

**Exploring the relationships between attachment, epistemic trust, and
expectations of helping relationships in adolescents.**

Tal Reches

D.Clin.Psy. Thesis (Volume 1)

2017

University College London

UCL Doctorate in Clinical Psychology

Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Tal Reches

Date: 23.6.2017

Overview

The overall focus of this thesis is to explore whether young people's help-seeking is affected by their attachment and epistemic trust (ET).

Part one presents a systematic literature review, which explores the relationship between attachment and help-seeking tendencies and behaviours. Existing research suggests that help-seeking processes are associated with individual differences in attachment; however, no systemic review has previously considered the relationship between the two. The review also addresses potential mediators and moderators for the observed relationship.

Part two presents an empirical paper that addresses multiple points: first, it looks at the relationship between attachment and expectation of helping relationship in the general context of young people's social networks and in the specific context of the therapeutic environment. Second, it reports on the potential role of ET as a mediator of this relationship. Results showed that attachment was a predictor of young people's expectations of helping relationships. Only limited evidence was found regarding the role epistemic trust plays in the observed relationship. Results are discussed in light of the novelty of the measures used. Finally, some clinical implications of this study are discussed, including the promotion of outreach intervention efforts to promote help-seeking among young people. Data collection was conducted jointly with another two fellow trainees.

Part three presents a critical appraisal of the empirical paper and provides reflections on the process of conducting research with an adolescent population, of defining and measuring the construct of 'expectations of helping relationship', and of conducting research into an emerging field.

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Acknowledgments

I would like to thank my supervisor, Professor Peter Fonagy, for his help and support in the process of conducting and writing this project. Your knowledge and guidance have been extremely valuable. I would also like to thank my external supervisor, Dr. Tobias Nolte, for supporting me and providing constructive feedback.

Thank you to Jessie Greisbach and Elise Draper, my fellow trainees in the DclinPsy course, who were also involved in this project. Working with you has been a great experience; your kind support helped me master the most challenging aspects of this project.

I would also like to thank my family for keeping faith in me and for their endless support and encouragement.

Finally, I would like to dedicate this work to my soon-to-be first child. You have certainly tested my limits while conducting this project, but have also filled me with a true sense of happiness. Going forward, all my thoughts will be dedicated to you.

Part One: Literature Review

A Systematic Literature Review into the Relationship between Attachment and Help-Seeking Tendencies and Behaviours.

1.1 Abstract

Aim

The aims of this review are twofold: first, it evaluates the extent to which the current literature describes the relationship between attachment and help-seeking tendencies and behaviours. Second, it examines any potential moderators and mediators that may play a role in this relationship.

Method

A systematic search was conducted using the databases PsychINFO, MEDLINE, and EMBASE. 22 studies met all inclusion criteria and 3 more papers were added by hand-search, resulting in a total of 25 studies that were included in this review.

Results

Results showed secure attachment to be positively linked to help-seeking. Regarding insecure attachment, findings suggest that attachment avoidance is negatively linked to help-seeking. Findings concerning attachment anxiety are less consistent: individuals with attachment anxiety are more likely to seek help, but are also ambivalent towards seeking help. Perceived social support, psychological distress, stigma as well as the anticipated risks and benefits of help-seeking were found to mediate the link between attachment and help-seeking. Both gender and the severity and nature of the stressor were found to moderate this relationship.

Conclusions

The current literature review supports the association between attachment and help-seeking and as a whole fits the assumptions of attachment theory. However, further research is needed to offer a more comprehensive model of attachment and help-seeking. Implications for developing interventions to increase help-seeking are discussed.

1.2 Introduction

Help-seeking

Help-seeking is a coping strategy that relies on other people. It refers to a form of communication that is aimed at obtaining help from others in response to a distressing experience or problem. Help can be sought from different sources and can be categorized as either formal or informal. Informal help-seeking may include approaching others in the context of social relationships such as family or friends. Formal help-seeking may include reaching out to professionals such as health professionals, counsellors and teachers. (Rickwood, Deane, Wilson & Ciarrochi, 2005).

