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# Building Bridges Triple P: A pilot study with families who have an adolescent with autism

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# Disclosure statement

- The Triple P—Positive Parenting Program is owned by the University of Queensland (UQ). Triple P International Pty Ltd (TPI) is licensed by UQ to disseminate the program worldwide.
- Royalties are distributed according to the University of Queensland's intellectual property policy to the Faculty of Health and Behavioural Sciences, School of Psychology and contributory authors.
- Dr Mazzucchelli, A/Prof Sofronoff, and A/Prof Ralph have received, are currently receiving, or may in the future receive royalties and/or consultancy fees from TPI.



# Children and adolescents with Autism Spectrum Disorder

- Autism spectrum disorder (ASD) occurs in almost 1.5% of children (Christensen et al., 2016)
- A major public health concern (Simonoff et al., 2008)
- Substantially greater risk of emotional and behavioural problems

More anxious, more depressed, more social and attention problems (Skokauskas & Gallagher, 2012)

70% of children aged 10- to 14-years have a comorbid mental health disorder (Simonoff et al., 2008)

Children with ASD and an intellectual disability are at even greater risk of a co-morbid mental health condition (Brereton et al., 2006)

# The significance of adolescence

- A time of increased vulnerability to emotional and behavioural problems (Sawyer et al., 2012)
  - A time of significant physical, emotional, cognitive, and environmental change
  - A time of increased expectations and social pressure
- The onset and prevalence of mental health problems is highest during adolescence and young adulthood (Kessler et al., 2007)
  - 50% of all lifetime mental disorders start by age 14, 75% by age 24
- Young people with ASD may be more vulnerable to stressors (Fung et al., 2015)

# The experience of parents

- Parents also report high levels of stress and depression during the adolescent years (Hartley et al., 2012)
- Parents must contend with normative sources of stress, but also additional challenges that accompany disability (Hamilton et al., 2014)
- Parents report that many of the behaviour support strategies they used are no longer practical or socially acceptable (Hamilton et al., 2014)
- Adolescents report dissatisfaction with their relationship with parents (Skär, 2003)
- Parents report receiving little or no practical support (Mazzucchelli & Moran, 2017)



# The promise of parenting programs

- Parenting programs are effective in preventing and treating mental health problems and improving family life
  - Younger children who are developing typically (e.g., Sanders et al., 2014)
  - Adolescents who are developing typically (e.g., Ralph, 2018)
  - Children with a developmental disability (e.g, Tellegen & Sanders, 2013)
- Preliminary work with families of adolescents with a disability:
  - Signposts** — However, lowest positive effect sizes found for older participant group (13- to 18-years)
  - Growing Up with Autism** — However, impact on youth is unknown, also requires a time commitment of 30 hours from parents
- There is a need for an efficient and tailored parenting program for parents of adolescents with ASD and other developmental disabilities

# Building Bridges Triple P

- 8 sessions (11.5 hours) manualised behavioural family intervention
- Draws together elements of Teen Triple P and Stepping Stones Triple P
- Includes content targeting:
  - Promoting positive parent-adolescent relationships
  - Managing problematic adolescent behaviour and risk taking
  - Supporting teens to manage their emotions and to develop social skills and peer relationships
- May be delivered in a flexible manner
  - Partial group format involving both group sessions and individual sessions has advantages.
    - Efficient, normalises difficulties, promotes peer support
    - Provides individualised attention and support





# Program outline

Session	Duration
1. Positive parenting	120 minutes
2. Encouraging appropriate behaviour	120 minutes
3. Managing problem behaviour and parenting routines	120 minutes
4. Getting teenagers connected and teaching survival skills	120 minutes
5. Implementing parenting routines 1	30 minutes
6. Implementing parenting routines 2	30 minutes
7. Implementing parenting routines 3	30 minutes
8. Program close	120 minutes



# Aims

- Assess the feasibility of delivering the content in an eight-week (11.5 hour) partial group format
- Investigate the acceptability of the program to parents of adolescents with ASD
- Explore potential intervention effects of BBTP in terms of:
  - Reducing the behavioural and emotional problems of adolescents with ASD
  - Increasing parents' confidence in managing common behaviour problems
  - Reducing dysfunctional parenting practices
  - Improving parental adjustment

# Method

- Pre-test post-test single group design
- Outcome measures

*Child Adjustment and Parent Efficacy Scale—Developmental Disability (CAPES-DD; Mazzucchelli, Sanders, & Morawska, 2011)*

*Parenting Scale—Adolescent Version (PSA; Irvine, Biglan, Smolkowski, & Ary, 1999)*

*Depression Anxiety Stress Scales—21 (DASS-21; Lovibond & Lovibond, 1995)*

*Goal Achievement Scales (GAS; Hudson, Wilken, Jauernig, & Radler, 1995)*



# Participants

Participant	Adolescent Age	Adolescent Gender	ABAS III GAC range	SCQ Total
Mother	16, 8	Male	Low	/
Father			Low	8
Mother	13, 3	Female	Below average	11
Mother	15, 9	Female	Low	25*
Father			Below average	21*
Mother	16, 9	Female	Below average	12
Mother	13, 3	Male	Low	9
Father			Low	6
Mother	14, 11	Male	Extremely low	20*

*Note.* \*Exceeds clinical cut-off, / participant refused to complete measure.

# Participant attendance

- Mean number of sessions attended:
  - 4.8 group sessions
  - 2.6 telephone sessions
- 44% of parents attended all 5 group sessions and 3 telephone sessions



# Protocol adherence

- Content delivered:

  - 100% of group session content

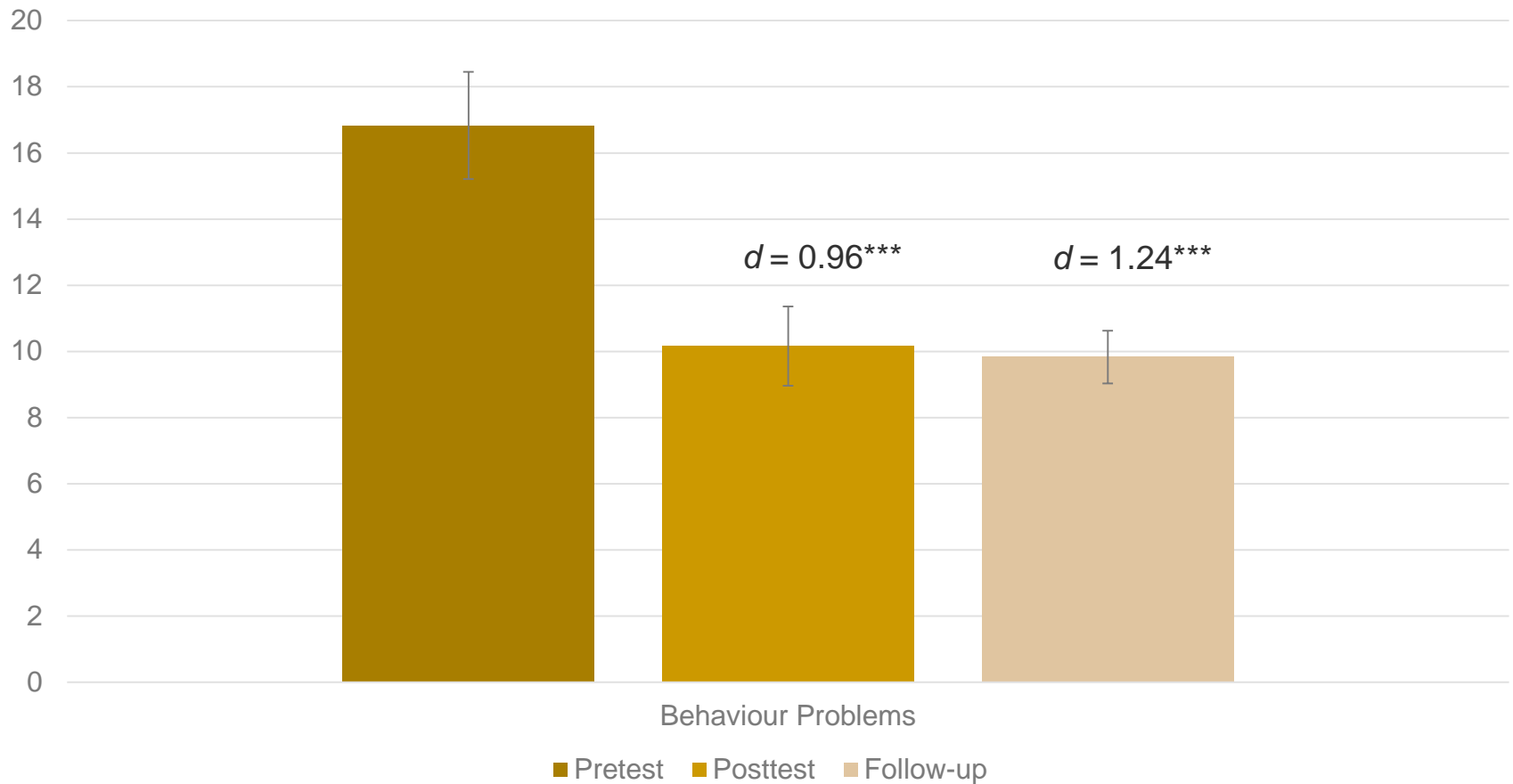
  - 99% of telephone session content

- Independent assessment of group sessions containing program content confirmed protocol adherence

