Appendix i

Adolescent Relationship Questionnaire - A-RQ

<table>
<thead>
<tr>
<th>Not at all like me</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very like me</th>
<th>7</th>
</tr>
</thead>
</table>

Below we have described 4 different ways that people act and feel when they are with other people. Please read each description and rate how much you are like each one when you are with people using the 7-point scale, ranging from "not at all like me" to "very like me". Please also circle the letter A, B, C or D of the description that is most like you.

A. It is easy for me to feel close to people. I feel okay asking people for help and I know that they will usually help me. When people ask me for help, they can count on me. I don't worry about being alone and I don't worry about others not liking me.

B. It is hard for me to feel close to people. I want to be close to people, but I find it hard to trust them. I find it hard to ask people for help. I worry that if I get too close to people they will end up hurting me.

C. I want to be really close to people, but they don't want to get that close to me. I am unhappy if I don't have people that I feel close to. I sometimes think that I care about people more than they care about me.

D. I don't care if I am close to people. It is very important for me not to ask for help, because I like to do things on my own. I don't like it if people ask me for help.
Appendix ii

Adolescent RSQ

Think about all of the people in your life.
Now read each of the following statements and rate how much it describes your feelings using the 7-point scale, ranging from "not at all like me" to "very like me".

Score

1. I find it hard to count on other people.  
2. It is very important to me to feel independent.  
3. I find it easy to get emotionally close to others.  
4. I worry that I will be hurt if I become too close to others.  
5. I am comfortable without close emotional relationships.  
6. I want to be completely emotionally close with others.  
7. I worry about being alone.  
8. I am comfortable depending on other people.  
9. I find it difficult to trust others completely.  
10. I am comfortable having other people depend on me.  
11. I worry that others don't value me as much as I value them.  
12. It is very important for me to do things on my own.  
13. I'd rather not have other people depend on me.  
14. I am kind of uncomfortable being emotionally close to people.  
15. I find that people don't want to get as close as I would like.  
16. I prefer not to depend on people.  
17. I worry about having people not accept me.
Dear Miss Henderson

Full title of study: Attachment Style Interaction with Adolescent Diabetes Outcomes Accounting for the Mediating Effect of Substance Misuse and Low Mood

REC reference number: 08/S1101/18

Thank you for your letter of 22 May 2008, responding to the Committee’s request for further information on the above research and submitting revised documentation, subject to the conditions specified below.

The further information has been considered on behalf of the Committee by the Chair, Vice-Chair and Scientific Adviser.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites (“R&D approval”) should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk,
Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>5.5</td>
<td>03 April 2008</td>
</tr>
<tr>
<td>Protocol</td>
<td>1</td>
<td>03 April 2008</td>
</tr>
<tr>
<td>Child Protection Referral Flowchart</td>
<td>1.1</td>
<td>23 March 2006</td>
</tr>
<tr>
<td>Response to Request for Further Information</td>
<td></td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Parents Information Sheet: - All Participants Under 16 yrs</td>
<td>2</td>
<td>12 May 2008</td>
</tr>
<tr>
<td>Participant Information Sheet: 5Q</td>
<td>3</td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Participant Information Sheet: 3Q</td>
<td>3</td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Participant Consent Form: All</td>
<td>2</td>
<td>12 May 2008</td>
</tr>
<tr>
<td>Letter of invitation to participant</td>
<td>1</td>
<td>01 April 2008</td>
</tr>
<tr>
<td>Letter from Sponsor</td>
<td></td>
<td>01 February 2008</td>
</tr>
<tr>
<td>Liability &amp; Professional Indemnity Insurance</td>
<td></td>
<td>20 July 2007</td>
</tr>
<tr>
<td>IIP-32 Question Scoring Sheet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SASSI Direct Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent RSQ - Scharfe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Relationship Questionnaire (A-RQ)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HADS Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigator CV: Sally Henderson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor CV - M Schwannauer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review
You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

08/S1101/18 ~ Please quote this number on all correspondence

With the Committee’s best wishes for the success of this project

Yours sincerely

[Signature]

Mr Nicholas Grier
Chair

Enclosures: "After ethical review – guidance for researchers"

Copy to: Dr Tina McLelland, NHS Lothian R&D
**Appendix x (a)**

Distribution plots for HbA1c and each predictor

1) Blood glucose distribution histogram

![Blood glucose distribution histogram](image)

HbA1c %

2) Raw score total on Inventory of Interpersonal Problems (IIP) distribution histogram