Help-seeking is a mechanism that can be divided into three stages: attitudes towards seeking help, intentions to actually seek help, and subsequent help-seeking behaviour (i.e. approaching help). These three stages are closely interlinked. Help-seeking attitudes have been found to be a predictor of increased help-seeking intentions (Shaffer, Vogel & Wei, 2006). Moreover, research has shown that individuals who accessed psychological help in the past thought more highly of help-seeking than individuals who had no previous intervention exposure (Lin & Parikh, 1999).

Help-seeking in times of need is fundamental to general wellbeing and has been associated with better mental health and adjustment outcomes. Lee (1999) claims that help-seeking is ‘a highly adaptive behaviour that has a positive ongoing impact on an individual across the lifespan’. Help-seeking provides protection against different mental-health risks such as suicide (Martin, 2002). Moreover, help-seeking was found to reduce immediate risk for suicide among those who experienced suicidal thoughts and ideation (Rudd et al., 1996). Although recent research has shown an increase in the number of people accessing psychological

services, there is still a significant amount of people who are hesitant to do so despite suffering from a wide range of mental health problems (Picco et al., 2016).

It is therefore crucial to deepen our understanding of the many factors that can affect this behaviour. Broader knowledge about what exactly prompts individuals to seek psychological support can not only influence outreach efforts, but also change the way professionals approach and provide services to those who would otherwise suffer in silence (Komiya, Good, & Sherrod, 2000). Past literature has considered a wide range of factors that may contribute to the decision-making process of seeking help including gender (e.g. Cohen, Guttman, & Lazar, 1998), stigma (e.g. Gulliver, Griffiths & Christensen, 2010), level of psychological distress (e.g., Deane & Chamberlain, 1994), perceived social support (e.g. Richwood & Braithwaite, 1994) and comfort with self-disclosure (Vogel & Wester, 2003).

Help-seeking and attachment

Attachment is another factor that is likely to influence the help-seeking process. Indeed, a body of research has specifically investigated the process of help-seeking from an attachment point of view. Attachment was found to play an important role in personal adjustment by guiding an individual's affect regulation and ways of coping with threatening experiences (Kobak & Sceery, 1988; Ognibene & Collins, 1998). In addition, research shows that attachment security is related to more self-disclosure and higher overall compliance with treatment (Dozier, 1990). Greater attachment security is also linked to better therapeutic alliances (Diener & Monrow, 2011). All of these findings suggest that improving our understanding of the role attachment plays in the help-seeking process is of high importance.

In 2009, Shaver and Mikulincer stated that 'attachment theory offers a functional perspective on support-seeking...' (p. 8). Decades earlier even, Bowlby

(1982) noted that the main goal of seeking support is to increase the individual's sense of security. Being able to rely on another for support in times of need creates and reinforces a sense of the world as safe and positive place. When a threat is perceived, the attachment system is activated and motivates the individual to seek proximity and support from the attachment figure as a way to protect and regulate the self. This process is called the 'primary attachment strategy' (Main, 1990).

Mikulincer and Shaver (2003) offered a two-stage process for the activation of the primary attachment strategy. First, threat appraisal triggers preconscious activation of the system that results in increased accessibility of the mental representation of the attachment figure. Then, if this preconscious activation is strong enough it will lead to the conscious idea of seeking support from the attachment figure, behavioural intentions to seek support, and actual seeking of support.

An attachment strategy is most evident during the first few years of life when a child is still completely dependent on their caregiver for survival (Shaver & Mikulincer, 2009). However, while attachment may be less obvious during later years, support-seeking behaviours during times of distress demonstrate that it remains active throughout life (Bowlby, 1988). During early childhood, the primary caregivers usually become the main attachment figure and are mostly sought out for support through nonverbal expression such as crying or crawling towards. In adolescence and adulthood, the peer group (i.e. close friends and romantic partners) can also become attachment figures (Ainsworth, 1991) and methods of seeking support expand to include verbal approaches such as talking or calling out for help. Finally, formal figures such as teachers, supervisors and therapists can play an important part in providing support in times of need (Rickwood et al., 2012).