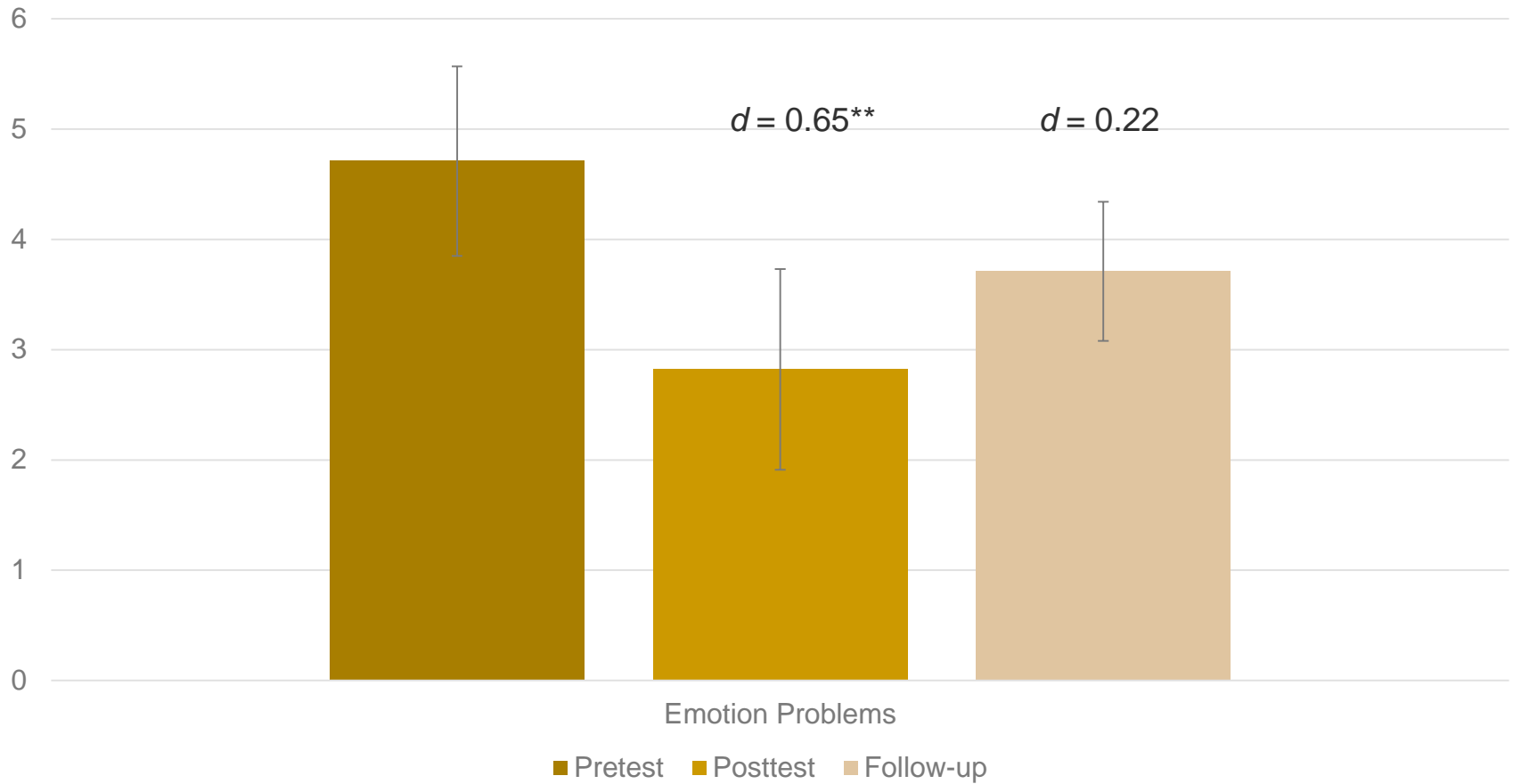


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# Adolescent behavioural problems