![Inventory of Interpersonal Problems (IIP) distribution histogram](image)

IIP total raw score
3) Total Anxiety Score distribution histogram

4) Total Depression Score distribution histogram
5) Substance use (FVOD% + FVA%) distribution histogram

![Substance use distribution histogram](image)

- **Frequency**: 40.00, 30.00, 20.00, 10.00, 0.00
- **Mean**: 9.359
- **Std. Dev.**: 12.64927
- **N**: 65

6) Total Attachment Score distribution

![Total Attachment Score distribution](image)

- **Frequency**: 20, 15, 10, 5, 0
- **Mean**: -1.6843
- **Std. Dev.**: 4.51879
- **N**: 86
Appendix x (b)

Statistics and distribution plots for the transformed variables

Table 1 – Normality tests of key predictors following transformation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov statistic (p value)</th>
<th>Skewness z score</th>
<th>Kurtosis z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c (n=86)</td>
<td>D (86)= 0.09 (ns)*</td>
<td>1.36**</td>
<td>-0.84**</td>
</tr>
<tr>
<td>HADS anxiety scores (n=86)</td>
<td>D (86)= 0.10 (ns)*</td>
<td>-0.48**</td>
<td>0.16**</td>
</tr>
<tr>
<td>HADS depression scores (n=86)</td>
<td>D(86)= 0.14 (p&lt;.001)</td>
<td>-0.47**</td>
<td>0.31**</td>
</tr>
<tr>
<td>SASSI-A2 FVA+FVOD % score (n=65)</td>
<td>D(65) = 0.26 (p&lt;.001)</td>
<td>1.82**</td>
<td>-1.78**</td>
</tr>
</tbody>
</table>

* not significant at p<.05  ** within the limits of z score +/- 1.
† Shapiro Wilk for n=50, also ns*

1) Transformed (logx) HbA1c distribution histogram

![Transformed HbA1c distribution histogram](image-url)
2) Transformed (square root) HADS Anxiety distribution histogram

3) Transformed (log(x+1)) HADS Depression distribution histogram
4) Substance use (FVOD + FVA%) (Square root) distribution histogram

![Histogram](image_url)

- Frequency
- Mean = 2.1261
- Std. Dev. = 2.21685
- N = 65
Appendix xi

Multiple regression analysis

Table 1 - ANOVA table for regression model using key predictors.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.005</td>
<td>1</td>
<td>.005</td>
<td>.747</td>
<td>.393a</td>
</tr>
<tr>
<td>Residual</td>
<td>.264</td>
<td>37</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.270</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>.024</td>
<td>5</td>
<td>.005</td>
<td>.659</td>
<td>.657b</td>
</tr>
<tr>
<td>Residual</td>
<td>.245</td>
<td>33</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.270</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), reverse back transformed TAS
b. Predictors: (Constant), reverse back transformed TAS, square root subs, sq root anx, depression +1 log , log iip
c. Dependent Variable: log HbA1c

Table 2- model Summary of regression model using key predictors.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.141a</td>
<td>.020</td>
<td>-.007</td>
<td>.08451</td>
</tr>
<tr>
<td>2</td>
<td>.301b</td>
<td>.091</td>
<td>-.047</td>
<td>.08618</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), reverse back transformed TAS
b. Predictors: (Constant), reverse back transformed TAS, square root subs, sq root anx, depression +1 log , log iip
Dear Patient,

I am currently carrying out a study at Diabetes Clinics across Lothian. The study is being carried out in order to help us to understand what things affect the way teenagers manage their Diabetes. By carrying out this study we hope to be able to offer more effective help to all teenagers with Diabetes.

At your next appointment I will be in the waiting area asking all the teenagers attending the clinic if they would like to complete some questionnaires for me. I will be asking you if you would like to participate. In order to give you time to think about whether or not you would like to participate, and to help you to understand the study better, I have enclosed an information sheet for you to read. Please take the time to read this carefully before you make any decisions.

When you arrive at the clinic you will be given the chance to re-read the information sheet and ask any questions before you decide whether or not to take part.

I look forward to seeing you then.

Yours sincerely,

Sally Henderson
Trainee Clinical Psychologist
Appendix v

(Participant information sheet for those completing 5 questionnaires)

Participnt Information Sheet 5Q  Version3- 22/05/08

Factors Affecting Diabetes Self Care in Adolescents

At your next appointment at the Diabetes Clinic you will be invited to complete some questionnaires. Before you decide if you want to it is important for you to understand why the research is being done and what it will involve. Please read this form and talk about it with anyone if you wish. At the clinic you will be approached by the researcher, a Trainee Clinical Psychologist called Sally Henderson, and asked if you would like to take part. At this stage you will be able to ask questions if there is anything that is not clear or if you would like more information. You do not have to take part if you do not wish to and you will be given time at the clinic to decide whether or not you wish to take part.