To summarise, attachment theory suggests that throughout the lifespan the attachment system is likely to affect one's help-seeking in times of stress. However, despite the potential relevance of attachment theory to the help-seeking process, no systematic literature review exists to elucidate this relationship.

Individual differences in attachment and help-seeking

Attachment theory can provide further understanding of individual differences in support-seeking. Mikulincer and Shaver (2003) suggest that the activation of the attachment system leads to automatically seeking some degree of proximity to the attachment figure. However, individual differences in attachment shape the way individuals cope with stressors. In their research, secure attachment was linked to perceptions of support availability, greater confidence in the supportiveness of others, and more satisfaction with the received support. Insecure adults on the other hand, deemed support to be less available to them and were less satisfied with the support they received (Mikulincer & Shaver, 2007). Another study that further supports these notions showed that negative maternal representations biased individual appraisals of supportive videotaped interactions (Shirk, Van Horn, & Leber, 1997).

Bowlby (1973) believed that these individual differences stem from a history of interactions with the attachment figures. Through these repeated experiences, children develop internal working models, which are mental representations of themselves and the other in close relationships. Internal working models provide a lens through which people perceive relationships with others. Internal working models help individuals manage stressful situations and determine if a person seeks proximity to others in times of distress (Hazan & Shaver, 1987; Larose & Bernier, 2001).

When the attachment figure is available and responsive, a secure attachment – i.e. mental representations of the other as trustworthy and reliable and the self as worthy and valuable – are likely to develop. As a result, a person with secure attachment is usually more likely to expect that the other is available and will offer help, which in turn increases the likelihood of using support-seeking behaviours as an emotion regulation strategy in times of distress (Main, Kaplan & Cassidy, 1985).

On the other hand, when the attachment figure is consistently unavailable, individuals learn that proximity and support-seeking often fail to achieve emotion regulation. They are then likely to develop an avoidant attachment, which consists of negative internal working models of others as unresponsive and untrustworthy (Griffin & Bartholomew, 1994). Instead of approaching others for help, they are more likely to use deactivating strategies in order to keep the attachment system deactivated and to avoid further distress from the lack of attachment figure availability. Individuals with attachment avoidance are likely to deny attachment needs and strive for self-reliance and independence (Mikulincer, Shaver & Pereg, 2003). Those individuals are likely to devalue others as a source of help and support (Kobak & Sceery, 1998). In support of these theoretical assumptions, it was found that individuals with attachment avoidance were less likely to disclose personal information to others (Dozier, 1990) and were less likely to acknowledge their own feelings of distress (Vogel & Wei, 2005).

Finally, when the attachment figure is unpredictable the individual is likely to develop attachment anxiety and a negative internal working model of the self as unworthy and incompetent. Individuals with attachment anxiety then use hyperactivating strategies and engage in attempts to elicit support by clinging and controlling responses in order to minimise distance from their attachment figure.

These individuals tend to perceive themselves as helpless and incompetent at affect regulation. They value the other's importance and at the same time fear being rejected and disappointment. Therefore, these individuals are more likely to seek support but feel uncertain whether others can be trusted and relied on (Mikulincer & Shaver, 2003; Kobak & Sceery, 1998; Shaffer et al., 2006). In support of this, individuals with attachment anxiety were found to engage in more self-disclosure to others (Dozier, 1990) and were more likely to acknowledge psychological distress (Vogel & Wei, 2005).

To summarise, individual differences in attachment can provide a better understanding of the help-seeking process, which has serious implications for an individual's personal adjustment and wellbeing. The decision to seek help seems to largely depend on the belief that others are a reliable source of support and comfort, which in turn depends on the individual's attachment system.