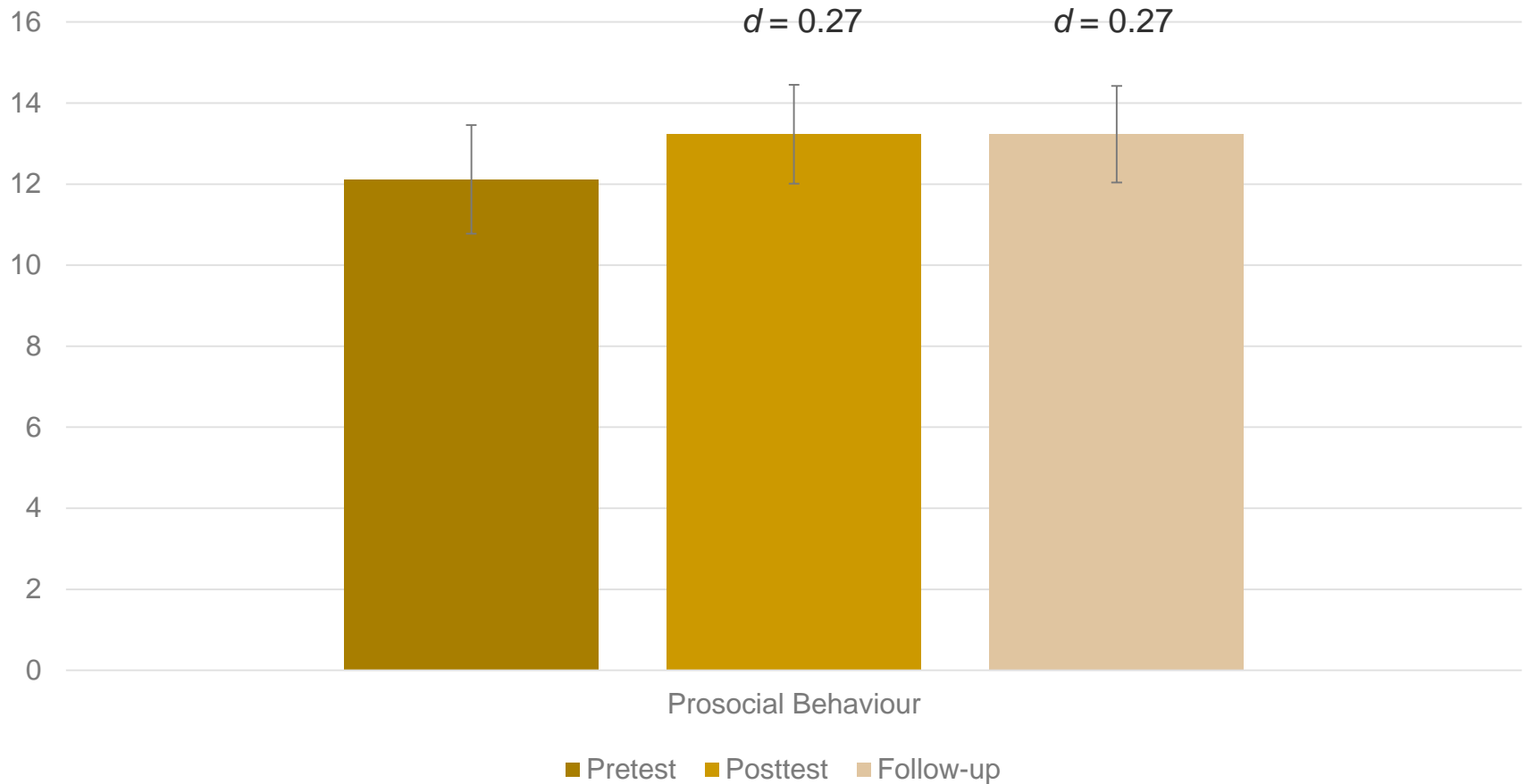


# Adolescent emotional problems

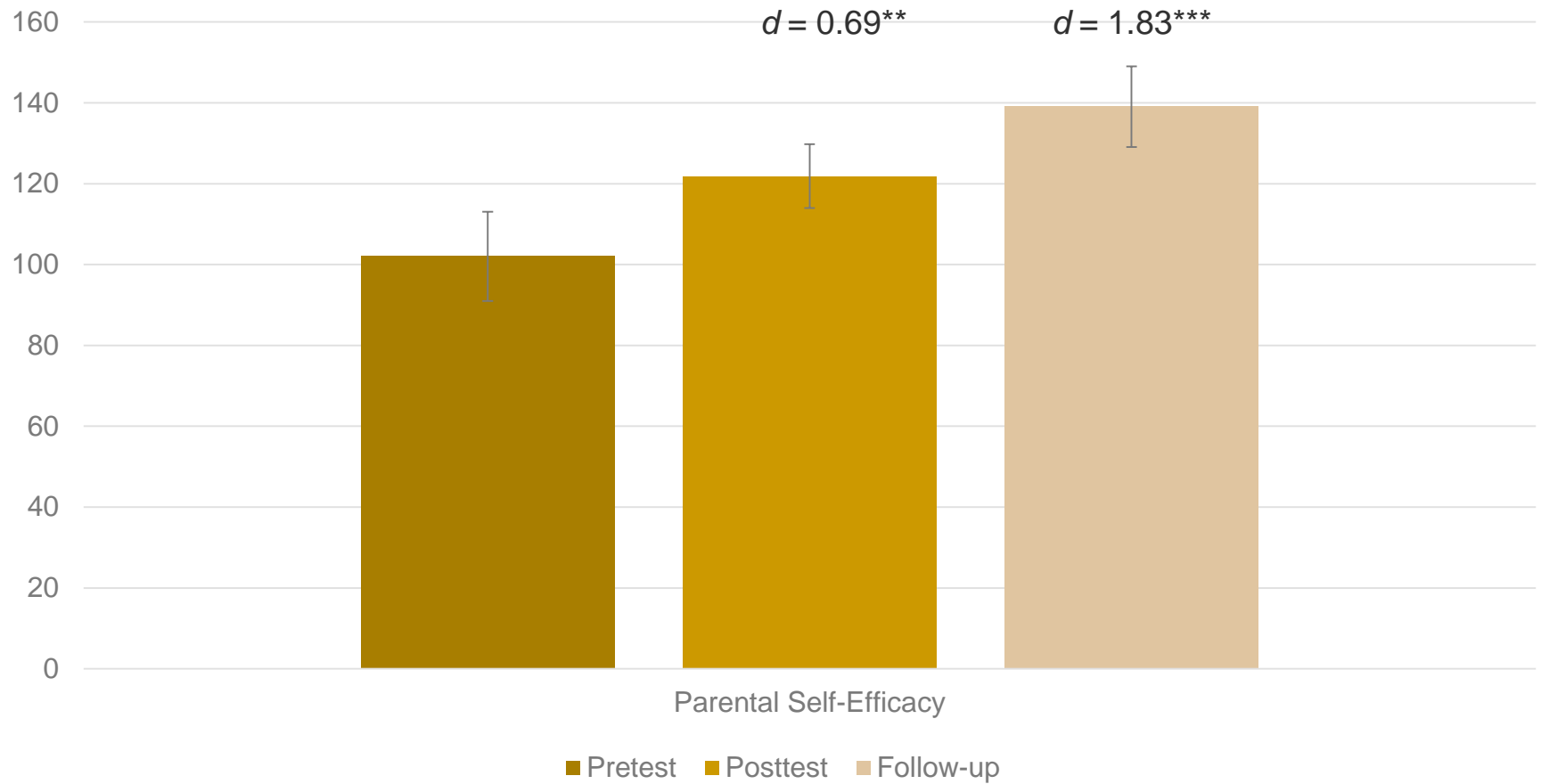




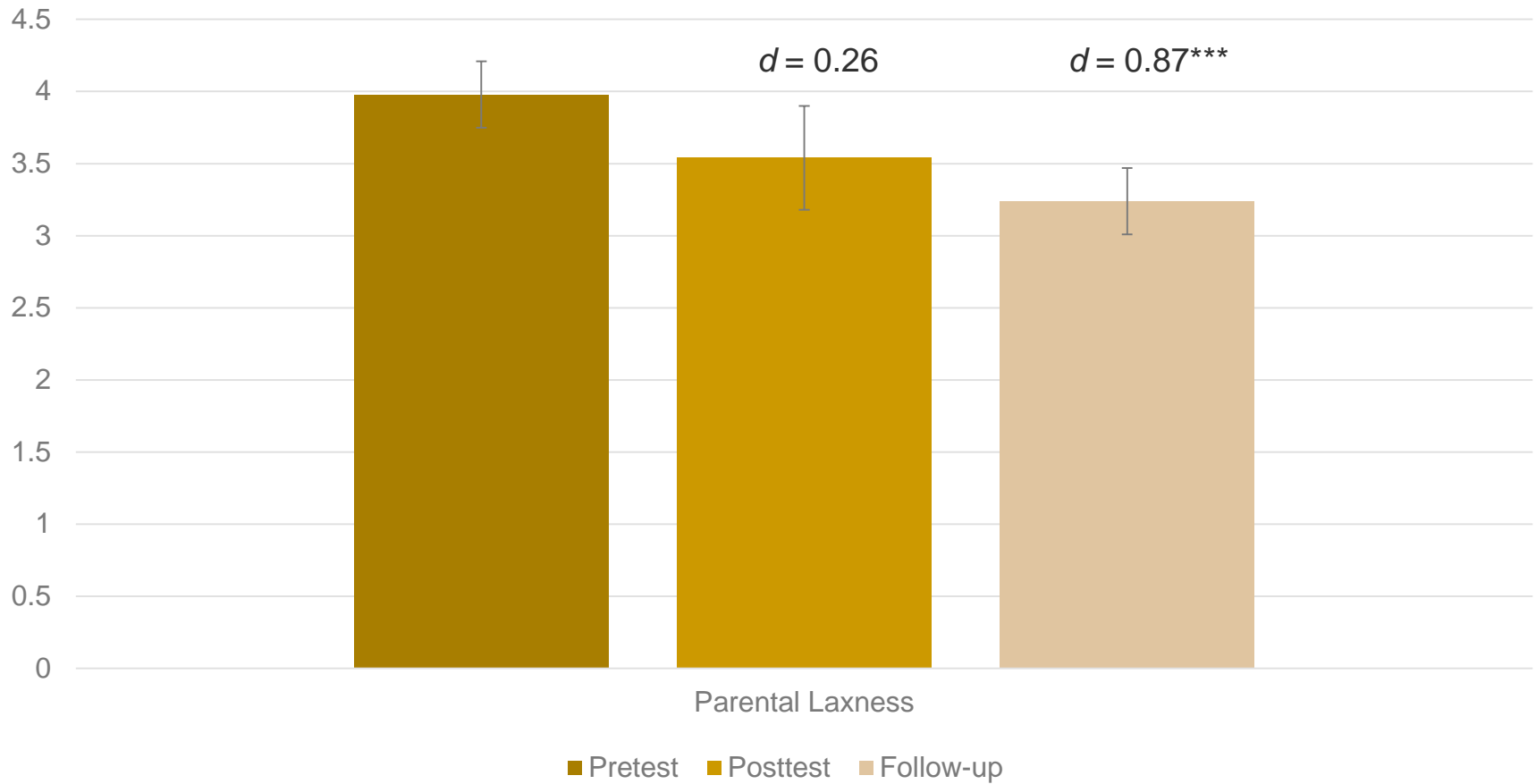
