



## Investigating the effect of providing monetary incentives to participants on completion rates of referred co-respondents: An embedded randomized controlled trial. Study within a trial (SWAT) protocol

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### ABSTRACT

**Background:** Parent-report questionnaires are a common method of generating data on child outcomes in mental health studies. A second report from another person who knows the child (co-respondent) is implemented to reduce bias and increase objectivity. The success of this approach is dependent on the engagement of co-respondents, which can be difficult. Financial incentives are used to increase data return in clinical trials, and to promote referral rates in online marketing. This protocol describes the use of an embedded randomised controlled trial (RCT) to investigate the effect of financial incentives on rates of co-respondent data completion. In the host RCT (of an online intervention designed to reduce the impact of a parent's anxiety on their child) index participants (i.e. parents) are asked to invite a co-respondent to complete measures on the index child. This study will test the hypothesis that providing monetary incentives to index participants will increase the outcome measure completion rate of co-respondents.

**Methods:** Embedded RCT of two parallel groups. Participants in the intervention arm will be sent a £10 voucher if their chosen co-respondent completes online baseline measures. Participants in the control arm will not be offered payment regardless of their chosen co-respondent's behaviour. 1754 participants will take part. Analysis will compare co-respondent outcome measure completion rates between the two arms at baseline and follow-up.

**Conclusion:** Findings from this study will provide evidence on the impact of offering payment to index participants on return rates of co-respondent data. This will inform resource allocation within future clinical trials.

### 1. Introduction

The use of parent-report questionnaires to measure and detect change in child variables such as health, mental health, behaviour and mood, is a common approach in psychological research. In particular, it is standard practice in trials of parenting interventions aimed at children, particularly those conducted online [2,11]. However, dependence

on a sole informant, who is also the target of a given parenting intervention, can introduce bias, perhaps particularly so when that parent is experiencing a mental health condition. One method to reduce this bias and generate a more robust understanding of a child, is to collect data from a second reporter who also knows the child well but is not subject to the intervention.

Within a randomised controlled trial (RCT) of an online parenting

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intervention for anxious parents (known as the Parenting with Anxiety (PWA) Trial), index participants are asked to refer another adult who knows their child well, such as a family member, to provide self-report questionnaire data on the child [<http://preprints.jmir.org/preprint/40707>]. However, while there is precedent for using such co-reports to enable the triangulation of data, the success of the method is contingent on the engagement of index participants in identifying (and often approaching) co-respondents, and on these co-respondents responding to these approaches.

Given that the challenges of follow-up data collection are well established (rates as low as 11% have been reported in online trials [3]) it seems likely that co-respondent referral, acceptance and data completion rates in the PWA study will be low: these co-respondent participants have limited investment in the trial – they are involved only to provide information and are unlikely to benefit from the intervention. Therefore, it was decided that efforts were needed to maximise the likelihood of co-respondents being referred, of agreeing to participate, and of completing outcome questionnaires.

Unfortunately, there is limited research that evaluates methods for maximizing the likelihood of index participants identifying and referring co-respondents, and the subsequent response rates of these co-respondents. Within the marketing domain, however, where referral is a common mechanism to generate both leads (referrals) and sales, incentives have been found to improve the number of referrals made by customers as well as increasing sign-ups and buyers [1].

Financial incentives are also commonly deployed to boost outcome completion rates from (index) participants within research studies and community surveys. This approach is based on a small evidence base, largely focused on surveys and population-level research which indicates that financial incentives are associated with increased participation and completion rates (e.g. Refs. [5,17] for review see Ref. [6]). While the effectiveness of such payments on data collection response rates within RCTs is less well researched, there is some evidence that payment is associated with improved follow-up data collection rates in online trials. For example, informing participants in an RCT of an online parenting programme for parents of anxious children, that they would be entered into a prize draw to receive a £30 voucher led to an 11% increase in response rates [11]. In an embedded RCT looking at the effect of different payment amounts, it was found that the offer of a £10 voucher led to a significant increase in follow-up response rates, whereas a £5 voucher did not generate a significantly higher level of data response compared with unincentivized controls [7]. It should be noted, however, that these studies explored the impact of payment on data collection rates from index participants, rather than from any co-respondents that they might have been asked to refer.