Providing more understanding of the help-seeking process from an attachment perspective may have important clinical implications. It may inform professional efforts to facilitate the help-seeking process and improve outreach to those who are in need but struggle to approach external support. By developing an awareness of how the help-seeking process may differ among individuals with different attachment styles, professionals could develop more targeted, attachment-theory driven interventions in order to increase the usage of mental health services (Cheng, Mcdermott & Lopez 2015). Increasing help-seeking is in turn likely to improve mental health and adjustment among those with insecure attachment.

Not only is it important to understand the relationship between attachment and help-seeking, but it is also crucial to understand the different paths through which these two constructs are associated. By attending to the different factors that may

contribute to the decision to seek help, a more comprehensive model of how individuals with different attachment styles approach help could be developed (Shaffer et al., 2006). Vogel and Wei (2005) suggest that since an individual's attachment orientation is generally considered to be stable throughout life and difficult to change, it may be helpful to focus intervention efforts on those factors that are expected to be involved in the relationship between attachment and help-seeking. For example, attachment anxiety was found to predict stigma about help-seeking, which was subsequently linked to less help-seeking (Cheng et al., 2015). Interventions aimed at reducing stigma would be particularly beneficial then for facilitating help-seeking among those with anxious attachment pattern.

The current review aims to systematically evaluate research about help-seeking from an attachment perspective and to provide an understanding of what factors may moderate and mediate this relationship.

This review hopes to address three main research questions:

1. Does a relationship exist between attachment and help-seeking?
2. If there is a relationship, what are the potential mediators of this relationship?
3. If there is a relationship, what are the potential moderators of this relationship?

1.3 Method

This systematic literature review was carried out using databases Psycinfo, Medline and Embase. Selected search terms were commonly used search terms in the fields of attachment and help-seeking and included: 'Attachment' OR 'Internal working model' AND keywords relevant to help-seeking (i.e. support-seeking OR help-seeking behaviour* OR help-seeking attitudes OR help-seeking intention* OR treatment seeking, etc.). A subject heading search was also conducted using the term

‘help-seeking behavior’. Please see appendix A for a full outline of the search terms. A total of 289 papers were initially found. This number was reduced to 214 after duplicates were removed. A further examination of titles and abstracts was conducted and the following initial exclusion criteria were applied:

1. Clearly non-relevant (i.e. study is not about help-seeking)
2. Theoretical papers
3. Papers not published in a peer-reviewed journal
4. Qualitative papers
5. Full text was not available

Forty-five papers remained, which were further examined using the following exclusion criteria:

1. Studies focusing on children under the age of 7 years. These studies were attachment studies that focused on toddlers’ and young children’s affect regulation strategies (e.g. - seeking proximity) in times of stress in the context of the attachment relationship with caregivers. The current investigation, however, was more interested in adolescent and adult help-seeking tendencies and behaviours in the context of seeking help and professional help, in particular for psychological distress. Therefore, it was felt that studies that explored young children were different in nature from those evaluated for the current review, and were therefore excluded.
2. Studies focusing on help-seeking behaviour for physical health problems. Although it was assumed that similar mechanisms are likely to be involved in attachment-driven help-seeking behaviours for physical and psychological problems, the current investigation’s primary interest was to achieve a better understanding of seeking help in the mental-health domain with the hopes

that doing so can facilitate help-seeking for mental health difficulties and help clinicians develop appropriate outreach interventions. To further narrow down the total amount of studies, it was therefore decided to exclude studies that included only seeking help for physical problems.

3. Studies evaluating solely informal help-seeking. A wide range of studies were found to focus on informal help-seeking behaviours as a coping strategy used in different contexts such as romantic relationships, parental relationship and within friendships. Those studies approached help-seeking from different angles and defined help-seeking in ways that felt to be too diverse for the purpose of the current investigation. Moreover, as outlined above, this literature review was mainly interested in exploring and developing understanding in the mental-health domain. Therefore, in order to further reduce the number of studies considered in this review, it was decided to exclude those studies that did not mention some form of formal help-seeking.

Overall, 22 studies met all inclusion criteria and were included in the current review. The references of the identified papers were then examined and additional relevant papers were identified and reviewed. Three more papers met all inclusion criteria, resulting in a total of 25 papers included in this review.