# Adolescent prosocial behaviour



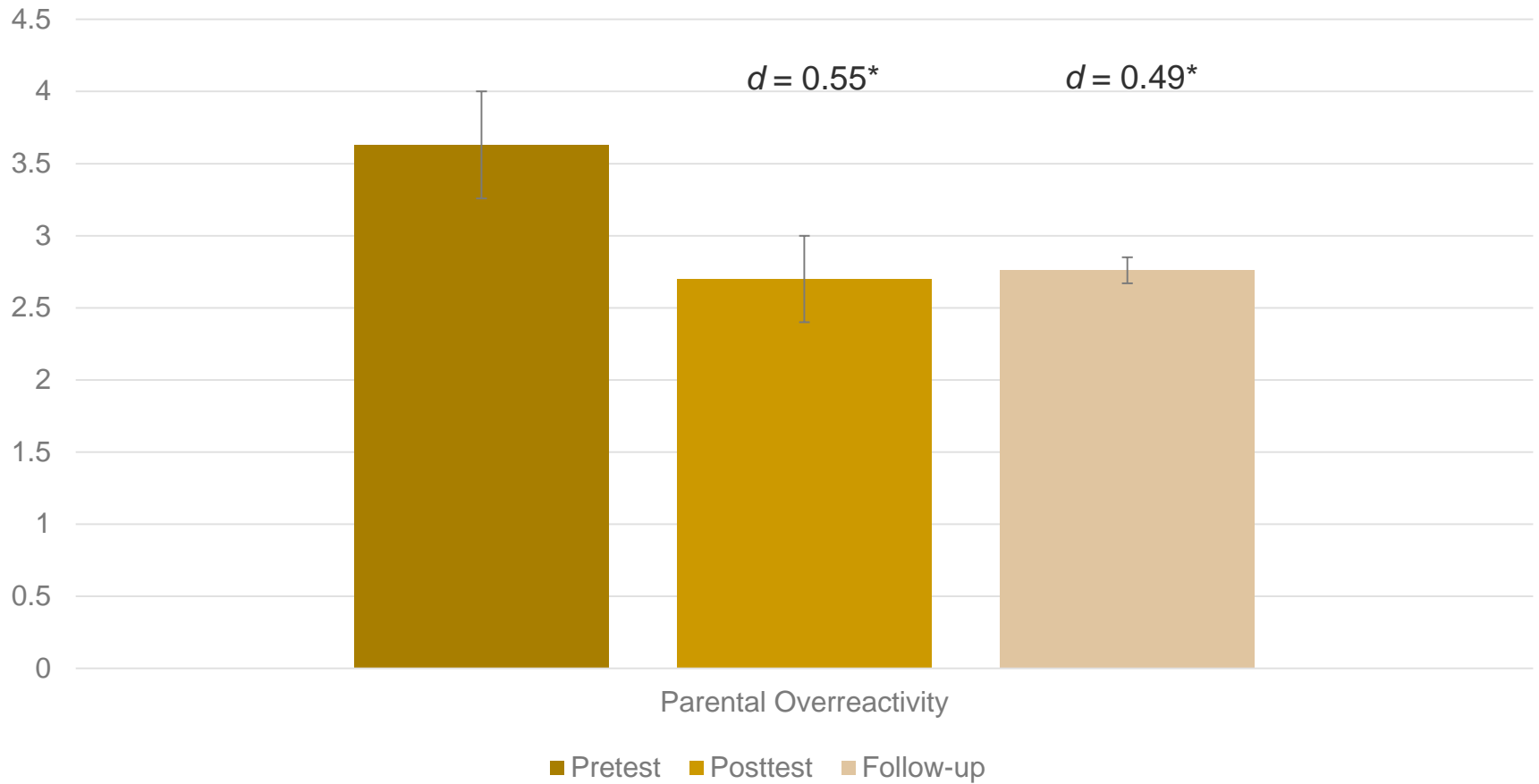
# Parental self-efficacy



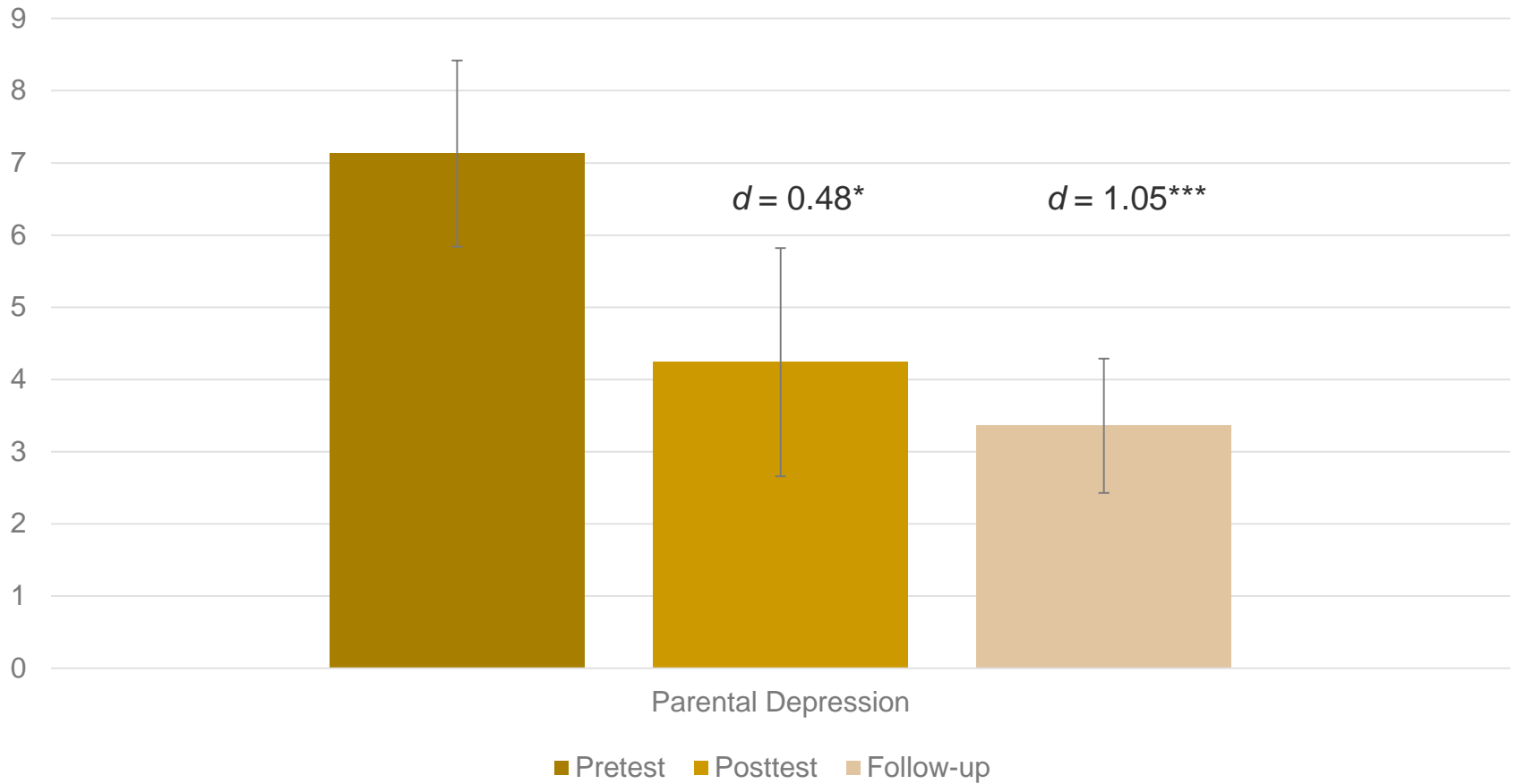
# Parental laxness



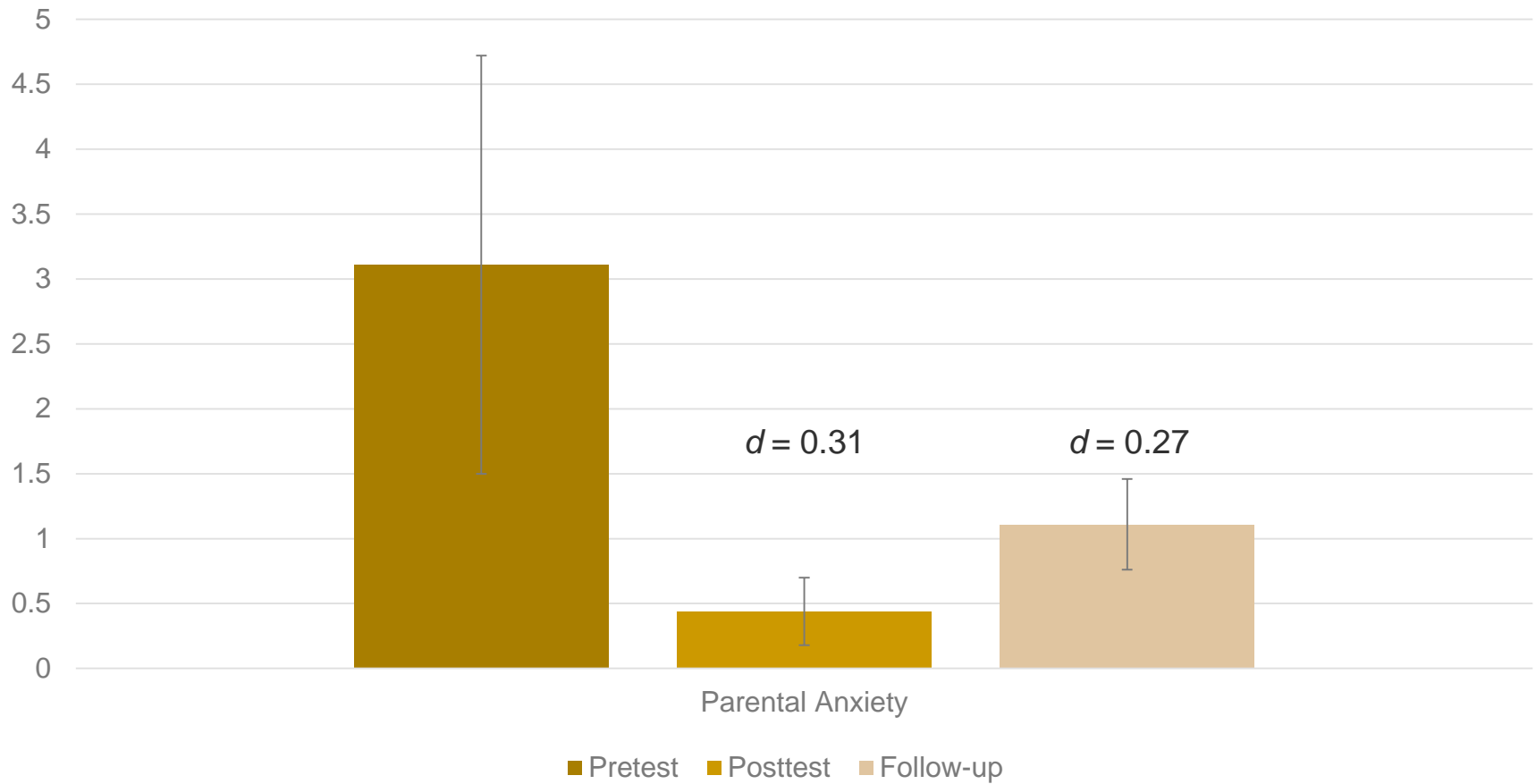