Using a ‘study within a trial’ (SWAT) design we seek to add to this literature by investigating the relationship between financial incentives and *co-respondent response rates* in an RCT that is completed fully online. The SWAT will investigate the effect of a small voucher payment to the index participant (i.e. the parent) upon the referral rate, consent rate, and outcome questionnaire completion rate of co-respondents.

Parents in the host RCT (PWA) will either be informed that they will receive a payment when their referred co-respondent completes baseline measures, or they are asked to refer a co-respondent with no offer of such payment. We hypothesise that there will be:

1. Higher rates of nomination of a co-respondent in the payment arm, compared to the control arm.
2. Higher rates of consented co-respondents in the payment arm, compared to the control arm.
3. Higher rates of completion of co-respondent baseline measures in the payment arm, compared to the control arm.
4. Higher rates of completion of co-respondent 6-month follow-up measures in the payment arm, compared to the control arm.

In addition, we will conduct an exploratory investigation into

whether payment arm has an effect on the quality of data returned by participants and co-respondents.

## 2. Methods

### 2.1. Trial design

This protocol is reported in accordance with guidelines for reporting embedded recruitment trials [8] based on the Consolidated Standards for Reporting Trials (CONSORT) statement 2010 [12]. It is a parallel group embedded RCT to investigate the impact on co-respondent response rates of paying participants to refer a co-respondent to complete measures (Fig. 1).

Whilst the host study will continue for three years with up to three different timepoints of data collection, this embedded SWAT ends six months and four weeks after the last co-respondent has consented.

### 2.2. Participants

#### 2.2.1. Host trial participant eligibility

Participants eligible for the host study are male and female adults (aged 16+) who report substantial symptoms of anxiety, and who have children aged 2–11 years. For the purposes of this SWAT, all participants in the PWA host trial will be included in this study. We will not exclude host participants on the basis of current/previous psychiatric treatment (parent or child) or on any psychological, neuropsychological or physical condition.

#### 2.2.2. Co-respondent eligibility

Index participants (i.e., parents participating in the host trial) will be asked to nominate a co-respondent to complete a set of measures alongside them, primarily in order to examine agreement between parent and co-respondent ratings of child anxiety. We ask index participants not to nominate anyone they have a paid relationship with. To ensure that nominated co-respondents are suitable to participate in the study, we have included brief eligibility criteria. Co-respondents need to:

- Know the child well enough to answer a questionnaire about their feelings and behaviours.
- Be aged over 16 years.

The co-respondent study participants will be referred to as ‘co-respondents’ in this protocol.

#### 2.2.3. Study setting

Both the host study and this SWAT will be completed entirely online, with UK-based participants. The participants in the host study will be self-referred into the study, and the co-respondents will have been nominated by host study participants.

### 2.3. Intervention

The host study is a randomised control trial of an online course designed to support anxious parents limit the impact of their anxiety on their children. Index parents who are randomised into the intervention arm are invited to take part in the course, which offers learning and skills designed to help parents develop their child’s confidence. Modules include play and over-protection. The online course has been developed from a face-to-face group intervention which has run in the UK National Health Service (NHS). Co-respondents are not given information about the host trial other than that it is an online parenting course.

In order to examine the impact of monetary incentivization on the response rates of co-respondents, we will randomise all host study participants into one of two arms (1:1 ratio) where they will either receive or not receive a £10 shopping voucher when a co-respondent that they

