HREA Research Project Protocol

1. **TITLE**

Protective Functions of Parent-Adolescent Relationships and Youth Mental Health

1. **Project Team Roles & Responsibilities**

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1. **SUMMARY**

The study aims to investigate the links between the parent-adolescent relationship and adolescent mental health and functioning, and how these variables may be mediated by participation in a brief parenting intervention. One hundred and fourteen (114) parent-adolescent dyads will be recruited. Adolescents will be aged 11 to 17 years and will meet diagnostic criteria for i) an Anxiety Disorder, ii) Conduct Disorder or iii) no psychiatric disorder (No Disorder). The goal is to recruit equal numbers of parent-adolescent dyads within each diagnostic category. The main objectives are: 1) to evaluate the influence of differential aspects of the parent-adolescent relationship, particularly connectedness and hostility, on adolescent mental health; and 2) to assess the effectiveness of the parenting group for promoting supportive parenting, improved parent-adolescent relationships (i.e., increased connectedness and reduced hostility), and improved adolescent functioning.

Parent-adolescent dyads will take part in two face-to-face multi-method assessment sessions, approximately six to eight weeks apart. Following the first assessment session (pre-intervention, Time 1), parents will participate a brief, stand-alone 2-hour parenting intervention, the Triple P-Positive Parenting Program discussion group: ‘Coping with Teenagers’ Emotions’. The intervention aims to enhance parenting skills and knowledge and introduce strategies to help parents encourage their teenager to better manage their own emotions. The second assessment session (post-intervention, Time 2) will be held approximately two to four weeks following parent attendance at the parenting group. Parent-adolescent dyads will be followed up via online questionnaires six months after completing the second assessment session (6-month follow-up, Time 3).

1. **Resources**

The primary resources required to complete this project relate to personnel to assist with recruitment of participants, completion of the pre-intervention interviews, coding of observations, and delivery of the brief parenting intervention. First-year postgraduate level students (interns) from the UQ Clinical Psychology programs enrolled in the internship placement modules will assist with these tasks. The project will be supported by the excellent research facilities, clinical expertise, and reputable networks of The University of Queensland’s Parenting and Family Support Centre in engaging families in youth-focused research, and translating findings into practice.

A research grant of SGD$10,000 will be provided by the National Council of Social Service (NCSS), Singapore, under the NCSS Prime Minister Social Service Award that has been awarded to the primary researcher. Under the conditions of the award, a research officer from NCSS in the role of research mentor will provide his/her input to the research project and use of funds allocated in discussion with the research team. An allocation of AUD$1,500 for the Doctor of Psychology program will also be provided by the UQ School of Psychology to support the research.

1. **Background**

Mental health problems experienced by children and young people can have long-term implications for their academic attainment, employment and family relationships (Patel, Flisher, Hetrick & McGorry, 2007), with emotional and conduct disorders being among the most commonly reported forms of mental health problems for children (Deighton et al., 2016). In the recent report on the Australian Child and Adolescent Survey of Mental Health and Wellbeing (2015), it was found that in the 12 months prior to the survey, 13.9% of children and adolescents aged 4-17 in Australia experienced a mental disorder, with Attention Deficit Hyperactivity Disorder (ADHD) being the most common overall (7.4%), followed by anxiety disorders (6.9%), major depressive disorder (2.8%) and conduct disorder (2.1%). Higher rates of mental disorders in children and adolescents were found in low-income families, with parents and carers of lower levels of education and higher levels of unemployment, as well as families with poorer levels of family functioning. The Australian Institute of Health and Welfare (2011) reported that 1 in 10 Australians aged between 15 and 19 years reported a mental or behavioural problem, and young people with a mental health disorder are at higher risk of lower educational attainment, joblessness, and poor physical health.

The quality of parenting received by children in their early years and adolescence has a large impact on many different aspects of their lives including brain development, language, social skills, emotional regulation, mental and physical health, and their capacity to cope with adverse life events in their childhood (Harrison, 2011; Sanders, 2012). “Parenting” is a term applied to a complex set of behaviours that characterise the daily interactions between parents and their children, as well as the beliefs and attitudes that underlie these behaviours (Harrison, 2011). Smokowski, Bacallao, Cotter and Evans (2014) found that negative current parenting practices were related to higher adolescent anxiety, depression, aggression and lower self-esteem, and school satisfaction, while positive current parenting was significantly associated with less depression and higher self-esteem, future optimism, and school satisfaction. More specifically, the parent-adolescent relationship has been consistently found to play an important role in predicting adolescent mental health outcomes.

A number of theories on child development and the impact of parent-child relationships have sought to identify important characteristics that shape the quality of the parent-child relationship and its influence on mental health outcomes. Attachment theory (Bowlby, 1969; Ainsworth, Blehar, Waters, & Wall, 1978), for instance, suggests that children, whose physical and emotional needs for safety have been adequately met by responsive parenting, form secure attachment bonds and develop internal representations of themselves and others as safe and available. These early parent-child relationships then become models for relationships formed in adolescence and later adulthood (Raudino, Fergusson, & Horwood, 2013). Using an attachment theory framework and stress-process model (the stress-process model argues that stressors can occur as single events or be repeated over time, becoming chronic), Withers, McWey and Lucier-Greer (2016) identified four dimensions of the parent-adolescent relationships impacting psychosocial outcomes among a sample of high-risk adolescents (aged between 12 and 15); these are: emotional closeness, communication, autonomy, and conflict. Research has found that positive parent-adolescent attachment relationships can significantly buffer the associations between adolescents’ exposure to negative life events and their mental health problems (Wille, Bettge, & Ravens-Sieberer, 2008; Bannick, Broeren, van de Looij, Jansen, & Raat, 2013).

In another theory, the IPARTheory (Interpersonal Acceptance-Rejection Theory) proposed by Rohner (2015), the elements of connectedness (acceptance) and hostility (rejection) in parent-child relationships are considered to be the key factors that predict and explain the major consequences of parent-child relationships on development and wellbeing. Acceptance and rejection are considered to be categorically separate or divergent ends of the warmth dimension of interpersonal relationships, which embodies the quality of the bond between individuals. The quality of these relationships may be represented by the physical, verbal, and symbolic behaviours of individuals in expressing their care, or lack thereof, for another individual. “Connectedness” is a sense of being cared for, personally accepted, valued, and supported by others, as well as enjoyment and feeling attached to family, friends, school, and the wider community (McGraw, Moore, Fuller & Bates, 2008); parent-adolescent connectedness may be characterised by interactions such as valuing each other’s opinions, feeling able to talk to parents about problems, spending time together, and perceiving care and communication (Ackard, Neumark-Sztainer, Story, & Perry, 2006). “Hostility”, on the other hand, has been defined as overt behaviour and/or communication or expressions between parents and adolescents, including arguing, angry comments, contempt, yelling, swearing, name-calling, and/or physical aggression (Buehler, Benson, & Gerard, 2006). Support for IPARTheory comes from numerous studies across various cultural settings that have found that perceived parental acceptance is associated with multiple psychological, emotional and behavioural benefits such as altruism, positive, life satisfaction, psychological hardiness, positive school achievement, feelings of emotional security, and social responsibility, while perceived parental rejection is associated with psychological and behavioural problems, including externalising and internalising behaviours, loneliness, personality disorders, risk-taking sexual and other behaviours, suicide and suicidal ideation, and so on (Rohner, 2015, 2010).

A recent meta-analytic study conducted by Weymouth, Buehler, Zhou and Henson (2016) concluded that parent-adolescent conflict is positively associated with youth maladjustment, and both disagreement and hostility in parent-adolescent relationships have negative effects on youth development. Lack of care and affection has been associated with drug use (Pires & Jenkins, 2007) and adolescents who perceive a lack of emotional warmth and high levels of rejection or overprotection are described as more aggressive and criminal by parents and teachers (Buschgens et al., 2010). Research findings consistently suggest that children and adolescents who experience poor quality interpersonal relationships with their parents are at significant risk of developing negative mental health outcomes (Kenny, Dooley & Fitzgerald, 2013) and poor psychosocial adjustment in adulthood (Raudino et al., 2013). For example, poor psychological adjustment and negative well-being in adolescence are associated with prolonged, intense and repeated parent-adolescent conflict (Sheeber, Davis, Leve, Hops & Tildesley, 2007), high levels of parental over-intrusion and authoritarian control (Rigby, Slee & Martin, 2007), and low levels of perceived parental communication (Ackard et al., 2006). High levels of parental criticism have also been linked with self-harm behaviour in youth (Wedig & Nock, 2007). Moreover, Raudino et al. (2013) found that the quality of parent-child relationships in adolescence (age 15 to 16) modestly predicted later psychosocial functioning in adulthood (i.e. depression, anxiety, suicidal behaviours, property/violent offending and illicit substance use up to age 30).