# Parental overreactivity



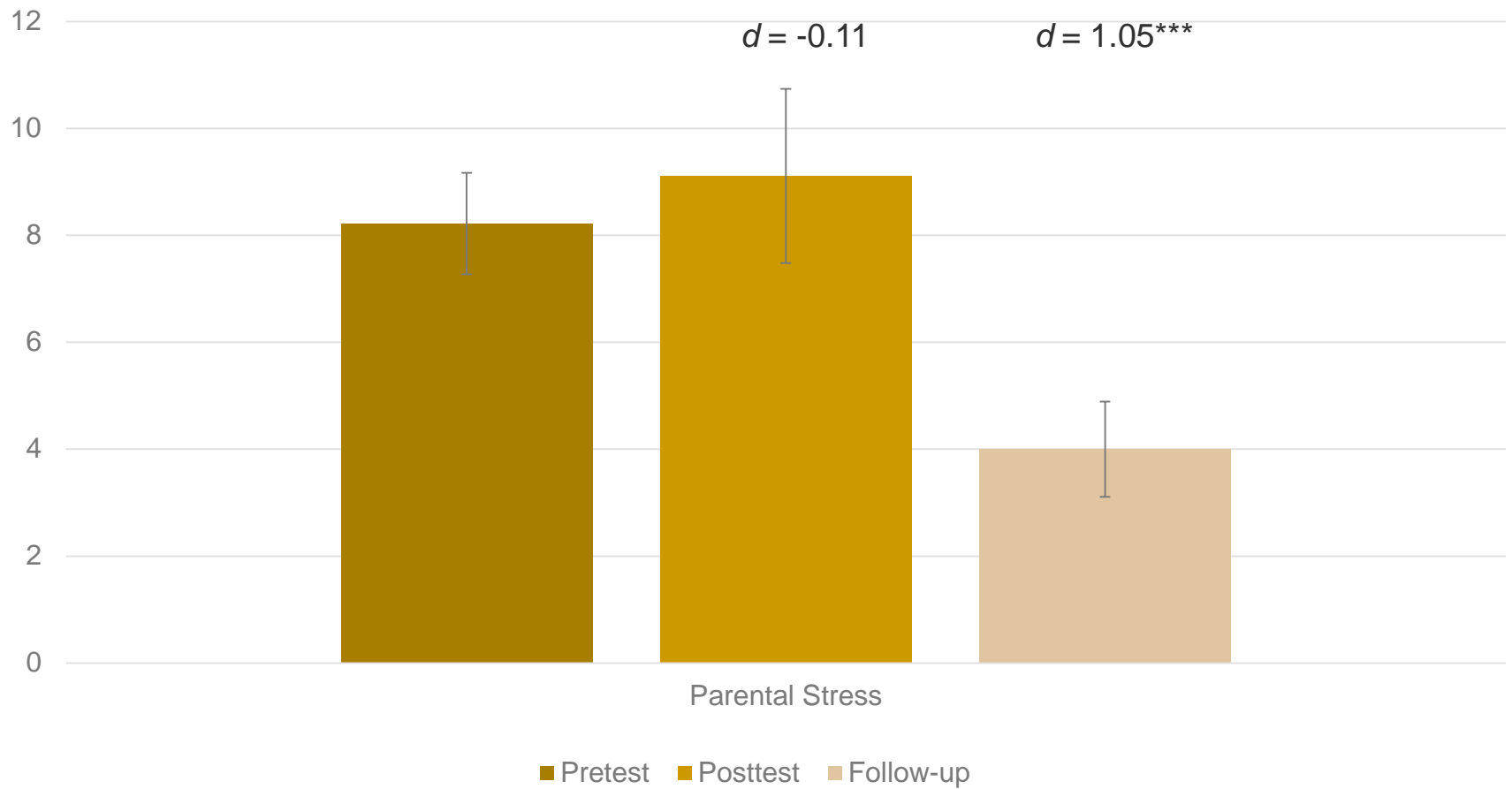
# Parental depression



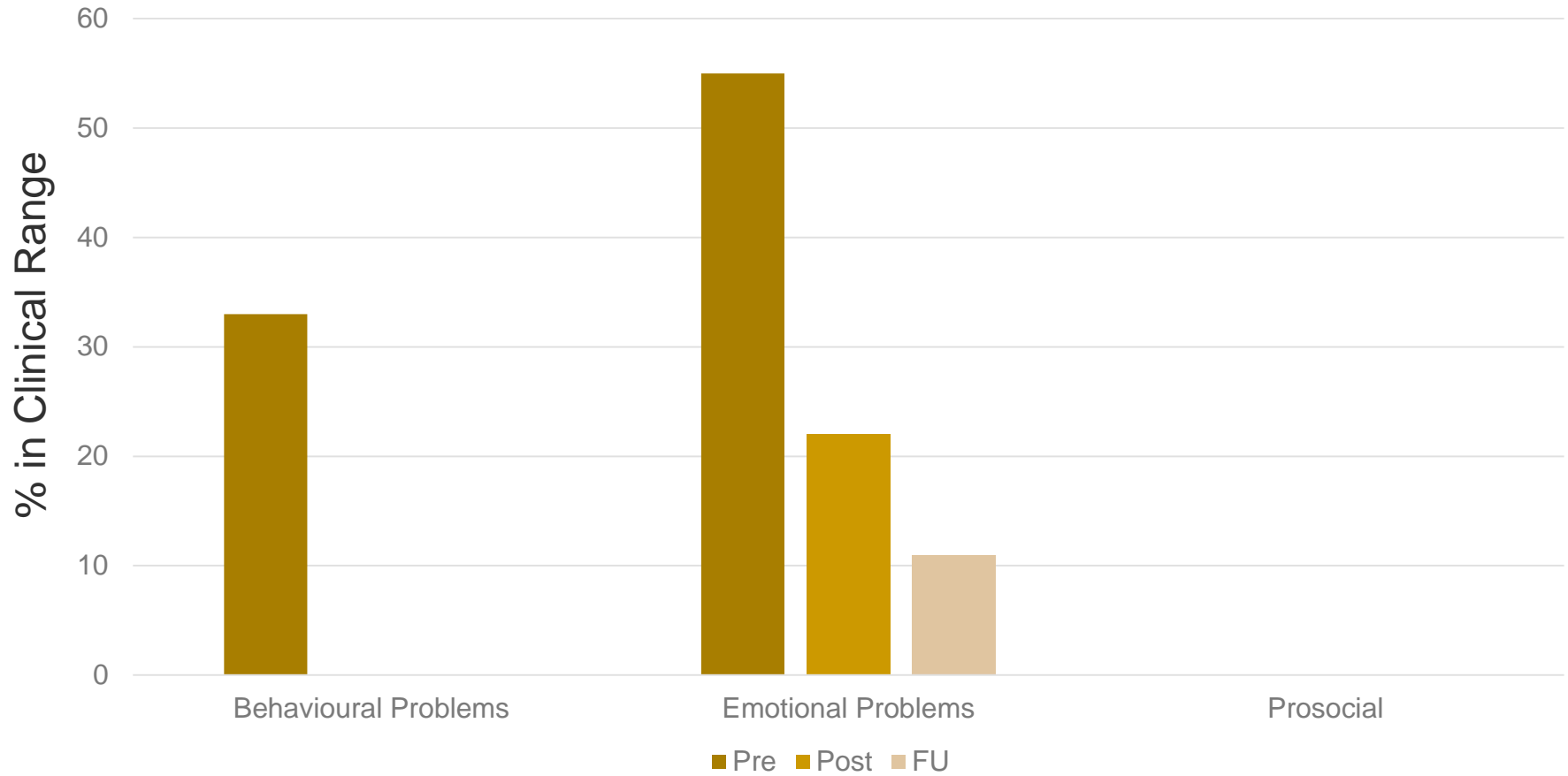