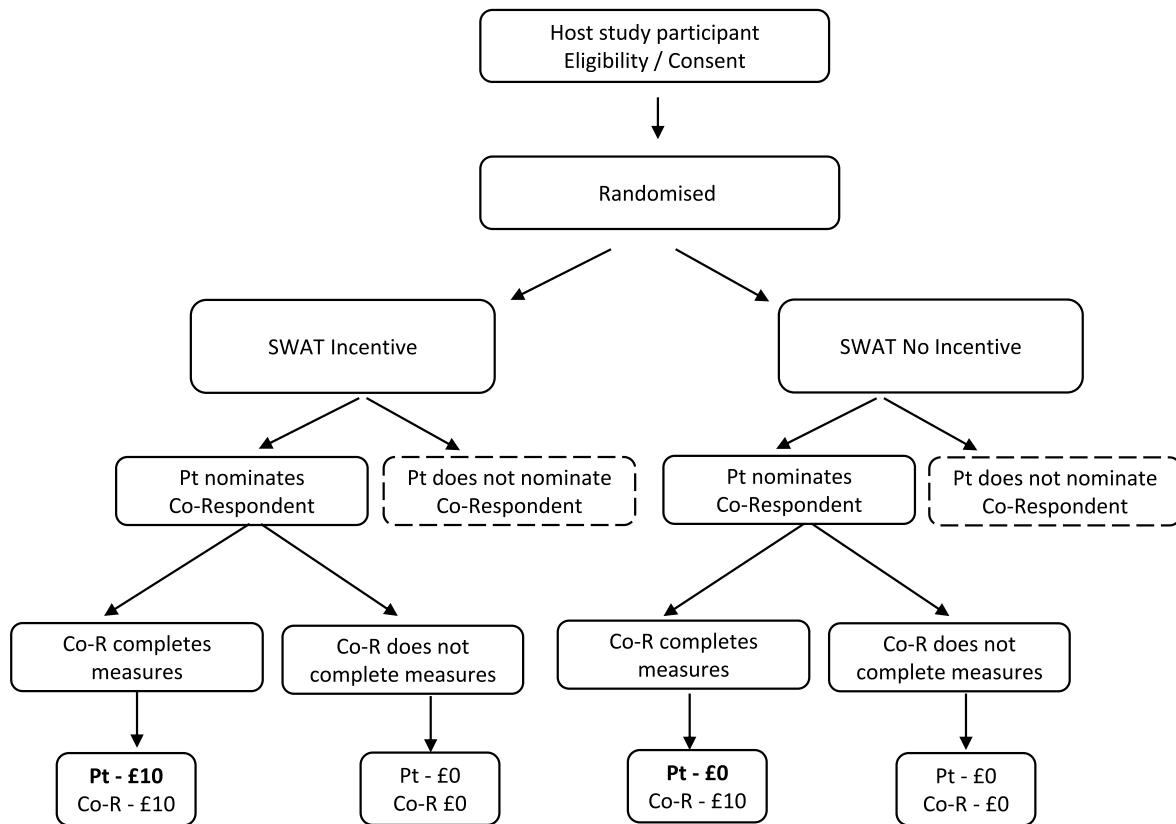


Fig. 1. Participant and co-respondent flow diagram.

have referred into the study completes baseline assessment measures.

Index participants in both arms will be told that a co-respondent that they refer will receive a £10 voucher for completion of baseline measures online. The proportion of co-respondents who nominate a co-respondent, whose co-respondent consents to participate, and whose co-respondent completes measures at baseline and again at the 6-months follow-up point, will be compared across SWAT arms.

The entire study will be completed online. Participants will flow through the study as follows:

- i. Index participant expresses interest in the host study.
- ii. Index participant receives summary information about host study and this SWAT.
- iii. Host participant screened against inclusion/exclusion criteria for host study.
- iv. Those meeting inclusion criteria for host study receive information about the host study and give consent online
- v. Index participant randomised into one of two SWAT arms: Incentive or No Incentive
- vi. Index participant invited to refer a co-respondent to complete measures. Index participants will be asked to provide details of a co-respondent who will be emailed from within the study web platform. An index participant can also choose not to refer or to make a referral later.
- vii. Index participant completes baseline measures for host study.
- viii. Index participant continues into Intervention/Control arm of host study.
- ix. 48 h after index participant completes measures, co-respondent receives information about the study and if willing, gives consent online.
- x. Co-respondent completes baseline measures.
- xi. Both host participant and co-respondent complete follow-up measures as per PWA host study.

Index participants who do not make a referral at stage vi have a two-week period in which they can subsequently elect to do so. If they make a referral, steps xxi. are then followed.

The monetary incentive will be an Amazon voucher, sent by email. If the index participant is in the Incentive arm, they will receive a £10 voucher once the co-respondent has completed their baseline measures. If they are in the No Incentive arm, they will not receive this payment. The co-respondent themselves will receive a £10 voucher upon completion of the measures regardless of which arm the host participant is in.

Fifty percent of the index participants will be in the Incentive arm, and 50% will be in the No Incentive arm (ratio 1:1).

#### 2.4. Post-study care

Participants will receive a debrief sheet once the host study outcome data collection is closed. This will thank participants for their involvement in the study, outline the objectives of the study, disclose and explain the hidden element of the SWAT study, provide relevant preliminary results (e.g. number of participants), will inform participants of planned further research and provide information about appropriate sources of support.