Figure 1 summarises the described procedure.

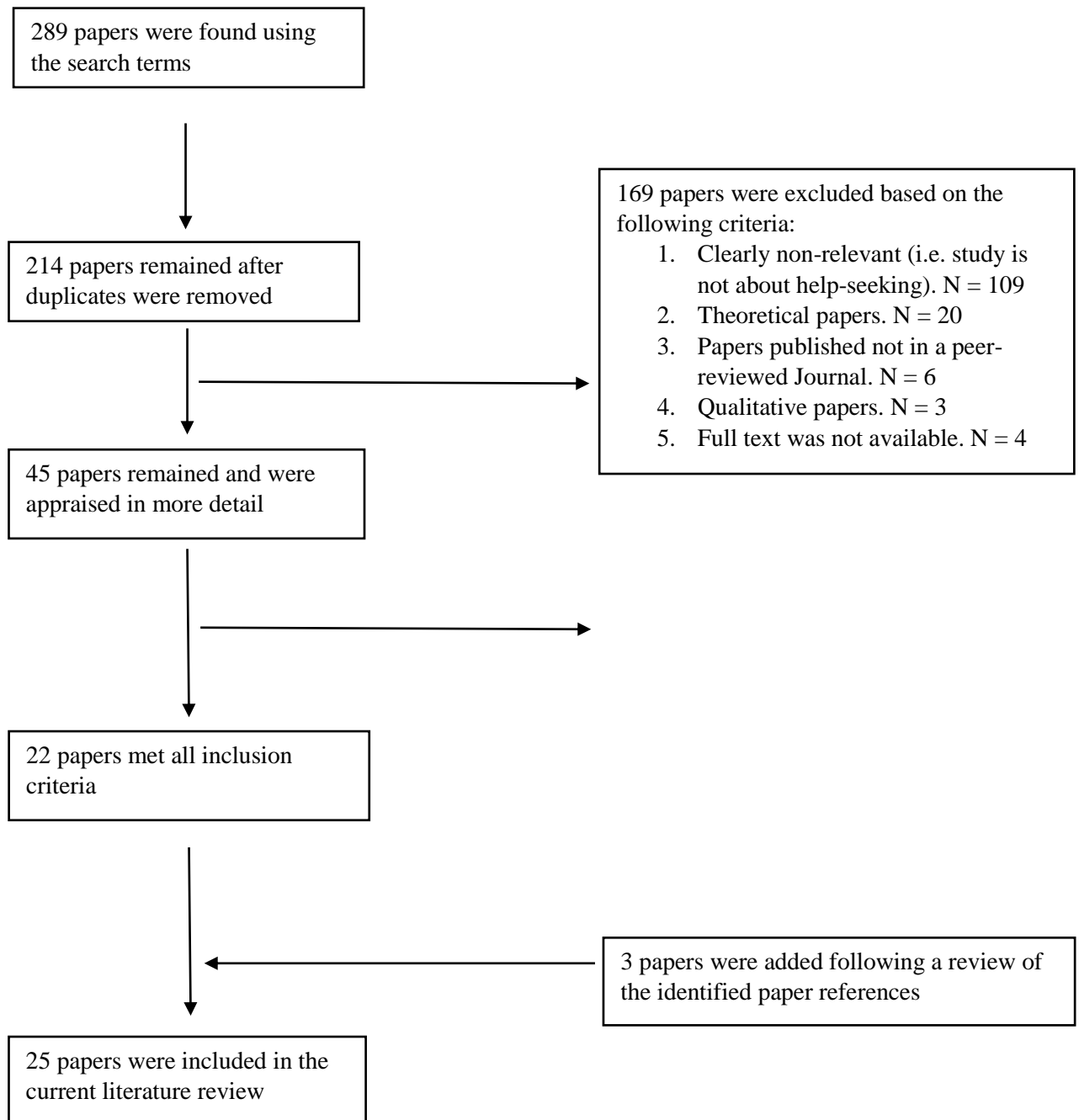


Figure 1. Paper selection procedure

The Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields (QualSyst; Kmet, Lee, & Cook, 2004) was used to assess the quality of studies evaluated for this literature review (please see appendix B).