# Parental anxiety



# Parental stress

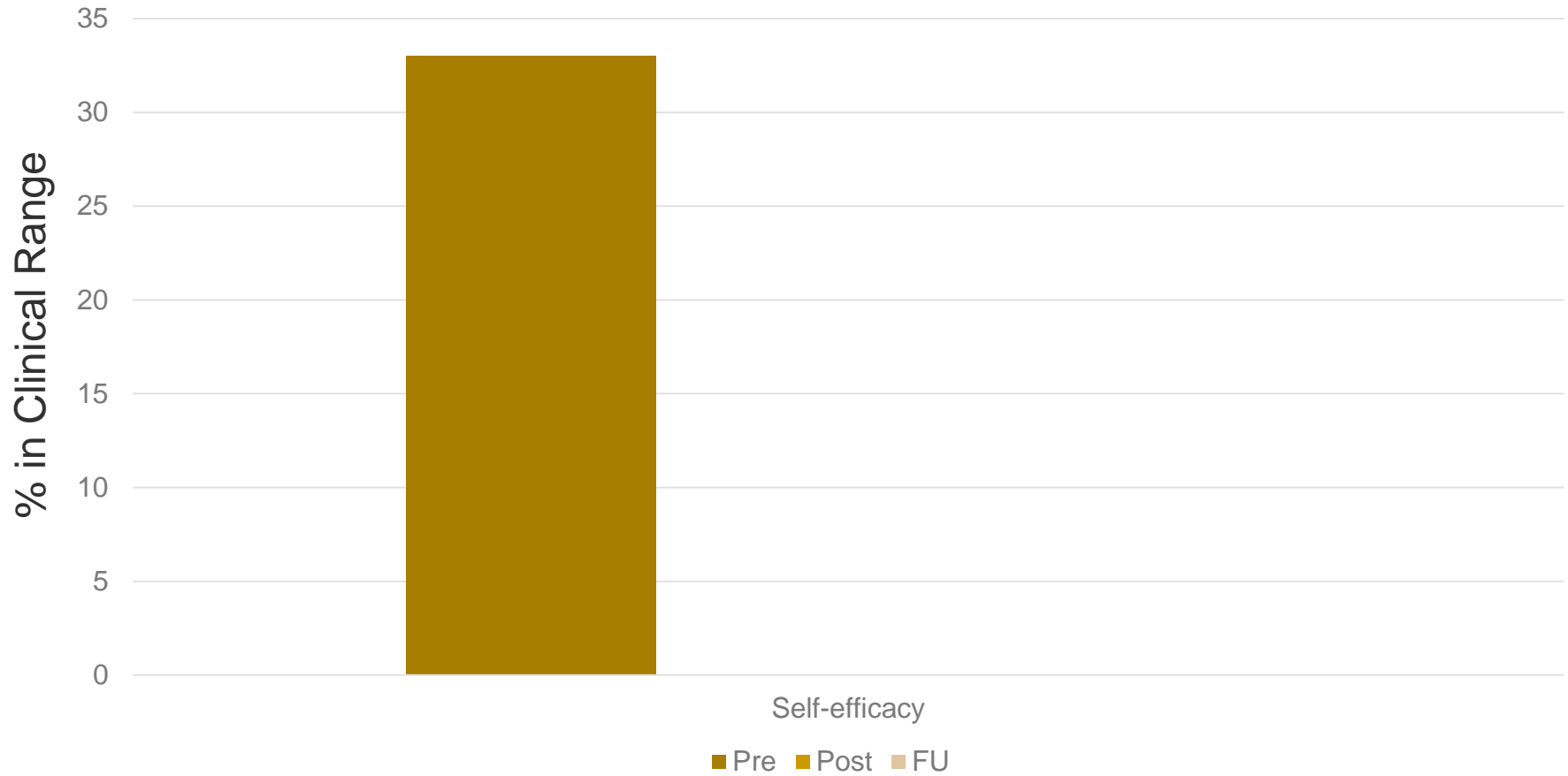


# Adolescent behaviour

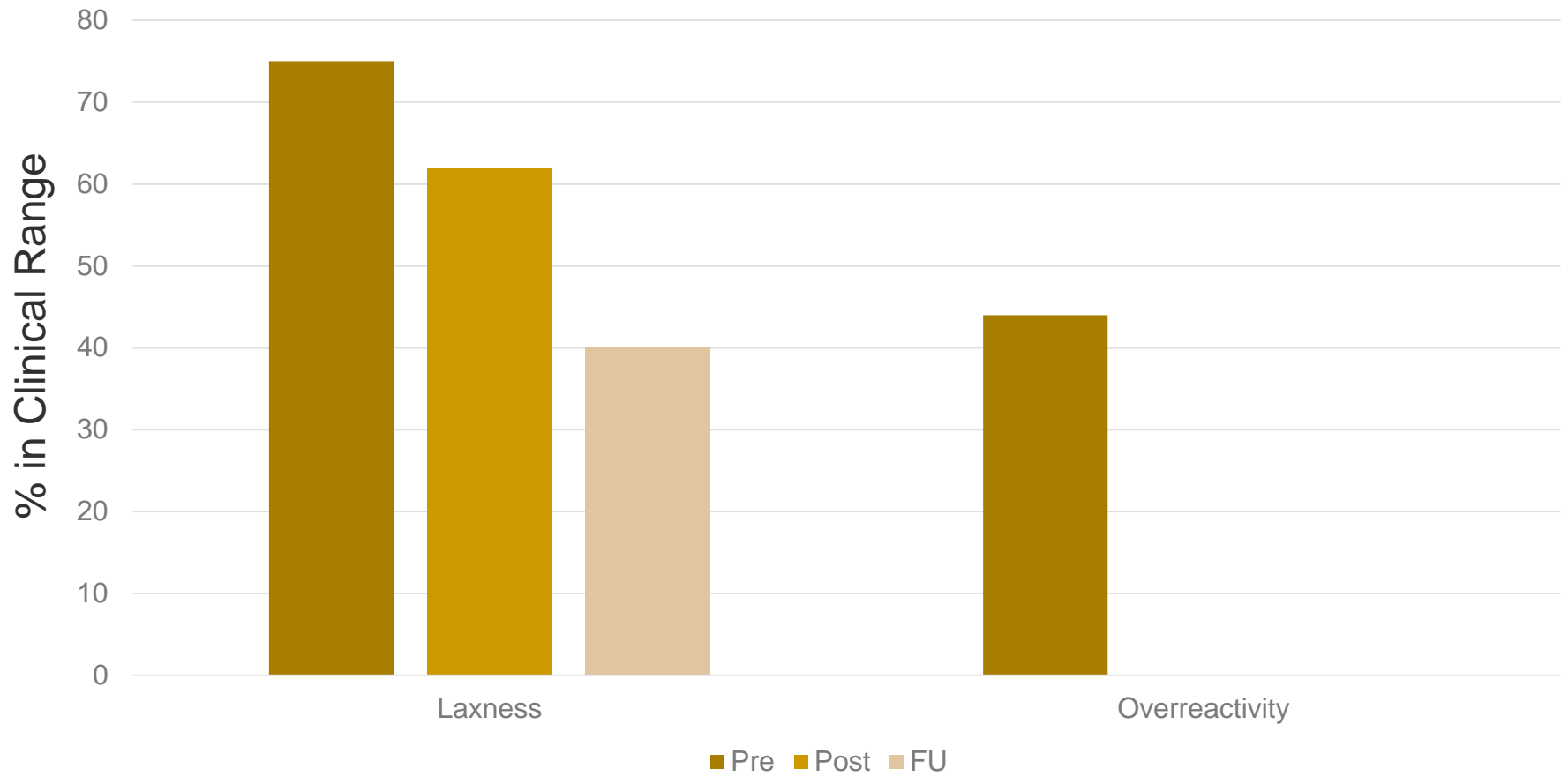




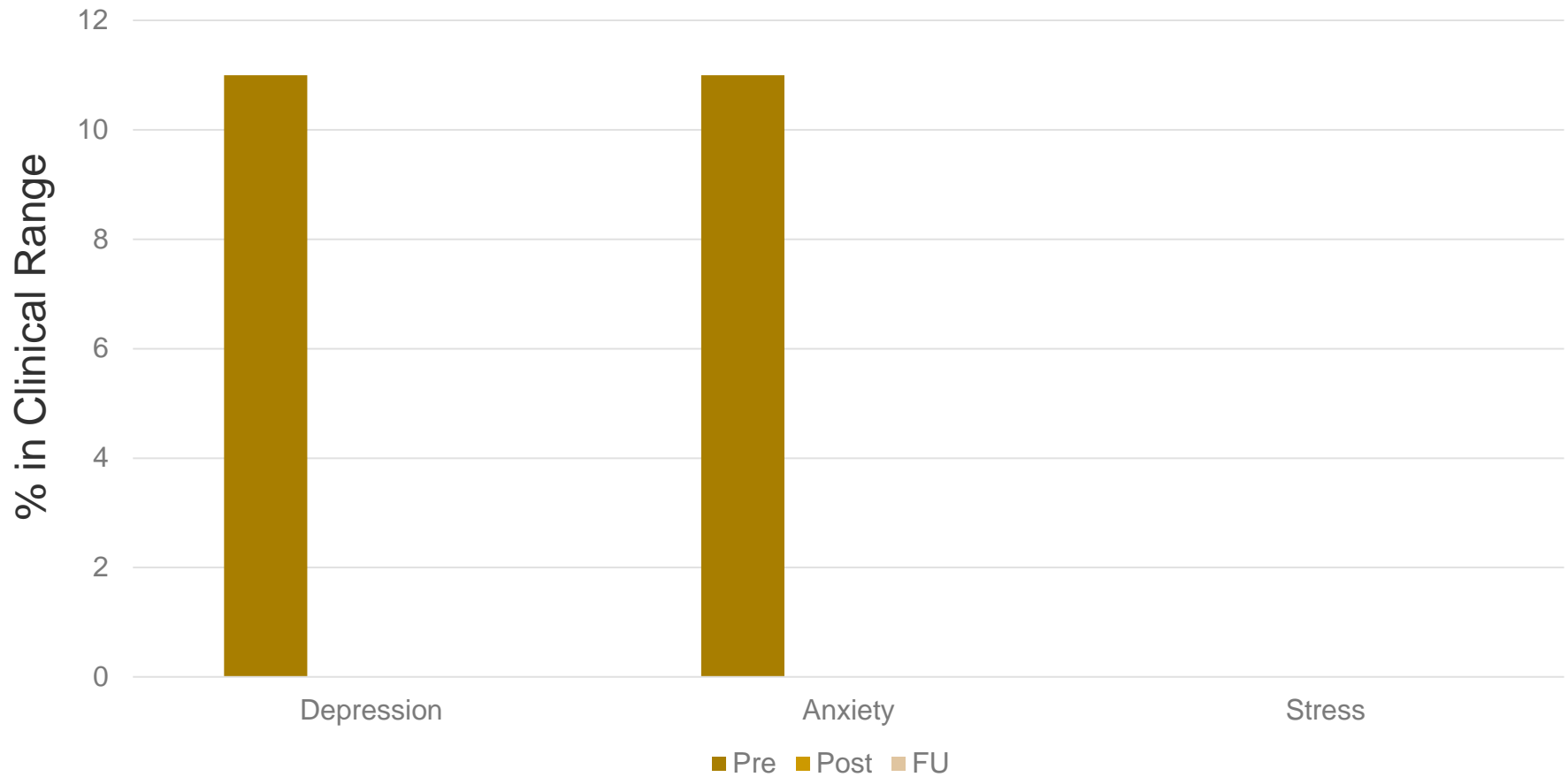