On the other hand, adolescents who experience a high level of connectedness in parent-adolescent relationships are more likely to report increased positive development, i.e. they are more resilient and likely to adhere to their goals. Adolescents raised by authoritative parents exhibiting more warmth (including expressions of affection) have been associated with better adolescent mental health and advantages in psychosocial development over their non-authoritatively raised peers; these adolescents demonstrate higher school achievement, less depression and anxiety, higher self-reliance and self-esteem, and are less likely to engage in antisocial behaviour including delinquency and drug use (Steinberg, 2001). Higher levels of adolescent self-worth have been linked with close, affectionate parent-child relationships (Birkeland, Melkevik, Holson & Wold, 2012; Parker & Benson, 2004), and improved self-worth resulting from these positive relationships is likely, in turn, to promote positive adolescent mental health (McAdams et al., 2017).

To date, research on parent-child relationships and mental health has mainly utilised retrospective questionnaire methods, such as asking adults to report on the style of parenting they received as children (see Rapee, 1997), or obtaining self-reports on the quality of the parent-child relationship from the perspective of children and adolescents (e.g. Kenny et al., 2013; Parker & Benson, 2004; Noack & Puschner, 1999). However, these methods measure perceived rather than actual parenting styles and behaviours and may be subject to memory and reporting bias (Hudson & Rapee, 2001). In comparison, only a few studies have used direct observational methods to investigate interactions between parents and their pre-adolescent and adolescent children with mental health disorders. For example, researchers who observed interactions between children (aged between 7 and 15) and their mothers when children are given a difficult cognitive task found that higher levels of anxiety in children are associated with an over-involved, controlling parenting style (e.g. Hudson & Rapee, 2001; Krohne & Hock, 1991). Barrett, Fox and Farrell (2005) used a family observation task to assess parent-child interactions in anxious children (aged 7 to 13 years) compared to their non-symptomatic siblings and a non-clinical control group. They also found support for associations of childhood anxiety with higher levels of control and lower levels of warmth in parent-child interactions. Interestingly, Waite and Cresswell (2015), who observed the behaviours of young people and their parents while they completed a series of mildly anxiety-provoking tasks, found that parents of adolescents (aged 13 to 16 years) with anxiety disorders displayed higher levels of intrusiveness and warmth compared to parents of adolescents without anxiety disorders, whereas this result was not observed among parents of younger children (aged 7 to 10 years). The inclusion of an observational design in the proposed study will provide further objective information in the assessment of actual parent-adolescent interactions in addition to measuring families’ perceptions of their parent-adolescent relationships.

Past research has also indicated the potentially positive effects of parenting programs, even brief parenting interventions, on parent-child relationships (Fabrizio, Tai, Hirschmann and Stewart, 2013) and adolescent developmental outcomes (Chand et al., 2013). The goal of parenting programs such as Triple P-the Positive Parenting Program are to promote positive child and adolescent development through enhancing parents’ knowledge, competence, and belief in their own capacities (Sanders, 2012). Parenting programs for parents of adolescents, such as Teen Triple P, which was specifically designed to meet the needs of parents of adolescents aged 11 to 16 years (Ralph & Sanders, 2003, 2004), have shown promise in reducing parent-adolescent conflict and adolescent behavioural difficulties, as well as improvements in parental self-efficacy and self-regulation. Several randomised controlled trials that evaluated Teen Triple P delivered in various formats (i.e., individual, group, and self-directed) detected improvements in parenting practices (e.g. reductions in the use of ineffective parenting strategies), parenting confidence, and the quality of family relationships, and decreases in parent-adolescent conflict and adolescent disruptive behaviours (Chu, Bullen, Farruggia, Dittman, & Sanders, 2015; Salari, Ralph, & Sanders, 2014).

While research suggests that conventional parenting programs produce important benefits for families, a significant issue for research in this area is how to make these programs easy for parents to access. This is a particular problem for parents of adolescents, who are often more difficult to engage and retain in parenting programs in comparison to parents of younger children. Recently, alternative delivery methods have been explored as a way of making these programs more accessible to parents, including parenting seminars and brief, targeted discussion groups. Chand et al. (2013) used a mixed-methods approach to investigate the effectiveness of a brief parenting intervention involving attendance at a 3-part seminar series. The study, which was not a randomised controlled trial, found that participation in the intervention was linked to increased positive parenting behaviours (e.g. use of praise) as well as improvements in family relationships and reduced parent-adolescent conflict. A specific focus of Chand et al.’s (2013) research was on positive adolescent outcomes. They found that the seminar series had positive effects on adolescent outcomes such as connection to school and family, a sense of caring for others, and reduced problem behaviours. Moreover, one recent trial completed by the investigators last year involved testing the efficacy of one-off, two-hour discussion groups targeted at a particular problem (e.g., family conflict, emotional teen behaviour), with positive effects on adolescent behaviour problems (Dittman, Burke, & Barton, 2016).

In this study, we aim to evaluate the role of connectedness and hostility in parent-adolescent relationships and how these constructs relate to adolescent mental illness (i.e. anxiety and behavioural disorders) and their influence on adolescent functioning (i.e. positive development, emotional difficulties, oppositional defiant behaviour, and antisocial behaviour). We will do this through multi-method assessments of these constructs, involving observational assessment of parent-adolescent interactions and questionnaire measures to obtain comprehensive information on the constructs of connectedness and hostility. We will also evaluate whether participation in a brief parenting intervention affects parent-adolescent relationships and how this impacts adolescent behaviour and functioning. Findings from the study will contribute to a new conceptual framework for understanding parent-adolescent relationships and their impact on adolescent mental health outcomes.

* 1. **Research Aims**

To help us understand the role of supportive parenting in shifting the trajectory of negative adolescent outcomes, the current project aims to:

1. Explore how aspects of the parent-adolescent relationship (i.e. connectedness and hostility) are associated with adolescent mental health (i.e. anxiety and conduct disorders). We predict that we will observe parents engaged in a range of behaviours that demonstrate connectedness and hostility within a 10-minute interaction with their adolescent, and during this interaction:
   1. Higher levels of hostility and lower levels of connectedness will be observed and reported by adolescents/parents who belong to the clinical sample groups (anxiety disorders and conduct disorders) as compared to the no disorder group.
   2. The highest levels of hostility amongst the three groups will be observed and reported by adolescents/parents in the conduct-disordered group.
   3. Anxiety-disordered adolescents and their parents will demonstrate and report the highest levels of connectedness amongst the three groups.
   4. Adolescents in the no-disorder group will have higher reported positive development and lower reported behavioural and emotional difficulties than those in the anxiety or conduct disordered groups.
2. Assess whether aspects of the parent-adolescent relationship can be improved by parental participation in a brief, targeted parenting intervention, and the implications for adolescent functioning. To achieve this, the study will examine the effectiveness of a brief parenting intervention for improving: a) the quality of the parent-adolescent relationship, and b) adolescent functioning (i.e., positive development, emotional difficulties, oppositional defiant behaviour, antisocial behaviour). We predict that participation in the parenting intervention will result in improvements across all three study groups in:
3. The quality of the parent-adolescent relationship (increased connectedness and decreased hostility).
4. Adolescent mental health outcomes (oppositional, defiant and antisocial behaviour, emotional difficulties, positive development).

Outcomes from this study will contribute to a better understanding of the role of supportive parenting in positive adolescent development. It is expected that the study will find a strong link between levels of connectedness and hostility in parent-adolescent relationships and their association with adolescent mental health outcomes.

1. **Project Design**
   1. **Research setting**

The research project will be conducted at the UQ Parenting and Family Support Centre at the St Lucia campus in Brisbane. Pre-post assessments and delivery of the parenting group will be conducted using the clinic rooms at the UQ Parenting and Family Support Centre. Follow-up data collection using only questionnaires will be conducted online via the UQ Qualtrics website, which is a secure web-based survey platform hosted on the UQ server. Participants who are invited to complete the online surveys will be provided with a unique username and password to access the surveys.

* 1. **Research Design**

The study involves a repeated measures evaluation of a brief parenting intervention, and will employ a multi-method assessment approach to evaluate the quality of the parent-adolescent relationship at three time points, pre-intervention, post-intervention, and at 6-month follow-up. Parents and their adolescent will attend the pre-intervention assessment session (Time 1) at the Parenting and Family Support Centre (PFSC). Parents will then be invited to attend the next available 2-hour ‘Coping with Teenagers’ Emotions’ parenting discussion group. Approximately two to four weeks following the parents’ participation in the discussion group, the parents and their adolescent will attend the PFSC to complete the post-intervention assessment (Time 2). Six months after completing the post-intervention assessment, follow-up data will be obtained from parent-adolescent dyads, who will be asked to complete a battery of online questionnaires via a secure web-based platform (Time 3).

**6.3 Participants**

Participants will be adolescents aged between 11 and 17 years and their parents. A minimum of 114 parent-adolescent dyads in total will be recruited for this study, with the goal of recruiting at least 38 dyads for each of the three study groups: 1) Anxiety Disorder Group, 2) Conduct Disorder Group, or a 3) No Disorder Group. The ratio of male to female adolescent participants will be balanced (1:1) as far as possible, within ethical limits and feasibility. For parents, efforts will be made to recruit both mothers and fathers; however, as is typical in parenting research, it is expected that a higher ratio of mothers will participate in the study.