The quality score QualSyst is a standardised and empirically grounded tool that is suitable for a wide range of study designs. The scoring system for the quantitative aspect of this research is based on an existing tool developed by Cho and Bero (1994) and Timmer, Sutherland and Hilsden (2003). The researcher conducted the evaluation on two occasions: an initial evaluation was carried out after first reading a paper and was then repeated after reading and evaluating all papers. If discrepancies arose between the two evaluations, a third and final evaluation was carried out and a score was determined by the researcher.

The full QualSyst assessment consists of 14 items. Each item is scored according to the degree to which the criteria is met (0 = no, 1 = partially, 2 = yes). Three items (i.e. four, five and six) are only relevant for intervention studies and were therefore not applicable to the current review and excluded from the final score calculation.

1.4 Results

Samples Characteristics

Appendix C summarises the 25 studies included in the current literature review according to their design, measures used to assess attachment and help-seeking, and participant characteristics.

The majority of studies (n=13) used a cross-sectional design. Three studies used retrospective designs and eight used prospective designs. One paper (Larose, Bernier, Soucy & Ephane Duchesne, 1999) included 2 studies: one cross-sectional and one prospective.

Regarding sample demographics, the majority of studies (n=17) in this review used emerging adult samples (i.e. young adults between the ages of 18-25), which refers to a developmental stage that involves transition into adulthood and is

considered a vulnerable stage for developing mental health problems (Cheng et al., 2015). The average age of participants was in their early twenties. Sixteen of these 17 emerging adult studies recruited their participants from universities and one study recruited young adults from the military (Mikulincer & Florian, 1995).

Three studies (Caspers, Yucuis, Troutman & Spinks, 2006; Riggs, Jacobovitz & Hazen 2012; Kealy, Tsai & Ogrodniczuk, 2016) used adult samples with an average age of late thirties. The Casper et al. study (2006) drew its sample from an ongoing adoption study. The Riggs et al. (2012) study sample was drawn from a longitudinal study exploring transition to parenthood. Kealy et al. (2016) recruited their sample from an outpatient assessment and treatment programme.

Four studies (Shirk, Gudmundsen & Burwell 2005; Gaylord-Harden, Taylor, Campbell, Kesselring & Grant, 2009; Larose & Bernier, 2001; Moran, 2007) used adolescent samples with a participant average age of approximately 14 years. Shirk et al. (2005) and Moran (2007) recruited participants from secondary schools. The sample for the Gaylord-Harden et al. (2009) study was drawn from a larger project investigating the effect of stressful life events on low-income urban youth. The Larose and Bernier (2001) study sample was drawn from a larger longitudinal study of adjustment to college. One study (Seiffge-Kernke & Beyers, 2005) used a longitudinal prospective design to explore help-seeking trajectories from adolescence (14) to young adulthood (21).

Although some variability in country of origin was observed, most studies took place in Western countries with a majority of Caucasian, middle-class participants. However, a few studies did not report on the ethnicity and socioeconomic status of participants.

The majority of studies used a mixed-gender sample (with slightly more females), while one study (Mikulincer & Florian, 1995) used a male-only sample and one study used a female-only sample (Riggs et al., 2012). Two studies examined the role of gender as a moderator of the association between attachment and help-seeking (Turan & Erdur-Baker, 2014; Greenberger & S. McLaughlin, 1998).

Sample size varied across studies: the largest sample size was $n=1982$ (Cheng et al., 2015) and the smallest was $n=34$ (Charles & Charles, 2006) in a study interested in a specific population of students who had experienced the loss of a sibling.

Measures

Attachment

Various studies conceptualised and measured attachment differently. Measures differed in their format (interview vs. self-report), the nature of the construct being measured (categorical vs. dimensional) and the type of relationship they refer to (attachment to parents vs. others such as romantic partners or peers). A summary of these measures can be found in table 1.