What is the purpose of this study?
The study is being carried out in order to help us to understand what things affect how you look after yourself and your Diabetes. By asking lots of teenagers questions about this I will be able to understand Diabetes better.

Studies in the past show that the way teenagers have relationships with friends and family may affect how well they look after their Diabetes. We also wonder if other things, such as how much alcohol or drugs the person may be using, and how good or bad their mood is, may also affect the way they look after their Diabetes.

What will I have to do?
If you decide to take part, you will be asked to complete five questionnaires. The first, second and third questionnaires will ask you about how you feel about your family and friends. The fourth questionnaire will ask you how your mood has been over the last week. The fifth is the longest, and will ask you about how much alcohol or drugs you may be using.

You should complete the questionnaires in the time before and after your appointment at the Diabetes Clinic. It will take you around 30- 40 minutes to complete the questionnaires. It is best if you do this alone without help from a parent or carer who came along with you today. Please answer the questions honestly. The person who gave you the forms will be around so please check with her if you have any questions as you go along.

Why have I been asked to take part?
All teenagers attending these clinics in Lothian are being asked to take part. It is totally up to you whether or not you want to fill in the questionnaires. If you do decide to take part you may stop at any time and your treatment will not be affected in any way. If you decide not to take part, this will not affect your treatment in any way.
**Will the information I provide be kept confidential?**

The questionnaires will not have your name on them and will therefore be anonymous. All of the information you provide on the questionnaires will be kept private and will not be shared with anyone else.

You may wish to discuss any issues or questions that come up with the researcher during the clinic. The researcher is more than happy to answer any questions. If this discussion gives the researcher cause to be worried that your mood is quite low or that you or another young person may be at risk of harm she can let someone who can help know. If you are under sixteen years old your parent/guardian will be told that the researcher is contacting someone who can help with the problem. This will only happen if you discuss such things with the researcher. The information on your questionnaires will still be kept anonymous and confidential.

**What happens to the information I provide?**

If you would like to see the results of this study, you can let the researcher know and the results will be posted to you when the study is finished.

**Who is organising the research?**

The research is being carried out by Sally Henderson (Trainee Clinical Psychologist) as part of the University of Edinburgh Clinical Psychology training course requirements. She is being supervised by Dr Ion Wyness (Clinical Psychologist) at St John’s Hospital in West Lothian and Matthias Schwannauer (Clinical Psychologist) at the University of Edinburgh. You may contact Miss Henderson on 01506 523615 should you have any questions.

**Local independent Advisor**

If you have any questions about the questionnaires or any worries about them before or after filling them in you can contact Sally Henderson. If you would prefer to speak to someone different you can call Dr Michele Bryans. She can be contacted at St John’s Hospital on 01506 523615.

Thank you for reading this and for your consideration.
Factors Affecting Diabetes Self Care in Adolescents

At your next appointment at the Diabetes Clinic you will be invited to complete some questionnaires. Before you decide if you want to it is important for you to understand why the research is being done and what it will involve. Please read this form and talk about it with anyone if you wish. At the clinic you will be approached by the researcher, a Trainee Clinical Psychologist called Sally Henderson, and asked if you would like to take part. At this stage you will be able to ask questions if there is anything that is not clear or if you would like more information. You do not have to take part if you do not wish to and you will be given time at the clinic to decide whether or not you wish to take part.

What is the purpose of this study?
The study is being carried out in order to help us to understand what things affect how you look after yourself and your Diabetes. By asking lots of teenagers questions about this I will be able to understand Diabetes better.

Studies in the past show that the way teenagers have relationships with friends and family may affect how well they look after their Diabetes. We also wonder if other things, such as how much alcohol or drugs the person may be using, and how good or bad their mood is, may also affect the way they look after their Diabetes.

What will I have to do?
If you decide to take part, you will be asked to complete three questionnaires. The first questionnaire will ask you about how you feel about your family and friends. The second questionnaire will ask you how your mood has been over the last week. The third is the longest, and will ask you about how much alcohol or drugs you may be using.