#### 2.5. Recruitment

The host study is intended to reach parents who have significant problems with anxiety, the majority of whom never receive treatment for anxiety (although those who have will not be excluded). So, we recruit chiefly from non-NHS sources including:

- Mental health charities.
- Male Mental health organisations and organisations supporting fathers (in order to maximise number of fathers in the RCT).

- Social Media: We will actively recruit via Facebook, Twitter and other appropriate channels.
- Other: We will advertise the study in health settings but will not actively 'recruit' via clinician referral.

Full host trial recruitment procedures can be found in the PWA trial protocol (link to be inserted).

## 2.6. Outcomes

All outcomes are completed online, by index participants and their co-respondents. Regular checks will be completed by the Trial Manager to ensure that processes for capturing and storing data are functioning well.

As in our previous research [4] index participants will complete measures for just one child and where more than one child is eligible, a single index child will be selected at random (by computer).

Any co-respondent will complete measures on the same child.

Below is an overview of the assessments that the participants and co-respondents will be completing for use within the analysis for the SWAT. The measures are reproduced in full in Appendix A. The full list of assessments completed by participants in the main host trial can be accessed within the host trial protocol.

### 2.6.1. Completed by all index participants and all co-respondents

**Child anxiety symptoms:** Spence Children's Anxiety Scale (SCAS-P & Preschool SCAS, according to child's age) [13,14]. These parallel instruments are acceptable to parents, and have good validity/reliability.

**Demographics:** Age, gender, socio-economic status, ethnicity, educational status.

### 2.6.2. Additionally completed by all index participants and all co-respondents who are co-parents

These instruments are completed by all index parents, and by co-respondents who are the index child's other parent. They are not completed by co-respondents who are not the index child's other parents (e.g. if they are a grandparent or a family friend).

**Parents' and co-parents' anxiety:** Parents and co-parents complete the SCARED-A about themselves. This is an adult version of the SCARED [18] assessing each of the Diagnostic and Statistical Manual of Mental Disorders, using 71 items. It has good internal consistency and is significantly correlated with results from the ADIS-IV-L diagnostic interview schedule.

**Parenting behaviour:** We will measure parenting behaviour of index parents and co-respondents who are their co-parents using the CPBQ [9, 10], a psychometrically strong, self-report instrument measuring parenting behaviours associated with risk of child anxiety.

### 2.6.3. Additionally completed by co-respondent if they are not the index participant's co-parent

Completed by co-respondents who are not the index child's other parent (e.g. they are a grandparent or family friend).

**Co-respondent anxiety:** Generalized Anxiety Disorder Assessment (GAD-7) [15] a seven-item scale which screens for anxiety disorder.

### 2.6.4. Completed by index parent only

**Child demographics:** child age, child gender, child developmental disability, prior treatment for anxiety.

Two items on co-parenting status.

## 2.7. Sample size

The sample size for this SWAT equals that of the host trial (N = 1754), the sample size for which was calculated to provide adequate power for the key objective of the host trial. Given the weighting of index participants into the two arms (50% payment v 50% non-

payment) and assuming 55% of co-respondents complete questionnaires in the group without financial incentives at baseline and 65% with baseline incentives, we would have in excess of 95% power to detect this difference in completion given our planned sample size. This sample size allows for 40% attrition (typical for online psychotherapeutic studies).

## 2.8. Randomisation

Randomisation into this embedded SWAT will occur simultaneously with (but independently of) randomisation into the host study. This will be block randomisation, in large blocks, to one of four groups (Host Intervention arm and SWAT Incentive arm; Host Intervention arm and SWAT No Incentive arm; Host Control arm and SWAT Incentive arm; Host Control arm and SWAT No Incentive arm). This will be carried out using predefined lists. Given the large sample size, stratified randomisation is not deemed necessary.

Randomisation will take place once the index participant has consented into the host study, and before nomination of a co-respondent. This will ensure that the index participant knows whether or not they will receive payment before they nominate their co-respondent (but they not be aware that there is an alternative condition).

## 2.9. Statistical methods

We will report data in line with the CONSORT 2010 Statement [12]. All analyses will be carried out using the 'intention to treat' principle, incorporating data from all participants including those who do not provide complete data. Every effort will be made to follow up all participants in both arms for outcome assessments. A detailed statistical analysis plan will be signed off prior to analysis, which will be performed in Stata 17 or higher [16].