It is anticipated that many of the participants in the trial will have children receiving services relating to their child's mental health issues (anxiety or conduct problems) from other community or private practitioners (e.g., psychologists, psychiatrists, CYMHS). Participation in the parenting discussion group will not interfere with other therapeutic help-seeking. It is expected that the discussion group will enhance or augment the standard treatment that adolescents and their families may be receiving elsewhere. For participating families in which no mental health issue has been identified (No Disorder Group), the parenting discussion group may be the only service the family is currently accessing. No family will be prevented from seeking additional assistance as a result of participating in this study. Both participating and non-participating families (i.e. those excluded due to not meeting full criteria or who drop out from the study) that request or require further assistance will be provided with a referral to other support services, including parenting services via the Queensland state-wide roll-out of the Triple P program.

* + 1. Participant recruitment strategies and timeframes

The recruitment of potential participants for the study sample will primarily be carried out through referrals from hospitals, community mental health services (e.g. Child and Youth Mental Health Service - CYMHS), GPs, schools, and private psychology clinics. Flyers and/or posters will be distributed to these services to advertise the project. The project will also be advertised through mainstream media using resources such as UQ News.

Full details of the research project will be provided on an existing UQ website, the Parenting Teenagers Research Group. All recruitment materials will include a link to the project website where full information on eligibility and inclusion criteria will be made available. Interested families will be directed to the project website and they may check their suitability for this study before applying to participate. The primary method for families to register their interest will be via a web form on the project website. Interested families will be asked to enter their names and basic contact information (phone number and email address) on the web form. A member of the research team will contact parents who have registered on the web form to discuss their interest and invite them to undertake a telephone screening/intake to evaluate if their families are eligible for the study according to the general study criteria (e.g. age, English-speaking). If they do, parents and their adolescents will be invited to attend the pre-intervention assessment session (T1), during which they will be assessed via a diagnostic interview to determine if they meet the full inclusion criteria. For families who have further queries or wish to contact the research team directly, a contact number and email address for the research team will also be provided on the project website and in all recruitment materials.

Recruitment will begin in 2017 once ethics approval has been received and continue throughout the year; data collection will be conducted as participants are recruited in the manner of a rolling recruitment process until sufficient numbers of families have entered the study. It is currently estimated that recruitment and data collection will be completed in December 2018. Separate ethics application will be made to Queensland Health for permission to promote the study to parents of adolescents receiving services from Children’s Health Queensland (CHQ) such as CYMHS. Recruitment via CHQ services will not commence until this ethics approval is obtained.

* + 1. Exclusion Criteria

Exclusion criteria which apply are:

* Participants from non-English speaking backgrounds or whose English is insufficient to participate. This will be determined by the telephone screening process and includes both adolescents and their parents.
* Adolescents who are not in the primary care of their parents. This also applies to adolescents in foster care who are in temporary placements.
* Adolescents and/or their parents who meet diagnostic criteria for one or more of the following disorders: intellectual disability, schizophrenia or other psychotic disorders, organic mental disorders, and neurodevelopmental disorders.
* For the clinical sample groups: adolescents with a principal diagnosis of anxiety disorder who also meet criteria for a conduct disorder, and vice versa (based on DSM-IV criteria)\*.
* Consistent with the reclassification in DSM-5, obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) will be excluded from the category of anxiety disorders for the purpose of this research.
* For the no disorder group: participants who have previously accessed a child and/or adolescent service (government or private) for mental health treatment in the past 12 months.

\*For this study, interested participants who meet DSM-IV criteria for both an anxiety disorder and conduct disorder will be excluded. This is to control for potential confounding variables presented by comorbid diagnoses and to clarify findings about treatment effects on specific subgroups of the population that are the target of this research, i.e. anxiety- and conduct-disordered adolescents. Those excluded due to not meeting full criteria can be provided with appropriate referrals to other support services.

* 1. **Approach/es to provision of information to participants and/or consent** 
     1. Ethical Considerations

The main ethical considerations taken into account are general concerns with working with children and young people, such as judging the participants’ vulnerability and capacity to consent to participation in the research. As with all participants, children and young people will be treated with respect and integrity, and their knowledge and wisdom explicitly valued via verbal feedback. The APS Code of Ethics and ethical guidelines for working with young people will be adhered to in this study.

* + 1. Assessment of Capacity

The research team will respect the developing capacity of the young people who may be involved in this study. The people responsible for assessing competence (i.e. members of the research team) are psychologists who are registered with the Australian Health Practitioner Regulation Agency (AHPRA). They have experience in working directly with children through providing a clinical service and/or in past research studies, and are responsive to the varying levels of development and maturity among young people which are not dependent on age. The young person will be assessed on whether they are mature enough to understand and consent to their participation in the research and are not vulnerable in other ways that may require additional care. For this study, young people who meet criteria for an intellectual disability, schizophrenia or other psychotic disorders, or an organic mental disorder will be excluded from this study as this will be deemed to have a likely impact on their capacity to give informed consent. The young people involved will be engaged in discussion appropriate to their level of cognitive capability in plain language to discuss what the research will require of their involvement and its likely outcomes. Parents will also play a role in explaining to adolescents how they will be involved in the study, with the understanding that parents should not put any pressure on their adolescents to take part. Adolescents will be encouraged to discuss any questions or concerns about the study with their parents and a member of the research team before consenting to participate. Parents will also be required to consent to their adolescents’ participation in the study.

* + 1. Information for Parents and Adolescents

Parents and adolescents will receive separate participant information sheets and consent forms. Efforts will be made to ensure both adolescent and adult participants’ consent is informed by using plain language to explain the research procedures, possible benefits and risks, confidentiality of data and limits to confidentiality, participants’ right to withdraw from the study at any time, and other relevant information. Opportunities will be given for both adolescents and their parents to ask questions and make clarifications. As the adolescent participants’ capacity to give consent may be limited, the consent of their parent/guardian with legal authority to act on their behalf will also be obtained. Written consent will be sought individually from adolescents and parents. If participants choose to withdraw from the study, they will be asked to complete a withdrawal form. Those who drop out from the study will not endure any costs and be referred appropriately, if needed.

* + 1. Obtaining Consent

Parents will be asked to consent to their own involvement in the study as well as the involvement of their adolescent, and both must sign separate consent forms. Adolescents will provide their own written consent and they can choose not to participate even if their parent has provided consent. Adolescents and their parents will only be deemed eligible to participate in the study if consent has been provided by both parties. This is designed to reduce the likelihood of coercion by parents for adolescent participation.

Written plan language information sheets and consent forms (parent and adolescent version versions) will be sent electronically or via postal mail to eligible participants at completion of the telephone screening (intake call). Separate envelopes will be included for the parent and adolescent to individually consent to the project. Participants may choose to return the consent forms prior to the pre-intervention assessment session in the reply paid envelope provided or to bring the consent forms with them to the session. Consent will be checked verbally prior to commencing the assessment session, and additional information sheets and consent forms will be made available at the pre-intervention assessment session in case the ones previously posted to parents had been misplaced.

* + 1. Participant Risks

It is anticipated that participation in the study will lead to a minimal risk of distress for adolescents and their parents. There are two main components to this study that require an assessment of risk:

*Assessment sessions:* There should be no risk to the participants’ health or physical functioning while completing tasks, questionnaires and interviews. There may be some possible risk of becoming temporarily upset during assessment processes in the collection of data if adolescents and/or their parents become distressed by the nature of the challenging task involved and their response to the situation, or when answering personal questions. However, the risk of this happening is low given that the duration of the tasks are relatively short and sufficient breaks will be provided between tasks. Tasks have also been selected to be developmentally appropriate for pre-adolescents and adolescents aged 11 to 17 years. Participants will be informed that if they are feeling distressed, they can stop the tasks at any time. While completing questionnaires or answering questions in the diagnostic interview, participants will be offered time to rest if needed and the process will be made as effortless as possible (e.g. offering participants different options of completing the questionnaires via pencil-and-paper or on a laptop).

*Parenting intervention:* It is not expected there will be any risks to participants’ health or physical functioning from participating in the parenting discussion group. Parents may become briefly upset while discussing their adolescent children in the group sessions, but the discussion group is designed to provide parents with strategies for improving their relationship and capacity to support their adolescents with difficult emotions.

In the unlikely scenario that a participant becomes distressed during any part of the study, the activity will be paused and a member of the research team (who is also a clinical practitioner) will be on hand to provide support. If required, additional supports or an appropriate referral will be provided, including encouraging participants to consult with their physician or mental health professional to obtain further assistance. Steps will also be taken to identify other potential harms and/or benefits. As all possible care will be taken to safeguard the participants involved, and the outcomes listed above have a low probability of happening, the risk to participants is considered minimal.

* + 1. Participant Benefits

All participants will be offered the parenting intervention as part of the study. Based on evidence from prior research, it is expected that participation in the parenting intervention (2-hour discussion group) will produce favourable outcomes for families of adolescents, including improved family relationships, parenting competence and adolescent functioning. Additionally, depending on the amount of funding available, each participating family will also be allocated a small gift voucher (e.g. $10 Coles-Myer voucher) to thank them for completing the assessments.

1. **RESEARCH ACTIVITIES**
   1. **Overview and Duration**

The research team will be responsible for all research activities required of this project in its duration, which will include: project development, development and preparation of assessment tools (e.g. coding schedule, problem-solving tasks), participant recruitment, assessment of participant eligibility, administration of research tasks, data collection and analysis, participant follow-up, write-up and presentation of results, and any publication activities.