# Parental self-efficacy



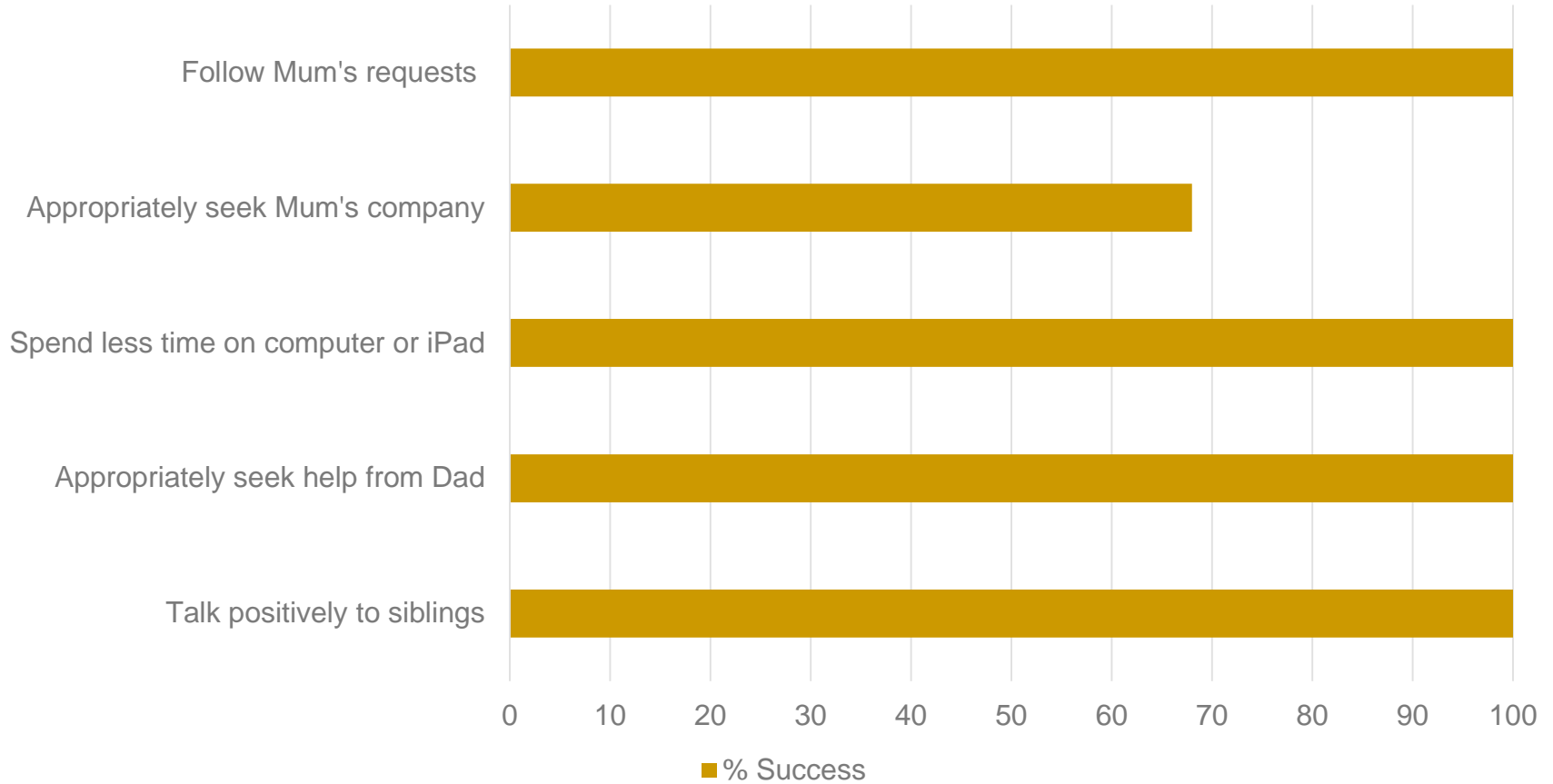
# Parenting style



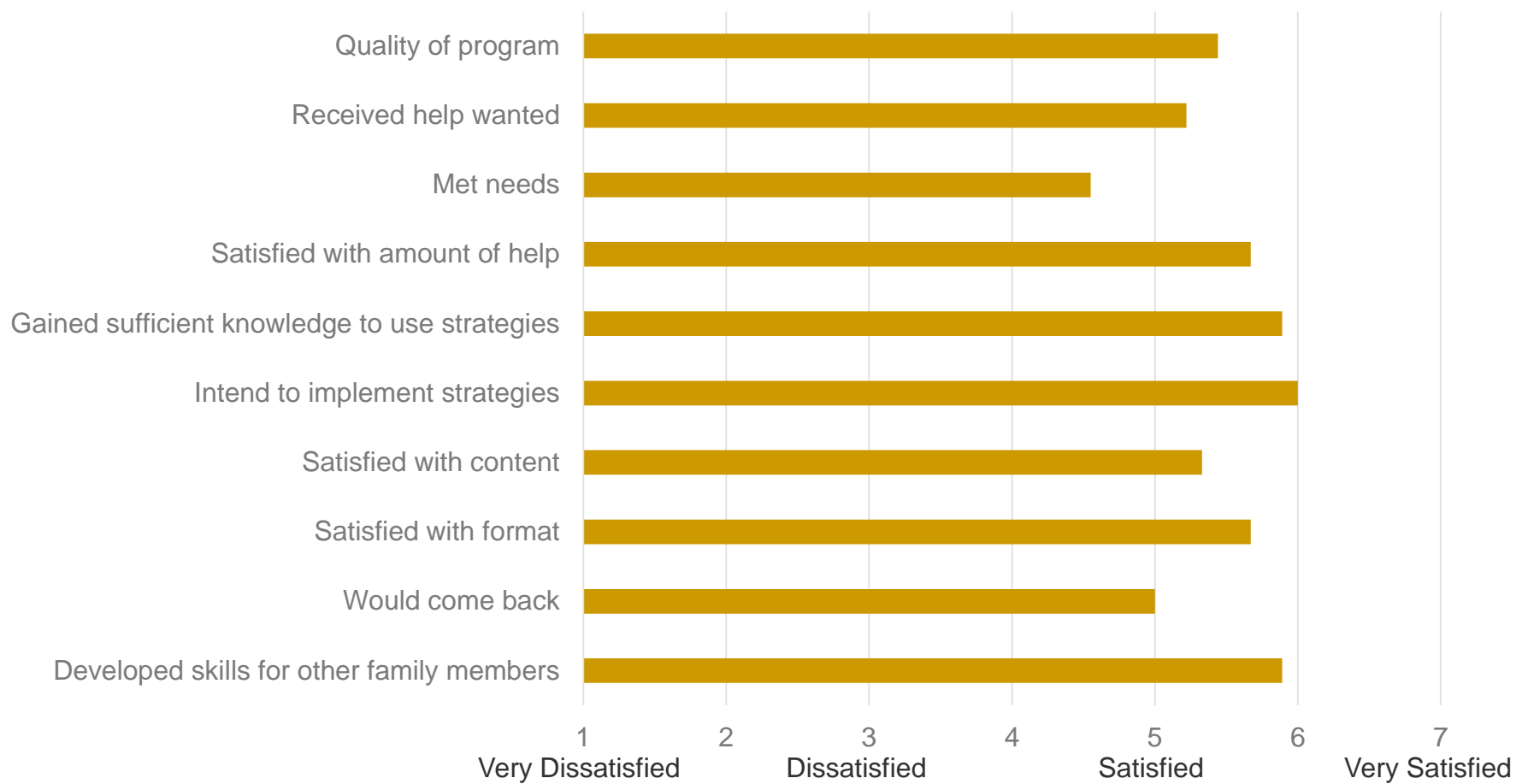
# Parental depression, anxiety and stress