### 2.9.1. Primary and secondary outcome analysis

**2.9.1.1. Primary outcome: completion rate.** Completion of co-respondent outcomes at baseline and at 6-months will be modelled using log-binary regression models with host participant incentivised or not as a fixed effect. We will report the relative risk of participant nomination, of co-respondent consent and of measures completion between the incentivised and non-incentivised groups, its 95% confidence interval and p-value.

**2.9.1.2. Exploratory data analysis: data quality.** Data quality will be evaluated in three ways:

1. Intraclass correlations on baseline co-respondent data for the two study arms.
2. Agreement between each parent and co-respondent's measures as calculated using a Bland-Altman plot.

## 3. Time taken to complete measures

### 3.1. Interim analysis

To investigate the quality of co-respondents referrals - i.e. that they are suitable candidates who have been appropriately nominated, an interim evaluation of the quality of data will be run after 120 participants have completed baseline data collection (60 in no-payment arm and 60 in the payment arm). If there does prove to be an inconsistency in the quality of data from the co-respondents in the two arms, the study may take action to amend the criteria and screening for co-respondents.

### 3.2. Ethical and regulatory considerations

Ethical approval has been obtained from the Sponsor's Cross Schools Ethics Committee (C-REC).

The SWAT design requires host trial participants and co-respondents to be blinded to which trial arm they have been allocated to. This was agreed to be a justifiable deception by C-REC. All participants will be informed of the SWAT trial design and their trial arm allocation in the debrief sheet.

Informed consent to this embedded SWAT study will not be sought from participants. Informed consent to the host study will be obtained after participants have read a reviewed and approved information sheet.

## 4. Results

As of 24<sup>th</sup> August 2022, 1628 participants have been randomised into the host trial and 345 co-respondents had completed baseline measures.

## 5. Discussion

At the end of this study, we will have added to the evidence base on maximizing response rates in online trials, which could have widespread benefits across future RCTs in a range of domains.

Study results will be delivered to academic/clinical audiences via fully open-access journals, and conferences. Anonymised data will be made available on a data repository at end of study.

### Funding

Funding for the trial provided by the Kavli Trust [38/19] with support from the University of Sussex.

### Registration

Registered in the SWAT Store | The Northern Ireland Network for Trials Methodology Research (qub.ac.uk): SWAT number 143: Fileupload,1099612,en.pdf (qub.ac.uk).

### Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Professor Sam Cartwright-Hatton designed the digital intervention and funded its development. No other authors have competing interests.

### Data availability

No data was used for the research described in the article.

### Measures

#### Child Measures (items)

SCAS: (38) (anxiety)/SCAS-Pre-school (28) (anxiety).

#### Parenting Behaviour Measures CPBQ: (104)

##### Parent Mental Health and Wellbeing Measures

SCARED-A: (71) (anxiety).

##### Co-respondent Measure

GAD-7: (7) (anxiety).

## SPENCE Child Anxiety Scale (SCAS)

The Spence Children's Anxiety Scale was developed to assess the severity of anxiety symptoms in children aged 8–15.

39-items scored using a 4-point scale (0 = never, 1 = sometimes, 2 = often, 3 = always). Item 39 not used in this study.

1. My child worries about things
2. My child is scared of the dark
3. When my child has a problem, s(he) complains of having a funny feeling in his/her stomach
4. My child complains of feeling afraid
5. My child would feel afraid of being on his/her own at home
6. My child is scared when s(he) has to take a test.
7. My child is afraid when (s)he has to use public toilets or bathrooms
8. My child worries about being away from us/me
9. My child feels afraid that (s)he will make a fool of him/herself in front of people
10. My child worries that (s)he will do badly at school
11. My child worries that something awful will happen to someone in our family
12. My child complains of suddenly feeling as if (s)he can't breathe when there is no reason for this
13. My child has to keep checking that (s)he has done things right (like the switch is off, or the door is locked)
14. My child is scared if (s)he has to sleep on his/her own
15. My child has trouble going to school in the mornings because (s)he feels nervous or afraid
16. My child is scared of dogs
17. My child can't seem to get bad or silly thoughts out of his/her head
18. My child suddenly starts to tremble or shake when there is no reason for this.
19. When my child has a problem, s(he) complains of his/her heart beating really fast.
20. My child worries that something bad will happen to him/her
21. My child is scared of going to the doctor or dentist
22. When my child has a problem, (s)he feels shaky
23. My child is scared of heights (e.g. being at the top of a cliff)
24. My child has to think special thoughts (like numbers of words) to stop bad things from happening
25. My child feels scared if (s)he has to travel in the car, or on a bus or train
26. My child worries what other people think of him/her
27. My child is afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)
28. All of a sudden my child feels really scared for no reason at all
29. My child is scared of insects or spiders
30. My child complains of suddenly becoming dizzy or faint when there is no reason for this
31. My child feels afraid when (s)he has to talk in front of the class
32. My child's complains of his/her heart suddenly starting to beat too quickly for no reason
33. My child worries that (s)he will suddenly get a scared feeling when there is nothing to be afraid of.
34. My child is afraid of being in small, closed places, like tunnels or small rooms
35. My child has to do some things over and over again (like washing his/her hands, cleaning or putting things in a certain order)
36. My child gets bothered by bad or silly thoughts or pictures in his/her head
37. My child has to do certain things in just the right way to stop bad things from happening
38. My child would feel scared if (s)he had to stay away from home overnight