The project will run for approximately 2 years to allow for time to recruit sufficient numbers of families and for families to progress through all stages of the study. Participants will commit to being in the study for approximately 12 months, covering initial telephone screening, completion of pre- and post-intervention assessments and ‘Coping with Teenagers’ Emotions’ parenting discussion group, and completion of 6-month follow-up questionnaires.

* 1. **Procedures**

Study outcomes will be assessed using a multi-methods approach at three time points, pre- and post-intervention, and 6-month follow-up. An outline of the components of the four sessions (pre-intervention assessment, parenting intervention, post-intervention assessment, and 6-month follow-up) is shown in Table 1 below.

*Table 1: Sessions Outline*

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| --- | --- |
| Session 1: Pre-Intervention Assessment (T1) | (A) Diagnostic Interview  (B) Questionnaires  (C) Observation  (D) Video-Mediated Recall/Feedback Tasks |
| Session 2: Parenting Intervention (parents only) | ‘Coping with Teenagers’ Emotions’ parenting discussion group |
| Session 3: Post-Intervention Assessment (T2) | (B) Questionnaires  (C) Observation  (D) Video-Mediated Recall/Feedback Tasks |
| Session 4: 6-Month Follow-Up (T3) | (B) Questionnaires (administered online) |

The T1 session will commence with a diagnostic interview (A) administered to parents and adolescents to classify families into adolescent mental health categories i.e., Anxiety Disorder, Conduct Disorder, No Disorder. Parents and adolescents will complete questionnaires (B) independently to provide information on demographics, parenting behaviours and practices, parents’ and adolescents’ psychological wellbeing, and the quality of the parent-adolescent relationship. The battery of measures will be prepared in separate parent and adolescent survey packages. Participants may choose to complete pencil-and-paper copies or web-based versions of the questionnaires. A laptop will be provided for participants on site to access the web-based questionnaires. Parent-adolescent interactions will then be observed during adolescent completion of a problem-solving puzzle task to assess for the presence of behaviours characteristic of connectedness and hostility in the relationship (C). The video recording of the interactions will be played back to parents and adolescents individually to assess their beliefs, reactions and attributions during the problem-solving task (D). T2 assessment will involve tasks B, C and D. Longitudinal data will be obtained from parent-adolescent dyads at T3, 6 months after T2, via quantitative measures only (B).

* + 1. Outcome Measures

The outcome measures included in the study are summarised in Table 2 and described below.

*Table 2: Proposed study measures*

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| --- | --- | --- |
| **Construct Assessed** | **Measure** | **Respondent/s** |
| Parent-adolescent relationship | * Parent-Adolescent Relationship Scale (PARS) * Observation and Video-Mediated Recall/Feedback Tasks | Parent  Adolescent |
| Adolescent mental health diagnosis | * Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent versions (ADIS-IV-C/P) | Parent  Adolescent |
| Adolescent functioning | * Adolescent Functioning Scale (AFS) | Parent  Adolescent |
| Parenting behaviours | * Alabama Parenting Questionnaire – Short Form (APQ-9) | Parent  Adolescent |
| Parent functioning | * Parental Psychological Flexibility Questionnaire (PPF) * Depression Anxiety and Stress Scales (DASS-21) | Parent |

* + - 1. **Adolescent Mental Health Diagnosis.** Assignment of participants to sample group (anxiety disorder group, conduct disorder group or no disorder group) will be assessed at commencement of the T1 session via a diagnostic interview. The assessment tool used for the diagnostic interview is the *Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent versions* (ADIS-IV-C/P; Silverman & Albano, 1996). The ADIS-IV-C/P are semi-structured clinical interviews based on diagnostic criteria from the DSM-IV (Diagnostic and Statistical Manual for Mental Disorders, version 4). The interviews cover a range of anxiety and conduct disorders listed in the DSM-IV and obtain parent and child ratings of interference of these disorders in the child’s daily life on a scale of 0 (symptom-free) to 8 (serious symptoms, limited quality of life). Separate ratings from the parent and child interviews are combined to aid the clinician in determining whether the child meets diagnostic criteria. A cut-off score of 4 on the scale (moderate impairment) is commonly used to indicate a level of severity consistent with meeting diagnostic criteria. Test-retest (Silverman, Saavedra & Pina, 2001) and concurrent validity (Wood, Piacentini, Bergman, McCracken, & Barrios, 2002) are reported as excellent for the ADIS-IV-C/P. The ADIS-IV-C/P was selected for this study instead of the newer ADIS-5 as no child versions of the ADIS-5 based on DSM-5 criteria have been developed yet. All sections of the ADIS-IV-C/P will be administered for this study except the sections on obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD), which will be excluded from the category of anxiety disorders consistent with their reclassification in DSM-5. The diagnostic interview will be completed at pre-intervention only.
      2. **Demographics.** The parent and adolescent survey packages will be used to gather demographic information about the adolescent and their family. Details on the adolescent and their parent’s age, gender, ethnicity, socioeconomic status, family composition, and parental education and employment. The demographic section of the parent and adolescent packages will be completed at pre-intervention only.
      3. **Parent-Adolescent Relationship.** Three methods will be used to assess the parent-adolescent relationship: a quantitative questionnaire (T1, T2 and T3), the *Parent-Adolescent Relationship Scale* (PARS; Burke, Dittman, Haslam, Filus & Ralph, 2017); observations of parent-adolescent interactions (T1 and T2), and the Video-Mediated Feedback Task (T1 and T2).

The PARS is a 20-item scale that assesses the quality of the parent-adolescent relationship. Three subscales emerged with good internal consistency: Connectedness, Involvement and Hostility (Burke, Dittman, Haslam, Ralph & Filus, 2017). Participants are asked to rate their responses on a 3-point scale ranging from 0 (Did Not Apply to Me At All) to 3 (Applied to Me Very Much, Or Most of the Time) to indicate how much the statement applied to them over the past week. Sample items include: *During stressful times in my teenager’s life, I try to do extra things to show them I care* (item 4), *I make negative comments about my teenager to others* (item 9)*, and I encourage my teenager to talk about their thoughts and feelings* (item 20)*.*

In the *Parent-Adolescent Observation*, adolescents will take part in a problem-solving task designed to elicit behaviours representing connectedness and hostility between parents and their adolescent. The observation will involve the adolescent undertaking two problem-solving puzzle tasks while their parent observes. Before completing the puzzle tasks, both the adolescent and their parent will be asked to rate on a continuous scale of 0 (Not close at all) to 10 (Very close) how close they feel to their parent/adolescent. (Please note, participants will be asked to complete this rating again at the end of the Video-Mediated Recall/Feedback Task.) The adolescent will be seated at a table with their parent and asked to select two challenging puzzle tasks to complete (out of three options), each in a 5-minute period (see Appendix A for examples of puzzle tasks and facilitator instructions). The parent will be given the answers to the problems presented, as well as a generic set of instructions before the start of the task that suggest they may provide help if they think it is really needed. The two sets of 5-minute parent-adolescent interactions during the puzzle task (total 10 minutes) will be video recorded for later transcription and coding. Interactions will be rated using a coding criteria measuring the constructs of parental connectedness and hostility that will be developed based on an adapted version of the Family Observation Schedule – Adolescent version (Sanders, Baker & Turner, 2012). The interaction will be rated by a researcher blind to the child’s diagnosis and an additional coder will rate a random 50% of the interactions for inter-rater reliability.

In the *Video-Mediated Recall/Feedback Task*, parents and adolescents will be separately shown the replay of their interactions during the problem-solving tasks as a cue to elicit their perceptions, beliefs and emotional responses about the interaction, specifically with regard to the constructs of parental connectedness and hostility. Before watching the video, participants will be individually asked some questions about their experience of completing the problem-solving tasks with their parent/adolescent, specifically:

* 1. “What did you think about the puzzles? How hard were they for you/your child?”
  2. “Did you enjoy doing the puzzles? What did you like/dislike about them?”
  3. “Do you have any other comments about the puzzles?”

Participants will also be asked to mark their experience of how difficult the tasks were on a continuous rating scale from 0 (Very easy) to 10 (Very difficult). Each participant will then watch a replay of the video; the video will be paused at specific times (approximately 20 to 30-second intervals) and participants will be asked to recall their thoughts and feelings about their own and their interaction partner’s behaviour at that point in time. A series of prompts will be used to elicit participant responses (see Appendix B for facilitator instructions and prompts). Parent and adolescent responses will be coded into categories using a pre-determined coding system modelled after the procedures used by Sanders and colleagues (Halford &Sanders, 1988; Sanders & Dadds, 1992). The qualitative data will be rated by a researcher blind to the child’s diagnosis and 50% of the data will be randomly selected and rated by another coder for inter-rater reliability. After watching the video, participants will be asked open-ended questions on their perception of their relationship with their parent/adolescent and asked again to rate on a continuous scale of 0 (Not close at all) to 10 (Very close) how close they feel to their parent/adolescent.