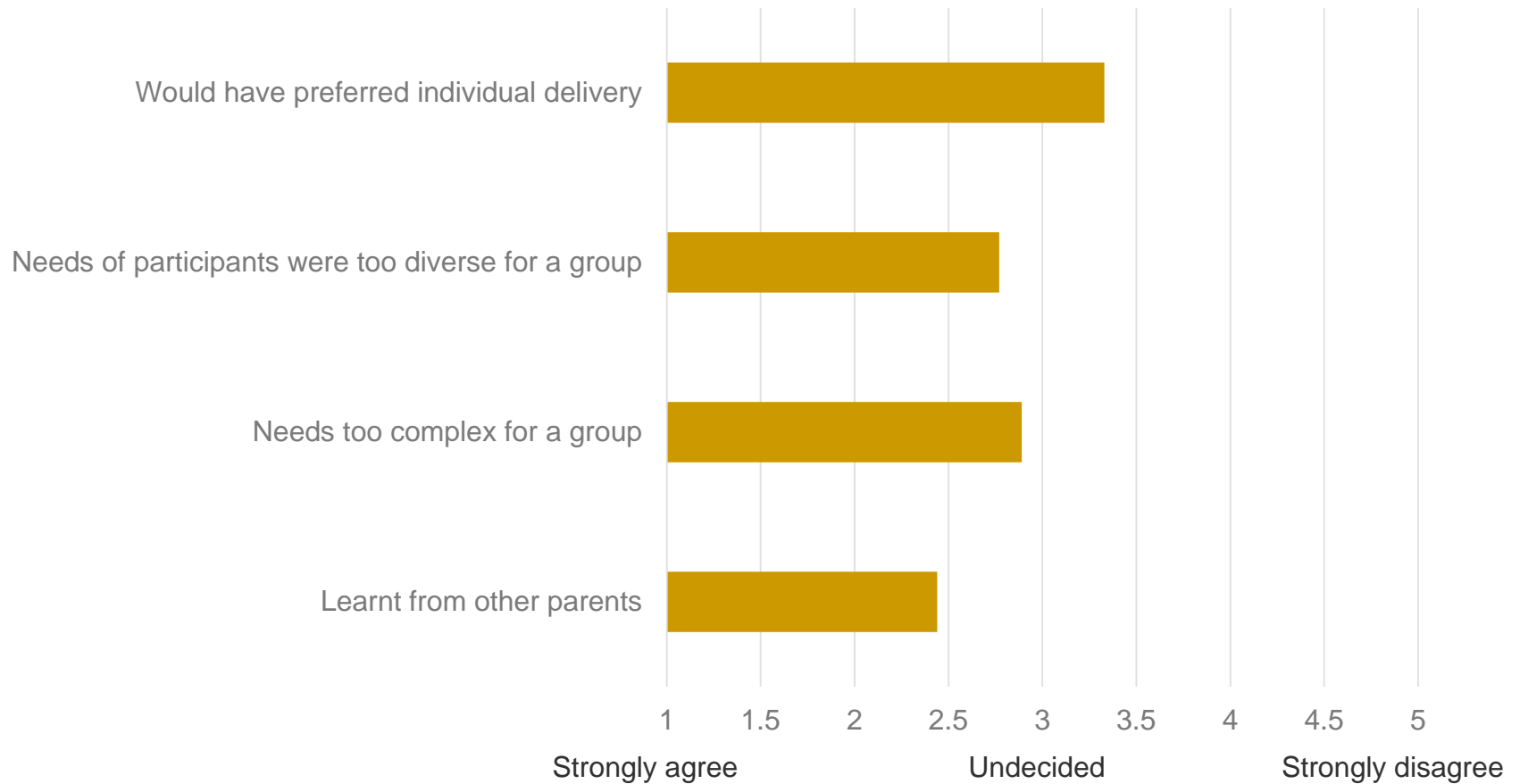
# Goal achievement



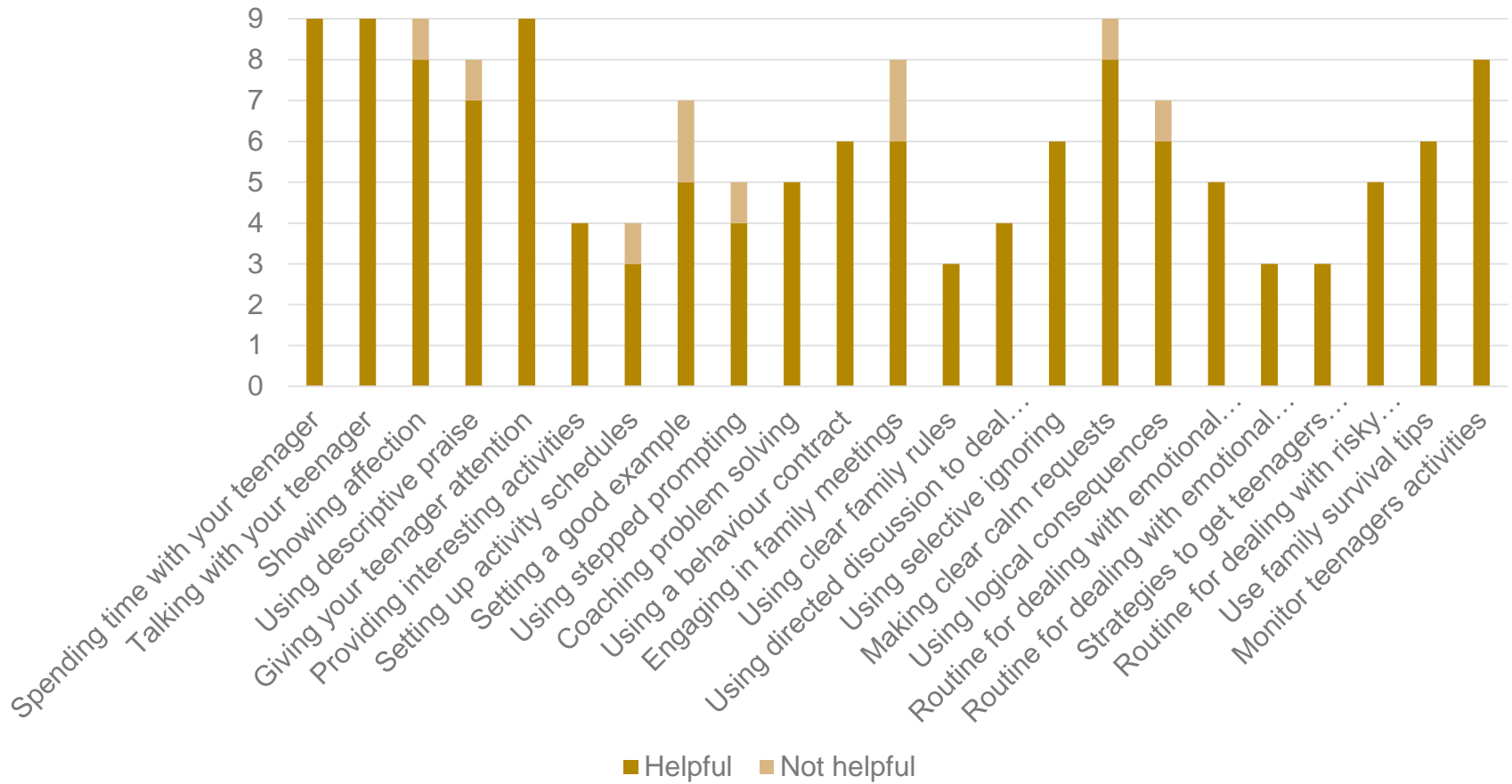
# Satisfaction with Building Bridges Triple P



# Satisfaction with group format



# Use of strategies



# Summary

## ■ Feasibility

Participants attended 92% of the 8 sessions

On average, 99% of each session's content was delivered

## ■ Acceptability

Participants satisfied with:

the help they received

the content and format of the program

44% reported that almost all or most of their needs had been met

Participants reported attempting the majority of strategies

Most participants found the strategies they attempted to be helpful





# Conclusions

- Intervention effects

Large reductions in adolescent behavioural problems

Small to large improvements in parenting practices

Medium to very large improvements in parenting confidence

Large reductions in symptoms of depression and stress (at follow-up)

Parents reported maintenance and in many cases further improvements at follow-up

All parents who undertook monitoring (56%) achieved or made significant progress towards their individually selected goals.



# Limitations and future directions

- Adolescents were relatively high-functioning
- The research design did not control for a number of potential sources of invalidity—a randomised controlled trial is needed
- Self-report measures could be usefully augmented with independent observer-based outcome measures
- Future studies should seek the perspective of adolescents
- Teacher rating scales would help to assess generalisation effects



# References

- Brereton, A. V., Tonge, B. J., & Einfeld, S. L. (2006). Psychopathology in children and adolescents with autism compared to young people with intellectual disability. *Journal of Autism and Developmental Disorders*, 36, 863-870. doi:10.1007/s10803-006-0125-y
- Christensen, D. L., Baio, J., Braun, K. V., Bilder, D., Charles, J., Constantino, J. N., . . . Yeargin-Allsopp, M. (2016). *Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2012 (SS-3)*. Retrieved from Atlanta, GA: Center for Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services.
- Fung, S., Lunsky, Y., & Weiss, J. A. (2015). Depression in youth with autism spectrum disorder: The role of ASD vulnerabilities and family-environmental stressors. *Journal of Mental Health Research in Intellectual Disabilities*, 8, 120-139. doi:10.1080/19315864.2015.1017892
- Hamilton, A., Mazzucchelli, T., & Sanders, M. (2014). Parental and practitioner perspectives on raising an adolescent with a disability: a focus group study. *Disability & Rehabilitation*, 1-10. doi:10.3109/09638288.2014.973969
- Hartley, S., Seltzer, M., Head, L., & Abbeduto, L. (2012). Psychological well-being in fathers of adolescents and young adults with Down syndrome, fragile X syndrome, and autism. *Family Relations*, 61, 327-342. doi:10.1111/j.1741-3729.2011.00693.x
- Hudson, A., Wilken, P., Jauernig, R., & Radler, G. (1995). Regionally based teams for the treatment of challenging behaviour: A three year outcome study. *Behaviour Change*, 12, 209-215. doi:10.1017/S081348390000406X
- Irvine, A. B., Biglan, A., Smolkowski, K., & Ary, D. V. (1999). The value of the Parenting Scale for measuring the discipline practices of parents of middle school children. *Behaviour Research and Therapy*, 37, 127-142. doi:10.1016/S0005-7967(98)00114-4
- Kessler, R. C., Amminger, G., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. (2007). Age of onset of mental disorders: A review of recent literature. *Current Opinion in Psychiatry*, 20, 359-364. doi:10.1097/YCO.0b013e32816ebc8c
- Lovibond, S., & Lovibond, P. (1995). *Manual for the Depression Anxiety Stress Scales*. Sydney, Australia: The Psychology Foundation of Australia Inc.
- Mazzucchelli, T. G., & Moran, L. C. K. (2017). *Carers of adolescents with a disability: Access to, and preferences for, parenting services*. Manuscript submitted for publication.
- Mazzucchelli, T., Sanders, M., & Morawska, A. (2011). *Child Adjustment and Parent Efficacy Scale—Developmental Disability*. Brisbane, Australia: Parenting and Family Support Centre, University of Queensland, Brisbane Australia.
- Ralph, A. (2018). Adolescents and young adults with psychosocial difficulties. In M. R. Sanders & T. G. Mazzucchelli (Eds.), *The power of positive parenting: Transforming the lives of children, parents and communities using the Triple P system* (pp. 171-181). New York, NY: Oxford University Press.
- Sanders, M., Kirby, J., Tellegen, C., & Day, J. (2014). The Triple P-Positive Parenting Program: A systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology Review*, 34, 337-357. doi:10.1016/j.cpr.2014.04.003
- Sawyer, S. M., Afifi, R., Bearinger, L. H., & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, 379, 1630-1640. doi:10.1016/S0140-6736(12)60531-5
- Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T., & Baird, G. (2008). Psychiatric disorders in children with autism spectrum disorders: Prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47, 921-929. doi:10.1097/CHI.0b013e318179964f
- Skär, R. N. L. (2003). Peer and adult relationships of adolescents with disabilities. *Journal of Adolescence*, 26(6), 635-649. doi:10.1016/S0140-1971(03)00061-7
- Skokauskas, N., & Gallagher, L. (2012). Mental health aspects of autistic spectrum disorders in children. *Journal of Intellectual Disability Research*, 56, 248-257. doi:10.1111/j.1365-2788.2011.01423.x
- Tellegen, C. L., & Sanders, M. R. (2013). Stepping Stones Triple P-Positive Parenting Program for children with disability: A systematic review and meta-analysis. *Research in Developmental Disabilities*, 34, 1556-1571. doi:10.1016/j.ridd.2013.01.022
- Ward, M. A., Theule, J., & Cheung, K. (2016). Parent-Child Interaction Therapy for Child Disruptive Behaviour Disorders: A Meta-analysis. *Child & Youth Care Forum*, 45(5), 675-690. doi:10.1007/s10566-016-9350-5
- Webster-Stratton, C., & Reid, M. J. (2017). The Incredible Years, Parents, Teachers, and Children Training Series: A multifaceted treatment approach for young children with conduct problems. In J. R. Weisz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents* (3rd ed., pp. 122-141). New York, NY: Guilford.
- Whittingham, K. L. (2007). *Implementation and evaluation of the parenting program Stepping Stones Triple P for children with autism spectrum disorders* (Unpublished doctoral dissertation). The University of Queensland, Brisbane, Australia.
- Wise, E. A. (2004). Methods for analyzing psychotherapy outcomes: A review of clinical significance, reliable change, and recommendations for future directions. *Journal of Clinical Psychology*, 60, 101-110. doi:10.1207/s15327752jpa8201\_10



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# Questions

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