It will take you around 15 to 20 minutes to complete the questionnaires. You should complete the questionnaires in the time before and after your appointment at the Diabetes Clinic. It is best if you do this alone without help from a parent or carer who came along with you today. Please answer the questions honestly. The person who gave you the forms will be around so please check with her if you have any questions as you go along.

Why have I been asked to take part?
All teenagers attending these clinics in Lothian are being asked to take part. It is totally up to you whether or not you want to fill in the questionnaires. If you do decide to take part you may stop at any time and your treatment will not be affected in any way. If you decide not to take part, this will not affect your treatment in any way.
Will the information I provide be kept confidential?
The questionnaires will not have your name on them and will therefore be anonymous. All of the information you provide on the questionnaires will be kept private and will not be shared with anyone else.

You may wish to discuss any issues or questions that come up with the researcher during the clinic. The researcher is more than happy to answer any questions. If this discussion gives the researcher cause to be worried that your mood is quite low or that you or another young person may be at risk of harm she can let someone who can help know. If you are under sixteen years old your parent/guardian will be told that the researcher is contacting someone who can help with the problem. This will only happen if you discuss such things with the researcher. The information on your questionnaires will still be kept anonymous and confidential.

What happens to the information I provide?
If you would like to see the results of this study, you can let the researcher know and the results will be posted to you when the study is finished.

Who is organising the research?
The research is being carried out by Sally Henderson (Trainee Clinical Psychologist) as part of the University of Edinburgh Clinical Psychology training course requirements. She is being supervised by Dr Ion Wyness (Clinical Psychologist) at St John’s Hospital in West Lothian and Matthias Schwannauer (Clinical Psychologist) at the University of Edinburgh. You may contact Miss Henderson on 01506 523615 should you have any questions.

Local independent Advisor
If you have any questions about the questionnaires or any worries about them before or after filling them in you can contact Sally Henderson. If you would prefer to speak to someone different you can call Dr Michele Bryans. She can be contacted at St John’s Hospital on 01506 523615.

Thank you for reading this and for your consideration.
Appendix vi

Parent Information Sheet For All Participants under 16 years

Factors Affecting Diabetes Self Care in Adolescents

At your child’s next appointment at the Diabetes Clinic he/she will be invited to take part in a research study. Before your child decides whether or not to take part it is important for you both to understand why the research is being done and what it will involve, therefore you have both been provided with this information to be read prior to the appointment. At the clinic your child will be approached by the researcher, a Trainee Clinical Psychologist called Sally Henderson, and asked whether he/she would like to take part. At this stage you will both be able to ask questions if there is anything that is not clear or if you would like more information. Your child is under no obligation to take part.

What is the purpose of this study?
The study is being carried out in order to help us to understand what things affect the way teenagers manage their Diabetes. By carrying out this study we hope to be able to offer more effective help to all teenagers with Diabetes.

From previous research that has been carried out, we think that the way teenagers have relationships with friends and family may influence how they manage their Diabetes self care routines. We also wonder if other factors, such as how much alcohol or drugs the person may be using, and how good or bad their mood is, may also affect the way they look after their Diabetes.

What will my child have to do?
If in agreement, your child will be asked to complete a pack of questionnaires investigating their use, if any, of drugs or alcohol, relationships with family and friends and their mood. These questionnaires can be completed in the time before and after the appointment at the Diabetes Clinic. Your child will asked to do this alone without help from a parent or carer but with help from the researcher if required.

Why has my child been asked to take part?
The study is running in Diabetes Clinics for teenagers all over Lothian. All teenagers attending these clinics are being asked to take part. Participation in this study is completely voluntary. If your child does decide to take part he or she may stop at any time and his/her treatment will not be affected in any way. If he/she decides not to take part, this will not affect his/her treatment in any way.

Will the information provided be kept confidential?
The questionnaires will contain no identifying information about your child. All the information provided by your child will be kept confidential and anonymous. Information from the questionnaires will not be shared with anyone else.

Your child may wish to discuss any issues or questions that arise with the researcher during the clinic. If this discussion gives the researcher cause to be concerned about your child’s mood or that your child or another young person may be at risk of harm,
the appropriate services will be notified. You will be informed of this action by the researcher at the clinic. This will only happen if your child discusses such things with the researcher. The information on the questionnaires will remain anonymous and confidential.

Who is organising the research?
The research is being carried out by Sally Henderson (Trainee Clinical Psychologist) as part of the University of Edinburgh Clinical Psychology training course requirements. She is being supervised by Dr Ion Wyness (Clinical Psychologist) at St John’s Hospital in West Lothian and Matthias Schwannauer (Clinical Psychologist) at the University of Edinburgh. You may contact Miss Henderson on 01506 523615 should you have any questions.