* + - 1. **Adolescent Functioning.** The A*dolescent Functioning Scale* (AFS; Dittman, Burke, Filus, Haslam & Ralph, 2016) will be administered at T1, T2 and T3. The AFS is a measure which can be completed by parents and adolescents that assesses problem behaviour and positive development in adolescents. The parent version consists of 35 items and the adolescent version consists of 33 items. Items fall into four subscales: Positive Development, Oppositional Defiant Behaviour, Antisocial Behaviour, and Emotional Difficulties. Participants are asked to rate their responses to several statements based on how true the statement was of the adolescent’s behaviour over the past four weeks. Responses are rated on a scale from 0 (Not At All True) to 5 (True Most of the Time). The AFS has shown high internal consistency and test-retest reliability, as well as established convergent and discriminant validity when validated in a sample of Australian parents of adolescents aged 11 to 18 years (Dittman, Burke, Filus, Haslam & Ralph, 2016). Sample items from the parent version include: *[My teenager] hurts me or others (e.g. hits, pushes, kicks)* (item 2)*, [My teenager] talks about their views, ideas or needs appropriately* (item 8)*,* and *[My teenager] seems unhappy or sad* (item 14)*.*
      2. **Parenting Practices.** The *Alabama Parenting Questionnaire-9* (APQ-9; Elgar, Waschbusch, Daniel, Dadds & Sigvaldason, 2007)will be administered at T1, T2 and T3.The APQ is a commonly used measure of parenting practices for school-aged children. The full scale contains 42 items assessing parenting practices across five domains: Positive Parenting, Poor Monitoring, Inconsistent Discipline, Involvement, and Corporal Punishment. The APQ’s scales have moderate internal consistency in youth aged 6-13 years, and adequate psychometric properties for an adolescent population (Zlomke et al., 2013). The short form version of the APQ will be used for this study, consisting of 3, 3-item subscales: Positive Parenting, Inconsistent Discipline, and Poor Supervision. Participants are asked to rate their responses to several statements based on how typically each item occurs at home. Responses are rated on a scale from 1 (Never) to 5 (Always). The APQ-9 has been validated and shown to be an informative tool for clinicians and researchers when brief assessment is required relating to disruptive behaviours in children (Elgar, Waschbusch, Dadds, & Sigvaldson, 2007). An adapted version of the APQ-9 will be used for adolescents in this study – questions will be altered slightly to provide adolescent perspectives (instead of parents’ self-report) of parenting practices on the 9 items in the questionnaire. Sample items from the parent version include: *You let your child know when he/she is doing a good job with something* (item 1), *You threaten to punish your child and then do not actually punish him/her* (item 2)*,* and *You praise your child if he/she behaves well* (item 7)*.*
      3. **Parent Functioning.** Two quantitative measures will be used to assess parent functioning at T1, T2, and T3, the *Parental Psychological Flexibility Questionnaire* (PPF; Burke & Moore, 2015) and the *Depression Anxiety Stress Scales, 21 items* (DASS-21; Lovibond & Lovibond, 1995). The PPF is used to evaluate psychological flexibility within parenting as defined by parental acceptance of negative thoughts, emotions and urges about one’s child while behaving consistently with effective parenting. The questionnaire comprises 19 items belonging to three subscales: Acceptance, Cognitive Defusion and Committed Action, and has been found to have adequate reliability and validity for use in research of psychological flexibility among parents of young people (Burke & Moore, 2015). Participants are provided a list of statements and asked to rate each item as it applied to their parenting on a 7-point Likert scale ranging from 1 (Never True) to 7 (Always True). Sample items include: *My emotions get in the way of being the type of parent I would ideally like to be* (item 1), *I worry about not being able to control the feelings I have about my children* (item 7)*,* and *I can get angry with my children and still be a good parent* (item 15)*.*

The DASS-21 is a short form of the original 42-item self-report questionnaire designed to evaluate the three emotional states of depression, anxiety and stress in adults (Lovibond & Lovibond, 1995). The three scales with seven items each provide a total score which has demonstrated excellent internal consistency and sound construct validity (Henry & Crawford, 2005). Participants are asked to rate their responses on a 3-point scale ranging from 0 (Did Not Apply to Me At All) to 3 (Applied to Me Very Much, Or Most of the Time) to indicate how much the statement applied to them over the past week. The DASS-21 will be used in this study to assess negative emotional states in parents and to identify any secondary effects of the discussion group on parental wellbeing. Sample items include: *I couldn’t seem to experience any positive feeling at all* (item 3), *I was worried about situations in which I might panic and make a fool of myself* (item 9), and *I was intolerant of anything that kept me from getting on with what I was doing* (item 14)*.*

* + 1. Parenting Intervention

The intervention is a single time-point, 2-hour discussion group that will be offered to parents as a stand-alone program. The ‘Coping with Teenagers’ Emotions’ discussion group is a 2-hour group (part of the Teen Triple P-Positive Parenting Program) that aims to teach parents strategies to encourage their adolescent to better manage their emotions, to deal with emotional behaviour and to effectively resolve problems that have triggered the emotional behaviour. The group sessions will be facilitated by a by a trained and accredited Triple P practitioner with approximately 10 to 20 parents in attendance per group. During the discussion group, parents will watch DVD segments to prompt group discussion and provide step-by-step suggestions about positive parenting strategies to help prevent problems and to cope with adolescents’ emotions and support the adolescent to deal appropriately with their feelings. The group will include active discussions of the parenting strategies introduced and will involve parents in developing a personalised parenting plan. Parents will be guided through the exercises in the workbook by the facilitator. The tasks have been designed to further parents’ understanding of the strategies introduced and issues raised by the group and to support implementation of the suggested strategies with their family. Every parent will receive a ‘Coping with Teenagers’ Emotions’ workbook that includes information and practical exercises covered during the discussion group. The workbook reinforces the material presented during the group and can be used at home with partners who were unable to attend.

As a measure of consumer satisfaction, the **Client Satisfaction Questionnaire** (CSQ; Sanders, Markie-Dadds, Tully & Bor, 2000) will be completed by parents following the completion of the parenting intervention. The CSQ contains 15 items measuring intervention satisfaction, 13 of which are rated on a 7-point scale, with the final 2 items providing room for comment. A copy of the CSQ is included in Appendix C.

* 1. **Data Collection/Gathering**

Data collection through a multi-component assessment (diagnostic interview, questionnaires, observation and video-mediated recall/feedback task) will occur at three time points. Information collected from participants via questionnaires will include demographic and family background information as well as standardised measures assessing the parent-adolescent relationship, adolescent and parent functioning, and parenting behaviours. Information will be sought separately from parents and adolescents. Some personal details of the adolescents may be obtained from their parents, such as demographic information and parents’ perceptions on their adolescent children's psychological functioning. No access to secondary data obtained from another third party or medical/health/mental health record or the records of a law enforcement agency will be required in this study.

Participants will be told that their participation is voluntary and they are free to withdraw from the study at any time without prejudice or penalty. Participants will be informed prior to consenting to participation that if they drop out of the study, any assessment information that they have provided up to the point of withdrawal will be included in the study unless they explicitly request for it to be removed. Those who drop out from the study will not endure any costs and be referred appropriately, if needed. Participants can contact a member of the research team if they wish to renegotiate their consent. If participants have other concerns about their involvement in the study, they can also choose to speak to an officer at UQ who is not involved in the study by contacting the Ethics Coordinator at UQ. A phone number for the Ethics Coordinator will provided in the Participant Information Sheet.

* 1. **Data Management**
     1. Privacy of Data

Participant confidentiality will be strictly adhered to by the research team, participating students who may assist in the collection and coding of data, and the University of Queensland. No release of confidential information related to the study or data will be released to any unauthorised third party without prior written approval of the research team and the participants. Clinical information will not be released without written permission of the subjects involved except as necessary for monitoring by NHMRC or regulatory authorities. Any risk of loss of confidentiality will be minimised by ensuring all research data is securely encrypted and stored.

* + 1. Data Storage

Participant data and video recordings of sessions will be copied from primary sources and transferred onto a computer database. Questionnaire data will be collected via Qualtrics, a secure web-based survey platform hosted on the UQ School of Psychology server, and/or pencil-and-paper versions of the surveys. The data will be collectively downloaded and stored securely on a password protected computer at the UQ Parenting and Family Research Centre. Data collected via pencil-and-paper versions will be entered into an electronic database. Video recordings will be saved on the same password protected computer and backed up on a USB which will be stored securely at the UQ Parenting and Family Research Centre.

Each parent-adolescent pair will be assigned a unique identification code that will be used to de-identify the data but allow for linking of parent and adolescent data for analysis. Participant data will be tracked and managed using an Excel database and stored securely on the same password protected computer. Only de-identified data will be analysed and reported to maintain confidentiality in the research. No identifiable information such as names, contact details or birth dates will be included in any presentation/publication to protect the privacy of participants.

Only the research team will have access to the research data, which will be owned by UQ. If transfer of data between computers is required, the data will be stored on an encrypted, password-protected USB or hard drive for the purpose of transfer and erased from the USB/hard drive once the transfer is completed. Only de-identified data will be transferred using this method. Any paper data will be stored securely in locked filing cabinets and electronic copies will be encrypted and stored in password-protected hard drives or USB.

In line with ethical guidelines for research involving humans, study data will be archived and retained for a minimum of seven years after the youngest participant in the study has turned 18 years old. All data will be stored securely at the UQ Parenting and Family Research Centre and accessed only by members of the research team.

