OF OREGON

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**A Substance Use Adaptation of Fathering Through Change**

**March 19, 2023**

## Statistical Analysis Plan

Primary outcome hypotheses were tested using standard normal autoregressive, analysis of covariance, models. More specifically, the post-intervention follow-ups were estimated as random intercept models for the 6-week and 4-month follow-ups. For the secondary outcome of substance use count of days or count of use status as a binary outcome, generalized linear models were estimated. Given the small sample size and two waves of repeated measures for the random intercept, models were estimated using robust standard errors to address nonindependence. Evaluation of the 5 primary outcomes were corrected for false discovery rate (Benjamini & Hochberg, 1995). Missing data patterns were evaluated to assess random missingness. with Little's MCAR test (Little, 1988). Little's MCAR test revealed that the data were missing completely at random and the estimated means and covariances for partial data fathers was not significantly different than fathers' with complete data ( $\chi^2(168) = 193.99$   $p = .083$ ).

Benjamini, Y., & Hochberg, Y. (1995). Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society. Series B, Methodological*, 57(1), 289-300. doi:10.1111/j.2517-6161.1995.tb02031.x

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202.