Local independent Advisor
If required you can contact Dr Michele Bryans, an independent advisor, to discuss any questions you may have about the research. She can be contacted at St John’s Hospital on 01506 523615.

Thank you for reading this and for your consideration.
CONSENT FORM

Title of the Study: Factors Affecting Diabetes Self-Care in Adolescents
Name of Researcher: Sally Henderson
Name of Diabetes Consultant:

1- I agree that I have read and understood the information sheet provided. I have been given the chance to think about the information provided and to ask any questions about the study. Any questions have been answered satisfactorily.

2- I understand that it is my decision to take part in this study and I can decide at any time to stop, without giving any reason. My medical and legal rights will not be affected. My concurrent treatment will not be affected by taking part or not taking part.

3- I understand that all of the information I provide on the questionnaires is completely anonymous. This means that the researcher will not be able to match my answers with my name.

4- I understand that if I discuss any issues with the researcher that cause her to feel that I, or anyone else, may be at risk, then she will discuss this information with individuals from regulatory authorities.

5- I agree to take part in the above study

------------------------------------------         --------------        -----------------------------------
Name of Patient                                       Date                    Signature

Name of person taking consent               Date                   Signature

I agree that this patient is capable of understanding the reason for participation and any implications. This patient therefore has the capacity to consent to participation in the above study.

----------------------------------------           --------------       --------------------------------------------
Name of lead medical personnel             Date    Signature
Correlations between measures and scales of key predictors

|                     | FVA +FVOD % | Average SASSI% | Secure Rating | Fearful Rating | Preoccupie d Rating | Dismissing Rating | A-RQ TAS | Composite TAS | HADS Depression | HADS Anxiety | Total IIP score |
|---------------------|-------------|----------------|---------------|---------------|---------------------|-------------------|----------|---------------|----------------|--------------|-----------------
| FVA+ FVOD %        |             |                |               |               |                     |                   |          |               |                |              |                 |
| Average SASSI%     | .652 **     |                |               |               |                     |                   |          |               |                |              |                 |
| Secure Rating      | .213 * (.088) | .173 (p=.167) |               |               |                     |                   |          |               |                |              |                 |
| Fearful Rating     | -.117 (p=.355) | .025 (p=.845) | -.478 ** (p<.001) |               |                     |                   |          |               |                |              |                 |
| Preoccupie d Rating | -.088 (p=.486) | -.015 (p=.904) | -.0352 ** (p<.001) | .450 ** (p<.001) |                     |                   |          |               |                |              |                 |
| Dismissing Rating  | .036 (p=.777) | .158 (p=.208) | -.078 (p=.477) | .262 (p=.015) | .245 (p=.23) |                   |          |               |                |              |                 |
| A-RQ TAS           | .141 (p=.264) | .025 (p=.846) | .655 ** (p<.001) | -.724 ** (p<.001) | -.720 ** (p<.001) | -.547 ** (p<.001) |          |               |                |              |                 |
| Composite TAS      | .221 (p=.176) | .032 (p=.848) | .705 ** (p<.001) | -.682 ** (p<.001) | -.750 ** (p<.001) | -.567 ** (p<.001) | .966 ** (p<.001) |          |                |              |                 |
| HADS depression    | .107 (p=.397) | .451 ** (p<.001) | -.291 ** (p<.007) | .285 (p=.008) | .280 (p=.009) | .154 (p=.156) | -.391 ** (p<.001) | .-453 ** (p<.001) |          |                |              |
| HADS anxiety       | .032 (p=.802) | .231 (p=.065) | -.322 ** (p<.002) | .492 ** (p<.001) | .443 (p=.111) | .173 (p=.111) | -.440 ** (p<.001) | -.568 ** (p<.001) | .442 ** (p<.001) |          |
| Total IIP Raw score | .089 ** (p=.590) | .454 ** (p<.001) | -.232 ** (p<.004) | .332 (p=.018) | .321 (p=.023) | .170 (p=.239) | -.387 (p=.005) | -.407 (p=.003) | .422 ** (p=.002) | .467 ** (p=.001) |          |

* = significant at p<.05
** = significant at p<.005

Bold indicates items that are not measured by the same Appendix viii Table of correlations between predictors
### Appendix ix