* 1. **Data Analysis**
     1. Sampling Strategy

A power analysis using G\*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007, 2009) was used to determine the appropriate sample size required for this project. This was determined by setting a medium effect size f of .25 , alpha set at .05, and power at .80. It was estimated that a minimum of 98 participants (parent-adolescent pairs) in total will be required for this study. To allow for attrition across time, an additional 15% will be recruited meaning 114 participants with be recruited in total with at least 38 participants in each of the three sample groups. Adolescent and parent data will be matched to evaluate the quality of the parent-adolescent relationship and explore the research questions identified.

* + 1. Analyses

Quantitative data will be analysed using SPSS. Descriptive analyses will be used to describe the adolescents and parents participating in this project. Observation data from the video recordings of parent-adolescent interactions during the problem-solving tasks will be coded and categorised using an adapted version of the *Family Observation Schedule – Adolescent version* developed by Sanders, Baker and Turner (2012) and also based on the global scales from Hudson and Rapee’s (2001) study. Participants’ responses in the video-mediated recall exercise will be coded into categories using a coding system that will be developed for this task adapted from Sanders and colleagues’ video-mediated recall procedures (Halford & Sanders, 1988; Sanders & Dadds, 1992). Differences in variables between the three sample groups will be investigated using one-way analyses of covariance (ANCOVA) with age and gender selected as covariates. Specifically, differences in the constructs of connectedness and hostility between groups will be analysed. Correlations and regressions will be used to predict adolescent mental health outcomes from the parent-adolescent relationship, parenting behaviours and practices, and parental functioning. A series of repeated measures multivariate analyses of covariance (MANCOVA) will be used to assess for changes on the qualitative data and outcome measures at T2 and T3, with pre-intervention data at T1 included as covariates. MANCOVAS will be conducted on each set of conceptually related dependent variables, e.g. parent-adolescent relationship (PARS), adolescent functioning (AFS), parenting practices (APQ-9), and parental functioning (DASS-21; PPF).

* + 1. Potential Biases

The researchers' (those coding and rating the data) awareness of the participants' clinical diagnosis may also potentially create more subjective outcomes in their rating of participants' responses to allocated tasks and questions. This potential bias will be addressed by having a random selection of videos from the observation task coded and rated by researchers blind to the participants' sample groups. To ensure parent-adolescent interactions are scored consistently across groups, each coder/rater will score at least two observations from each sample group. Different coders/raters will score each of the two observation tasks completed by a parent-adolescent pair.

1. **Results, Outcomes and Future Plans**

**8.1 Plans for Dissemination and Publication of Project Outcomes**

All investigators will participate in the development and preparation of papers for submission to peer reviewed scientific publications and conferences. Authorship will be determined by role in preparation of the paper. Both positive and negative findings from the study will be submitted for publication.

At the end of the study, all participants will be sent a letter to thank them for their participation in the study and to provide a list of contacts of support services which may be helpful for the family. A summary of the research findings in layman’s terms will be provided to participants; only de-identified group outcomes will be presented in the summary. Families who are interested in finding out more information about their assessment results or who require further support may contact the research team directly.

**8.2 Other Potential Uses for Data**

The data may be used in future research projects that are an extension of the current project by the named researchers or, upon application, other researchers such as in the case of a systematic review or meta-analysis (e.g. of parenting intervention effectiveness). Parts of the data may also be used by future postgraduate students for the purpose of research. Data will be de-identified prior to being provided to external researchers or future students; these parties will not have access to any identifiable data sets from families. Should an issue arise in relation to the data that requires de-identification, Dr Burke or Dr Dittman will access the data and provide the required information in de-identified format to the researcher or student requesting the information.

1. **References**

Ackard, D. M., Neumark-Sztainer, D., Story, M., & Perry, C. (2006). Parent–child connectedness and behavioral and emotional health among adolescents. *American journal of preventive medicine*, *30*(1), 59-66.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment. *A psychological study of the strange situation. Hillsdale, NY: Erlbaum*.

Australian Government Department of Health (2015). *The Mental Health of Children and Adolescents: Report on The Second Australian Child and Adolescent Survey on Mental Health and Wellbeing.* Retrieved from https://www.health.gov.au/internet/main/publishing.nsf/Content/9DA8CA21306FE6EDCA257E2700016945/$File/child2.pdf.

Australian Institute of Health and Welfare (2011). *Young Australians: Their Health and Wellbeing 2011.* Retrieved from http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737419259.

Bannink, R., Broeren, S., van de Looij–Jansen, P. M., & Raat, H. (2013). Associations between parent-adolescent attachment relationship quality, negative life events and mental health. *PloS one*, *8*(11), e80812.

Barrett, P. M., Fox, T., & Farrell, L. J. (2005). Parent—Child interactions with anxious children and with their siblings: An observational study. *Behaviour Change*, *22*(04), 220-235.

Birkeland, M. S., Melkevik, O., Holsen, I., & Wold, B. (2012). Trajectories of global self-esteem development during adolescence. *Journal of adolescence*, *35*(1), 43-54.

Birmaher, B., Brent, D. A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): a replication study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*(10), 1230-1236.

Bowlby, J. (1969). Attachment and loss v. 3 (Vol. 1). *Random House. Furman, W., & Buhrmester, D.(2009). Methods and measures: The network of relationships inventory: Behavioral systems version. International Journal of Behavioral Development*, *33*, 470-478.

Buehler, C., Benson, M. J., & Gerard, J. M. (2006). Interparental hostility and early adolescent problem behavior: The mediating role of specific aspects of parenting. *Journal of Research on Adolescence*, *16*(2), 265-292.

Burke, K., & Moore, S. (2015). Development of the parental psychological flexibility questionnaire. *Child Psychiatry & Human Development*, *46*(4), 548-557.

Burke, K., Dittman, C. K., Haslam, D., Ralph, A., & Filus, A. (2017). Assessing the quality of the parent-adolescent relationship: Development of the parent-adolescent relationship scale (PARS). *Manuscript in preparation*.

Buschgens, C. J., van Aken, M. A., Swinkels, S. H., Ormel, J., Verhulst, F. C., & Buitelaar, J. K. (2010). Externalizing behaviors in preadolescents: familial risk to externalizing behaviors and perceived parenting styles. *European Child & Adolescent Psychiatry*, *19*(7), 567-575.

Chand, N., Farruggia, S., Dittman, C., Sanders, M., & Ting Wai Chu, J. (2013). Promoting positive youth development: Through a brief parenting intervention program. *Youth Studies Australia*, *32*(1), 29.

Christin, A., Akre, C., Berchtold, A., & Suris, J. C. (2016). Parent–adolescent relationship in youths with a chronic condition. *Child: care, health and development*, *42*(1), 36-41.

Chu, J. T. W., Bullen, P., Farruggia, S. P., Dittman, C. K., & Sanders, M. R. (2015). Parent and adolescent effects of a universal group program for the parenting of adolescents. *Prevention Science*, *16*(4), 609-620.

Deighton, J., Argent, R., De Francesco, D., Edbrooke-Childs, J., Jacob, J., Fleming, I., ... & Wolpert, M. (2016). Associations between evidence-based practice and mental health outcomes in child and adolescent mental health services. *Clinical child psychology and psychiatry*, *21*(2), 287-296.

DeSousa, D. A., Salum, G. A., Isolan, L. R., & Manfro, G. G. (2013). Sensitivity and specificity of the Screen for Child Anxiety Related Emotional Disorders (SCARED): a community-based study. *Child Psychiatry & Human Development*, *44*(3), 391-399.

Dittman, C. K., Burke, K., & Barton, K. (2016). *A mixed methods evaluation of the efficacy of brief, targeted parenting groups for parents of teenagers.* Paper presented at the 8th World Congress of Behavioural and Cognitive Therapies: Melbourne, Australia. June 2016.

Dittman, C. K., Burke, K., Filus, A., Haslam, D., & Ralph, A. (2016). Measuring positive and negative aspects of youth behavior: Development and validation of the Adolescent Functioning Scale. *Journal of Adolescence*, *52*, 135-145.

Elgar, F. J., Waschbusch, D. A., Dadds, M. R., & Sigvaldason, N. (2007). Development and validation of a short form of the Alabama Parenting Questionnaire. *Journal of Child and Family Studies*, *16*(2), 243-259.

Fabrizio, C. S., Lam, T. H., Hirschmann, M. R., & Stewart, S. M. (2013). A brief parenting intervention to enhance the parent–child relationship in Hong Kong: Harmony@ Home. *Journal of Child and Family Studies*, *22*(5), 603-613.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behaviour Research Methods*, *39*, 175-191.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behaviour Research Methods*, *41*, 1149-1160.

Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults’ close friendships and romantic relationships. *Personal relationships*, *4*(2), 131-144.

Halford, W. K., & Sanders, M. R. (1988). Assessment of cognitive self-statements during marital problem solving: A comparison of two methods. *Cognitive Therapy and Research*, *12*(5), 515-530.

Harrison, L. J. (2011). The Longitudinal Study of Australian Children Annual Statistic Report 2010. *The Australian Institute of Family Studies.*

Hudson, J. L., & Rapee, R. M. (2001). Parent–child interactions and anxiety disorders: An observational study. *Behaviour research and therapy*, *39*(12), 1411-1427.