2000 Susan H. Spence.

### SPENCE Preschool Anxiety Scale (SCAS-P)

The Preschool Anxiety Scale consists of 28 scored anxiety items (Items 1 to 28) that ask parents to report on the frequency of which an item is true for their child. Each item is rated on a 5-point scale (4 if the item is very often true, 3 if the item is quite often true, 2 if the item is sometimes true, 1 if the item is seldom true or if it is not true at all circle the 0). Item 29 (open-ended) is not included in the trial assessment battery.

1. Has difficulty stopping him/herself from worrying ...
2. Worries that he/she will do something to look stupid in front of other people
3. Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap)
4. Is tense, restless or irritable due to worrying ...
5. Is scared to ask an adult for help (e.g., a preschool or school teacher)
6. Is reluctant to go to sleep without you or to sleep away from home ...
7. Is scared of heights (high places)
8. Has trouble sleeping due to worrying
9. Washes his/her hands over and over many times each day
10. Is afraid of crowded or closed-in places
11. Is afraid of meeting or talking to unfamiliar people
12. Worries that something bad will happen to his/her parents
13. Is scared of thunder storms
14. Spends a large part of each day worrying about various things
15. Is afraid of talking in front of the class (preschool group) e.g., show and tell
16. Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again
17. Is nervous of going swimming.
18. Has to have things in exactly the right order or position to stop bad things from happening
19. Worries that he/she will do something embarrassing in front of other people
20. Is afraid of insects and/or spiders
21. Has bad or silly thoughts or images that keep coming back over and over
22. Becomes distressed about your leaving him/her at preschool/school or with a babysitter
23. Is afraid to go up to group of children and join their activities
24. Is frightened of dogs
25. Has nightmares about being apart from you
26. Is afraid of the dark
27. Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening
28. Asks for reassurance when it doesn't seem necessary

1999 Susan H. Spence and Ronald Rapee.

### Comprehensive Parenting Behaviour Questionnaire 2–11 years

104-items focused on parental interaction. Each is scored according to a 5-point scale (1 = Not applicable, 2 = Slightly applicable, 3 = Sometimes, but sometimes not applicable, 4 = Usually applicable, 5 = Completely applicable).

1. I play little tricks on my child
2. I constantly keep an eye on my child, to prevent him/her from getting hurt
3. I regularly play or talk with my child for at least 5 min, with full concentration on each other, just for fun
4. I give my child the feeling that he/she is a burden on me