Statistics and distribution plots for the transformed variables

#### Table 1 – Normality tests of attachment measures following transformation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov statistic (p value)</th>
<th>Skewness z score</th>
<th>Kurtosis z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-RQ secure rating</td>
<td>D (86) = 0.18 (p&lt;.001)</td>
<td>0.29**</td>
<td>-1.22**</td>
</tr>
<tr>
<td>A-RQ dismissing rating</td>
<td>D (86) = 0.27 (p&lt;.001)</td>
<td>1.91**</td>
<td>-1.95**</td>
</tr>
<tr>
<td>A-RQ TAS</td>
<td>D (86) = 0.13 (p&lt;.01)</td>
<td>1.78**</td>
<td>-0.44**</td>
</tr>
<tr>
<td></td>
<td>Shapiro-Wilk statistic (p value)</td>
<td>Skewness z score</td>
<td>Kurtosis z score</td>
</tr>
<tr>
<td>IIP-32 Cold/Distant</td>
<td>W (50) = 0.95 (p&lt;.05)</td>
<td>0.40**</td>
<td>1.27**</td>
</tr>
<tr>
<td>IIP-32 Intrusive/Needy</td>
<td>W (50) = 0.99 (ns)*</td>
<td>-0.13**</td>
<td>0.04**</td>
</tr>
<tr>
<td>IIP-32 Total Raw Score</td>
<td>W (50) = 0.07 (ns)*</td>
<td>-0.46**</td>
<td>1.04**</td>
</tr>
</tbody>
</table>

*ns= not significant at p<.05 ** within the limits of z score +/- 1.96
1) Transformed (logx) A-RQ Secure scores distribution histogram

2) Transformed (logx) A-RQ Dismissing scores distribution histogram
3) Transformed (logx) A-RQ TAS distribution histogram

![Histogram of A-RQ TAS distribution](image)

- Mean = 0.58
- Std. Dev. = 0.327
- N = 86

6) Transformed (logx) IIP-32 Cold/Distant scale scores distribution histogram

![Histogram of IIP-32 Cold/Distant scale scores](image)

- Mean = 1.73
- Std. Dev. = 0.084
- N = 50
7) Transformed (square root) IIP-32 Intrusive/Needy scale scores distribution histogram

8) Transformed (logx) IIP-32 Total Raw Score distribution histogram
Dear Miss Henderson

Full title of study: Attachment Style Interaction with Adolescent Diabetes Outcomes Accounting for the Mediating Effect of Substance Misuse and Low Mood

REC reference number: 08/S1101/18

Thank you for your letter of 22 May 2008, responding to the Committee’s request for further information on the above research and submitting revised documentation, subject to the conditions specified below.

The further information has been considered on behalf of the Committee by the Chair, Vice-Chair and Scientific Adviser.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites (“R&D approval”) should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk,
Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>5.5</td>
<td>03 April 2008</td>
</tr>
<tr>
<td>Protocol</td>
<td>1</td>
<td>03 April 2008</td>
</tr>
<tr>
<td>Child Protection Referral Flowchart</td>
<td>1.1</td>
<td>23 March 2006</td>
</tr>
<tr>
<td>Response to Request for Further Information</td>
<td></td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Parents Information Sheet: - All Participants Under 16 yrs</td>
<td>2</td>
<td>12 May 2008</td>
</tr>
<tr>
<td>Participant Information Sheet: 5Q</td>
<td>3</td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Participant Information Sheet: 3Q</td>
<td>3</td>
<td>22 May 2008</td>
</tr>
<tr>
<td>Participant Consent Form: All</td>
<td>2</td>
<td>12 May 2008</td>
</tr>
<tr>
<td>Letter of invitation to participant</td>
<td>1</td>
<td>01 April 2008</td>
</tr>
<tr>
<td>Letter from Sponsor</td>
<td></td>
<td>01 February 2008</td>
</tr>
<tr>
<td>Liability &amp; Professional Indemnity Insurance</td>
<td></td>
<td>20 July 2007</td>
</tr>
<tr>
<td>IIP-32 Question Scoring Sheet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SASSI Direct Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent RSQ - Scharfe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Relationship Questionnaire (A-RQ)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HADS Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigator CV: Sally Henderson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor CV - M Schwannauer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review
You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

08/S1101/18  ~  Please quote this number on all correspondence

With the Committee’s best wishes for the success of this project

Yours sincerely

C. Graham

Mr Nicholas Grier
Chair

Enclosures:  "After ethical review – guidance for researchers"

Copy to:  Dr Tina McLelland, NHS Lothian R&D