Kenny, R., Dooley, B., & Fitzgerald, A. (2013). Interpersonal relationships and emotional distress in adolescence. *Journal of Adolescence*, *36*(2), 351-360.

Krohne, H. W., & Hock, M. (1991). Relationships between restrictive mother-child interactions and anxiety of the child. *Anxiety Research*, *4*(2), 109-124.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behaviour Research and Therapy, 33(3), 335-343.

Manders, W. A., Scholte, R. H., Janssens, J. M., & De Bruyn, E. E. (2006). Adolescent personality, problem behaviour and the quality of the parent–adolescent relationship. *European Journal of Personality*, *20*(3), 237-254.

McAdams, T. A., Rijsdijk, F. V., Narusyte, J., Ganiban, J. M., Reiss, D., Spotts, E., ... & Eley, T. C. (2017). Associations between the parent–child relationship and adolescent self‐worth: a genetically informed study of twin parents and their adolescent children. *Journal of Child Psychology and Psychiatry*, *58*(1), 46-54.

Mcgraw, K., Moore, S., Fuller, A., & Bates, G. (2008). Family, peer and school connectedness in final year secondary school students. *Australian Psychologist*, *43*(1), 27-37.

Parker, J. S., & Benson, M. J. (2004). Parent-adolescent relations and adolescent functioning: Self-esteem, substance abuse, and delinquency. *Adolescence*, *39*(155), 519.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet*, *369*(9569), 1302-1313.

Pires, P., & Jenkins, J. M. (2007). A growth curve analysis of the joint influences of parenting affect, child characteristics and deviant peers on adolescent illicit drug use. *Journal of Youth and Adolescence*, *36*(2), 169-183.

Ralph, A., & Sanders, M. R. (2003). Preliminary evaluation of the Group Teen Triple P program for parents of teenagers making the transition to high school. *Australian e-Journal for the Advancement of Mental Health*, *2*(3), 169-178.

Ralph, A., & Sanders, M. R. (2004). *The 'Teen Triple P' Positive Parenting Program: A preliminary evaluation*. Trends and Issues in Crime and Criminal Justice, *282*, 1-6.

Raudino, A., Fergusson, D. M., & Horwood, L. J. (2013). The quality of parent/child relationships in adolescence is associated with poor adult psychosocial adjustment. *Journal of Adolescence*, *36*(2), 331-340.

Rigby, K., Slee, P. T., & Martin, G. (2007). Implications of inadequate parental bonding and peer victimization for adolescent mental health. *Journal of Adolescence*, *30*(5), 801-812.

Rohner, R. P., & Khaleque, A. (2010). Testing central postulates of parental acceptance‐rejection theory (PARTheory): A meta‐analysis of cross‐cultural studies. *Journal of Family Theory & Review*, *2*(1), 73-87.

Rohner, R. P. (2015). Introduction to interpersonal Acceptance-Rejection Theory (IPARTheory), Methods, Evidence, and Implications. *Retrieved October*, *19*, 2015.

Salari, R., Ralph, A., & Sanders, M. R. (2014). An efficacy trial: Positive parenting program for parents of teenagers. *Behaviour Change*, *31*(1), 34-52.

Sanders, M. R., & Dadds, M. R. (1992). Children's and parents' cognitions about family interaction: An evaluation of video-mediated recall and thought listing procedures in the assessment of conduct-disordered children. *Journal of Clinical Child Psychology*, *21*(4), 371-379.

Sanders, M. R., Dadds, M. R., Johnston, B. M., & Cash, R. (1992). Childhood depression and conduct disorder: I. Behavioral, affective, and cognitive aspects of family problem-solving interactions. *Journal of Abnormal Psychology*, *101*(3), 495-504.

Sanders, M. R., Markie-Dadds, C., Tully, L. A., & Bor, W. (2000). The Triple P-Positive Parenting Program: a comparison of enhanced, standard, and self-directed behavioural family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology, 68*(4), 624.

Sanders, M. R., & Ralph, A. (2002). Facilitator’s manual for group Teen Triple P. *Brisbane, Australia: Triple P International Publishing*.

Sanders, M.R. (2012). Development, evaluation, and multinational dissemination of the Triple P-Positive Parenting Program. *Annual Review of Clinical Psychology, 8*, 345-379.

Sanders, M.R., S. Baker, and K.M.T. Turner (2012). A randomized controlled trial evaluating the efficacy of Triple P Online with parents of children with early-onset conduct problems. *Behaviour Research and Therapy, 50(11)*, 675-684.

Sentse, M., Lindenberg, S., Omvlee, A., Ormel, J., & Veenstra, R. (2010). Rejection and acceptance across contexts: Parents and peers as risks and buffers for early adolescent psychopathology. The TRAILS study. *Journal of abnormal child psychology*, *38*(1), 119-130.

Sheeber, L. B., Davis, B., Leve, C., Hops, H., & Tildesley, E. (2007). Adolescents' relationships with their mothers and fathers: associations with depressive disorder and subdiagnostic symptomatology. *Journal of abnormal psychology*, *116*(1), 144.

Silverman, W. K., & Albano, A. M. (1996). *Anxiety Disorders Interview Schedule for DSM-IV.: Parent interview schedule* (Vol. 1). Oxford University Press.

Silverman, W., & Albano, A. M. (1996). *Anxiety Disorders Interview Schedule for DSM-IV: Child Interview Schedule.* Oxford University Press.

Silverman, W. K., Saavedra, L. M., & Pina, A. A. (2001). Test-retest reliability of anxiety symptoms and diagnoses with the Anxiety Disorders Interview Schedule for DSM-IV: child and parent versions. *Journal of the American Academy of Child & Adolescent Psychiatry*, *40*(8), 937-944.

Smokowski, P. R., Bacallao, M. L., Cotter, K. L., & Evans, C. B. (2015). The effects of positive and negative parenting practices on adolescent mental health outcomes in a multicultural sample of rural youth. *Child Psychiatry & Human Development*, *46*(3), 333-345.

Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of research on adolescence*, *11*(1), 1-19.

Waite, P., & Creswell, C. (2015). Observing interactions between children and adolescents and their parents: the effects of anxiety disorder and age. *Journal of abnormal child psychology*, *43*(6), 1079-1091.

Wedig, M. M., & Nock, M. K. (2007). Parental expressed emotion and adolescent self-injury. *Journal of the American Academy of Child & Adolescent Psychiatry*, *46*(9), 1171-1178.

Weymouth, B. B., Buehler, C., Zhou, N., & Henson, R. A. (2016). A Meta‐Analysis of Parent–Adolescent Conflict: Disagreement, Hostility, and Youth Maladjustment. *Journal of Family Theory & Review*, *8*(1), 95-112.

Wille, N., Bettge, S., Ravens-Sieberer, U., & BELLA Study Group. (2008). Risk and protective factors for children’s and adolescents’ mental health: results of the BELLA study. *European child & adolescent psychiatry*, *17*(1), 133-147.

Withers, M. C., McWey, L. M., & Lucier‐Greer, M. (2016). Parent–Adolescent Relationship Factors and Adolescent Outcomes Among High‐Risk Families. *Family Relations*, *65*(5), 661-672.

Wood, J. J., Piacentini, J. C., Bergman, R. L., McCracken, J., & Barrios, V. (2002). Concurrent validity of the anxiety disorders section of the anxiety disorders interview schedule for DSM-IV: child and parent versions. *Journal of Clinical Child and Adolescent Psychology*, *31*(3), 335-342.

Zlomke, K. R., Lamport, D., Bauman, S., Garland, B., & Talbot, B. (2014). Parenting adolescents: Examining the factor structure of the Alabama parenting questionnaire for adolescents. *Journal of Child and Family Studies*,*23*(8), 1484-1490.

**APPENDIX A: Samples of Problem-Solving Puzzle Tasks**

**Example 1: Tangrams**

*Problem:* Use the tangram pieces provided (right) to form the shape shown (left).

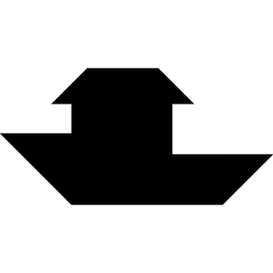
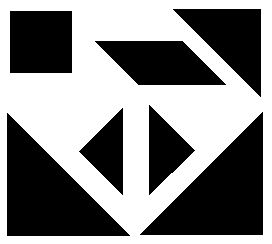
Instructions by Facilitator

Invite both parent and adolescent to sit together at the table in the observation room and exit the room once the following instructions are provided and both the adolescent and parent are clear about what they have to do.

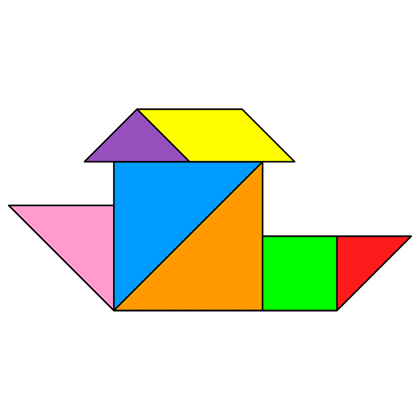
To ADOLESCENT: “Your task is to place the geometric tangram pieces that are made up of different small shapes together to make the large shape shown in front of you. You have 5 minutes to complete the puzzle. If you can’t finish making the puzzle, that’s okay. You don’t have to finish making the puzzle if you don’t want to, but just give it your best shot. When 5 minutes are up, we will let you know and you can take a short break. Do you have any questions?”