5. When my child really misbehaves, I spank him/her
6. When my child doesn't listen to me, I explain that I find that annoying
7. I play boisterously with my child
8. I do not look at my child when he/she has disappointed me
9. I show my child that I love him/her
10. I am often harsh towards my child
11. My child knows how to persuade me not to give out punishment when he/she has done something wrong
12. I reward my child or give him/her something extra if he/she behaves well
13. If my child finds something scary, I encourage him/her to carry on regardless
14. I never take my child to busy places
15. I give my child the feeling that I love him/her the way he/she is; I don't want to change him/her
16. At times I totally have had it with my child, and reject him/her
17. When my child is too boisterous or noisy at home, I yell at him/her
18. When we go out, I prepare my child for this in advance
19. I encourage my child to approach unfamiliar people to ask them something
20. I cannot stand it when my child plays with things which make the house messy
21. I know exactly how to calm my child down when he/she is upset
22. I sometimes get very irritated when my child cries, and I do not hide it
23. I am often inconsistent in applying the rules I have made for my child
24. When my child has hit someone, I explain that he/she has hurt the other person
25. I encourage my child to be the best
26. I keep my child away from risky situations
27. I do fun activities with my child, such as handicraft or baking cookies
28. I am not easily pleased by my child
29. When I'm tense or irritable, I take it out on my child
30. I praise my child if he/she is being nice to other children
31. My child sometimes sees me horsing around with other people
32. I encourage my child to do things by him/herself
33. I show my love to my child by cuddling him/her, holding him/her and kissing him/her
34. When my child does something stupid, I react with irritation
35. When my child does not do what I ask, I often leave it at that
36. I make sure my child knows what is allowed and what is not
37. I regularly tease my child for fun
38. I don't take my child out shopping because the fuss is too much for him/her
39. If my child does something naughty, I correct him/her, but at the same time I show that I still love him/her
40. When my child reacts differently from what I expected, I respond with disappointment
41. If my child does not do what I ask, even after repeated warnings, I slap him/her
42. When my child wants to touch something, he/she is not allowed to, I explain why it is not allowed
43. I almost never play rough and rowdy games with my child
44. If my child has hurt my feelings, I stop talking to him/her until he/she does me a favor
45. I comfort my child and show understanding when he/she is upset
46. My child hardly ever irritates me
47. I threaten to punish my child but then I fail to follow through
48. I reward or praise my child when he/she behaves properly, such as when he/she says 'thank you'
49. If I see something that is new or exciting to my child, I encourage him/her to approach it

50. When my child climbs or clambers, I tell him/her that he/she should not climb too high because otherwise he/she might fall
51. Every day I play with child for a while, for example building something together or doing puzzles
52. When my child whimpers or moans, I shout at him/her
53. I set clear rules for my child
54. I encourage my child to perform for an audience by, for example singing a song, dancing, or doing something sporty
55. When I have a certain schedule in my head, my child has to cooperate
56. I often stroke my child's head
57. When my child does something I don't like, I often let it go
58. When my child has acted badly towards someone, I explain that it makes the other person sad
59. I challenge my child to contests, for instance running races or arm wrestling
60. I do not plan more than one outdoor activity per day because it might be too much for my child
61. If my son wants to dress up like a princess or my daughter wants to dress up like a pirate, I let him/her go ahead
62. When I'm stressed or tired, I react more severely to my child's difficult behaviour
63. When my child helps, for example with clearing up toys, I give him/her a compliment
64. I show my child that I take risks
65. I encourage my child to do things in his/her own way
66. When my child asks something, I take my time when answering the question
67. The punishment I give my child depends on my mood
68. I give my child a warning when he/she appears to be starting to misbehave
69. As a prank, I sometimes give my child a real scare
70. During a risky activity I tell my child he/she should be careful
71. I often talk with my child
72. When my child goes too far, I slap him/her
73. I enjoy having pillow-fights with my child
74. When my child does something that's not allowed, I pretend that he/she is not around
75. I often tell my child that I love him/her
76. When I ask my child to clean up and he/she does not do it, I eventually clean up myself
77. I encourage my child to do exciting things, such as jumping off high objects or climbing higher than he/she dares
78. I avoid doing things with my child that disturb his/her routine, for example when it means that bedtime will be later
79. I sometimes find it difficult to fully accept my child, including, his/her bad characteristics
80. If my child lingers when we are in a hurry, I shout at him/her
81. I encourage my child to say no if he/she doesn't want something
82. I cannot stand it when my child suddenly wants something different from what we had planned
83. I immediately notice whether my child likes something or not
84. If my child makes a fuss when I say 'no', I give in to him/her
85. I encourage my child to compete against other children
86. I encourage my child to make his/her own decisions (RRR)
87. When my child is naughty and I am stressed, I shout at him/her
88. My child often sees me approach unfamiliar people
89. When my child does something that is not allowed, I usually refuse to talk to him/her until he/she behaves better
90. When saying 'no' doesn't work, I offer my child a treat, so that he/she will behave.
91. I pretend that I'm going to eat my child's sweets, for example his/her cookies or dessert
92. I want to monitor everything that my child is doing
93. When my child misbehaves, I grasp him/her roughly