To PARENT: “We want to see how your child solves tasks and how good he/she is at thinking. Most children can do the puzzles but some may find it hard to get going. Mum/Dad, you are going to sit there for support and you will have the answers for the puzzles. You can help if you think your child really needs it. Any questions?”

*Problem:*

*Solution:*



**Example 2: Scrabble**

*Problem:* Make as many English words as possible from the letters provided.

Facilitator Instructions

Return to the observation room after completion of the first problem-solving task – time 5 minutes and stop the first task. Allow the participants a brief 2-minute break then provide the following instructions for the second problem-solving task. Leave the room once instructions have been given and both the adolescent and parent are clear about what they have to do.

To ADOLESCENT: “The next puzzle involves making English words from letters given. You will be given six letters at first, like this one (show one of the letters printed on a plain card). Your task is to try and make as many words as possible from the letters given. Write down the words you have made on the blank worksheet in front of you, writing one word in each box. Don’t worry if you’re not sure about the correct spelling of the words you’re thinking of – just write them all down. Just like in the first task, you will have 5 minutes to make as many words as you can. I will come back to let you know when time is up. Do you have any questions?”

To PARENT: “You will be given three extra letters in addition to the ones given to your child. Feel free to give one or more of these letters to your child, but only one at a time, whenever you feel that you want to. There is no particular rule – just when you feel like it. You can help when you feel your child really needs it. Any questions?”

*Problem:*

Letters provided to child:

G , H , B , N , O , R

Extra letters provided to parent:

T , E , S

*Solution:*

|  |  |  |
| --- | --- | --- |
| **OR** | **HORN** | **GOES** |
| **GOT** | **HOT** | **REST** |
| **ROE** | **ROT** | **RENTS** |
| **HOG** | **SOB** | **SHORT** |
| **BOG** | **TORN** | … and so on |
| **NOG** | **BEST** |  |
| **BORN** | **BORE** |  |

**Example 3: Mazes**

*Problem:* Find your way through the maze, starting from the green arrow and exiting at the red arrow.

Instructions by Facilitator

Return to the observation room after completion of the first problem-solving task – time 5 minutes and stop the first task. Allow the participants a brief 2-minute break then provide the following instructions for the second problem-solving task. Leave the room once instructions have been given and both the adolescent and parent are clear about what they have to do.

To ADOLESCENT: “Your task is to find a path through the maze shown, starting from the green arrow at the centre of the maze and exiting at the red arrow. Just like in the first task, you have 5 minutes to complete the puzzle. If you can’t find a solution, that’s okay. You don’t have to finish the maze if you don’t want to, but just give it your best shot. When 5 minutes are up, we will let you know and you can take a short break. Do you have any questions?”

To PARENT: “We want to see how your child solves tasks and how good he/she is at thinking. Most children can do the mazes but some may find it hard to get going. Mum/Dad, you are going to sit there for support and you will have the solution to the maze. You can help if you think your child really needs it. Any questions?”

|  |  |
| --- | --- |
| *Problem:* | *Solution:* |
|  | https://krazydad.com/mazes/answers/ans_TF_v1_1.jpg |

**APPENDIX B: Video-Mediated Recall Feedback Schedule**

**Before starting the video:**

Participants will be seated together with you at a table. In front of you will be a TV, video/DVD player and remote control. Insert the videotape/DVD provided into the player.

Facilitator’s Instructions

To ADOLESCENT/PARENT: “I will be showing you the video that we recorded earlier when you completed the puzzles with your Mum/Dad/child. Before I do so, I’d like to ask you some general questions about your experience of doing those tasks.

* 1. What did you think about the puzzles? How hard were they for you/your child?
  2. Did you enjoy doing the puzzles? What did you like/dislike about them?
  3. Do you have any other comments about the puzzles?”

Next, place the sheet of paper with the following scales in front of them:

Tangrams puzzle:

Scrabble puzzle:



**Very Difficult**

**Very Easy**

To ADOLESCENT/PARENT: “The scales shown have two ends, with ‘Very Easy’ on one end, and ‘Very Difficult’ on the other end. Please place a mark (X) on each of the two scales where it shows how easy or difficult you think each of the two problem-solving tasks was for you/your child.”

**While playing the video:**

Facilitator’s Instructions

To ADOLESCENT/PARENT: “I am now going to play you the videotape of the problem-solving tasks that you completed earlier with your Mum/Dad (or which your child completed). I will be pausing the video after every 20 seconds. When I pause the video, I’d like you to share with me what you were thinking or how you felt during that part of the task shown in the video. Just tell me what thoughts or feelings come to mind and what you remember from doing the task. There are no right or wrong answers. This may take some time, so just let me know whenever you need to take a break. You can tell me if you need a break whenever we pause the video. Do you have any questions?”

Start playing the video. Pause the video after every 20 seconds played, and use the suggested prompts below to invite the participants to verbalise their thoughts after watching the video segment played.

Allow participants to take breaks if/when required.

Suggested Prompts

* Can you tell us what your thoughts were when you experienced that task?
* What did you notice when you watched that?
* How did that make you feel?
* Why did you think that or feel that way?
* What were you thinking when you said/did that?
* What did you notice about what your mother/father/teenager said/did?
* How did you feel about what your mother/father/teenager said/did during that task?

**After playing the video:**

Facilitator Instructions

After you have played the entire video, let the participant know they have finished watching the video and you will be asking a couple of final questions.

To ADOLESCENT/PARENT: “Now that you have finished watching the video, I am going to ask you a couple of final questions.

* 1. How did watching the video make you feel about how you get along with your Mum/Dad/child? Why did it make you feel that way?
  2. Any other comments?”

Next, place the sheet of paper with the following scales in front of them:

How close do you feel to your parent/teenager now?

**Very close**

**Not at all close**

To ADOLESCENT/PARENT: “The scale shown is like the one you saw before. It has two ends with ‘Not at all close’ on one end, and ‘Very close’ on the other end. Please place a mark (X) on the scale where it shows how close you feel to your Mum/Dad/child now.”

Let participants know they have now completed the Assessment session and thank them for taking part in the tasks today.

**APPENDIX C: Client Satisfaction Questionnaire**

**Client Satisfaction Questionnaire**

This questionnaire will help us to evaluate and continually improve the program we offer. We are interested in your *honest opinions* about the services you have received, whether they are positive or negative. Please answer all the questions.

***Please circle the response that best describes how you honestly feel.***

1. How would you rate the quality of the group that you attended?

7 6 5 4 3 2 1

Excellent Good Fair Poor

2. Did you receive the type of help you wanted from the group?

1 2 3 4 5 6 7

No definitely not No not really Yes generally Yes definitely

3. To what extent has the group met *your child's* needs?

7 6 5 4 3 2 1

Almost all needs Most needs Only a few needs No needs

have been met have been met have been met have been met

4. To what extent has the group met *your* needs?

7 6 5 4 3 2 1

Almost all needs Most needs Only a few needs No needs

have been met have been met have been met have been met

5. How satisfied were you with the *amount of help* you and your child received?

1 2 3 4 5 6 7

Quite dissatisfied Dissatisfied Satisfied Very satisfied

6. Has the program helped you to deal more effectively with your child's behaviour?

7 6 5 4 3 2 1

Yes, it has helped Yes, it has No, it hasn't No, it made

a great deal helped somewhat helped much things worse

7. Has the group helped you to deal more effectively with problems that arise in your family?

7 6 5 4 3 2 1

Yes, it has helped Yes, it has No, it hasn't No, it made

a great deal helped somewhat helped much things worse

8. Do you think your relationship with your partner has been improved by the group?

1 2 3 4 5 6 7

No definitely not No not really Yes generally Yes definitely

9. In an overall sense, how satisfied are you with the program you and your child received?

7 6 5 4 3 2 1

Very satisfied Satisfied Dissatisfied Very

dissatisfied

10. If you were to seek help again, would you come back to Triple P?

1 2 3 4 5 6 7

No, definitely not No, I don't think so Yes, I think so Yes, definitely

11. Has the group helped you to develop skills that can be applied to other family members?

1 2 3 4 5 6 7

No, definitely not No, I don't think so Yes, I think so Yes, definitely

12. In your opinion, how is your child's behaviour at this point?

1 2 3 4 5 6 7

Considerably Worse Slightly The same Slightly Improved Greatly

worse worse improved improved

13. How would you describe your feelings at this point about your child's progress?

7 6 5 4 3 2 1

Very Satisfied Slightly Neutral Slightly Dissatisfied Very

satisfied satisfied dissatisfied dissatisfied

14. Since beginning this program, have you sought further assistance for your child's behaviour or for your family from any other source? If so, please describe.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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15. Have you had any other problems with your child which you feel may be related to the original difficulty?

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16. Do you have any other comments about the group?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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