94. I sometimes play 'tag' with my child: I chase after him/her and say in a low voice that I'm going to grab him/her
95. I ask my child for his/her opinion about things
96. When I have said that my child is not allowed to do something, I stick to it
97. I encourage my child to gain new experiences by, for example, eating something new or playing a new game
98. I often try to get my child to change
99. When my child misbehaves in public, I scold him/her
100. I encourage my child to stand up for himself/herself
101. When my child does not listen, I respond without getting angry (RRR)
102. I urge my child on when he/she is competing against other children
103. I show my child that I engage with situations that I find exciting or scary
104. If my child comes to me because he/she is having a minor quarrel, I make him/her sort it out by himself/herself

Comprehensive Parenting Behaviour Questionnaire 4–6 years (CPBQ4-6) © 2011.

Mirjana Majdandžić, Wieke de Vente, and Susan M. Bögels.

#### SCARED-A

71 items rated on a 3-point scale to indicate how frequently the symptoms have been experienced: "almost never", "sometimes", or "often".

1. When I feel frightened, it is hard to breathe
2. I'm afraid of standing on a high peak (e.g. a tower) and look down.
3. I'm worried about my partner leaving me
4. I don't like to be with unknown people
5. When I see blood, I get dizzy
6. I want things to be in a fixed order
7. I get scared when I sleep away from home
8. I worry about others not liking me.
9. When I get frightened, I feel like passing out
10. I think that I will be contaminated with a serious disease
11. I am nervous.
12. I have strange thoughts that frighten me
13. I follow my partner wherever s/he goes.
14. People tell me that I look nervous
15. I feel nervous with people I don't know well.
16. I am afraid to visit the doctor.
17. I'm worried about the closeness of my relationship with my children
18. When I get frightened, I feel like I am going crazy
19. I'm worried about possible events than can separate me from my family
20. I am afraid to visit the dentist.
21. I worry about being as good as other people.
22. I am afraid of an animal that is not really dangerous
23. I get scared when there is thunder in the air.
24. I blush, sweat or tremble when I'm with others
25. I do things more than twice in order to check whether I did it right
26. I have frightening dreams about a very aversive event I once experienced.
27. I want things to be clean and tidy.
28. When I get frightened, it feels like things are not real.
29. I would feel scared if I had to fly in an airplane.
30. I have nightmares about something bad happening my family.
31. I worry about being away from my family.
32. I perform rituals that help me to get less scared of my thoughts.
33. I'm afraid I will make a fool of myself when I'm with others

34. When I feel frightened, my heart beats fast.
35. I am scared when I get an injection.
36. I am afraid of getting a serious disease.
37. I feel weak and shaky.
38. I've had nightmares about something bad happening to me.
39. I feel nervous when I go to a party.
40. I am so scared of a harmless animal that I do not dare to touch it.
41. I worry about things working out for me.
42. I doubt whether I really did something.
43. When I get frightened, I sweat a lot
44. I am a worrier.
45. I feel scared when I watch a medical operation on TV
46. I try not to think about a very aversive event I once
47. Suddenly I get really frightened for no reason at all.
48. I am afraid to be alone in my house
49. I get scared when I think back of a very aversive event I once experienced.
50. It is hard for me to talk to unfamiliar people.
51. When I am frightened, I feel like I am choking.
52. People tell me that I worry too much.
53. I don't like to be away from my family.
54. I am afraid of having anxiety (or panic) attacks.
55. I worry that something bad might happen to my family.
56. I am shy.
57. I have unwanted thoughts about hurting other people.
58. I worry about what is going to happen in the future.
59. When I get frightened, I feel like throwing up.
60. I worry about how well I do things.
61. I worry about sleeping alone.
62. I worry about things that happened in the past.
63. I'm afraid to ask a question in a group of people.
64. When I feel frightened, I get dizzy.
65. I get scared in small, closed places.
66. I have strange, scary thoughts that I prefer not to have.
67. I am afraid of the dark.
68. I have unbidden thoughts about a very aversive event I once experienced.
69. I am afraid of an animal that most people do not fear.
70. I don't like being in a hospital.
71. I feel nervous when I am with other children or adults and I have to do something while they watch me.

### The generalized anxiety disorder 7-item (GAD-7) scale

Seven-item scale to assess severity of anxiety symptoms using 4-point scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day).

1. Feeling nervous, anxious or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still

6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen

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