Fourteen studies assessed attachment as a categorical construct while the remaining 11 assessed attachment as a dimensional construct. The majority of studies used self-report measures ($n = 21$), and only four used an interview (i.e. the Adult Attachment Interview).

The most frequently used ($n = 5$) categorical tool was the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). The RQ is a self-report measure of internal working models in close relationships. The RQ asks participants to rate the degree to which each of four short paragraphs describes their experience

of close relationships. The RQ provides classification of secure, fearful, preoccupied and dismissive styles. The RQ was reported to have good validity and reliability (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994).

The most frequently used ($n = 5$) dimensional tool was the Experience of Close Relationship (ECR; Brennan, Clark & Shaver, 1998). The ECR is a self-report measure that measures adult attachment continuously along the two dimensions of anxiety and avoidance. Participants are asked to rate how much each of 36 statements describes their experience of close relationships. Reliability and validity were found to be adequate (Shaffer et al., 2006; Vogel & Wei, 2005; Brennan et al., 1998).

Table 1. Attachment Measures

Measure of attachment	n
Categorical - self report	
Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991)	5
Hazan and Shaver's description of how people typically feel in close relationship (HS; 1987)	3
Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994)	2
Berry, Wearden, Barrowclough & Liversidge (2006) 16 items scale	1
Self-Reliance Inventory II (Daus & Joplin, 1999)	1
Categorical – interview	
Adult Attachment Interview (AAI; Main & Goldwyn, 1985/1998)	4
Dimensional - self report	
Experience of close relationships (ECR; Brennan, Clark & Shaver, 1998)	5
Parent form of the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987)	3
Maternal Expectations Scale (MES; Shirk et al., 1999)	1
Attachment Style Questionnaire (ASQ; Feeney et al., 1994)	1

*Two studies (Ognibene & Collins, 1998; Greenberger & McLaughlin, 1998) used two attachment measures.

Help-seeking

Similar to attachment, help-seeking was also constructed and measured differently across studies. Eight studies examined help-seeking attitudes. The most commonly used measure was the Attitudes Towards Seeking Professional Psychological Help (ATSPPHS; Fischer & Turner, 1970) which measures general attitudes toward seeking help for mental health problems. The ATSPPHS has shown to have acceptable psychometric properties (Fischer & Farina, 1995; Vogel & Wester, 2003; Shin & Ahn, 2005).

Five studies examined help-seeking intentions. The most frequently used measure was the Intentions of Seeking Counselling Inventory (ISCI; Cash, Begley, McCown & Weise, 1975). Participants were asked to rate their willingness to seek counselling for each one of 17 items. Cepeda-Benito and Short (1998) reported adequate reliability and validity for this questionnaire.

Fifteen studies examined help-seeking behaviours, but focused on different types of help-seeking behaviour. Eight studies explored coping strategies more generally and listed help-seeking as one of those. Two studies examined help-seeking behaviour as an experience of participation in therapy. Three studies were interested in support-seeking from a specific formal figure, and another two looked more specifically at the strategies individuals use to seek help. The Ways of Coping Checklist (WOSC; Folkman & Lazarus, 1980) was the most frequently used measure ($n = 4$). The relevant scale for this literature review has been the support-seeking scale, which asked individuals to rate the extent to which they use different types of

support-seeking behaviours (e.g. ‘I got professional help’). Psychometric properties were found to be adequate (Mikulincer, Florian & Weller, 1993).

Table 2. Help-Seeking Measures

Measure of help-seeking	N
Help-seeking attitudes	
Attitudes Toward Seeking Professional Help Scale (ATSPPHS; Fischer & Turner, 1970)	3
The Readiness for Psychotherapy Index (RPI; Ogrodniczuk, Joyce & Piper, 2009)	1
The Network Orientation Scale (NOS; Vaux, Burba & Stewart 1986)	1
Attitudes towards Seeking Psychological Help-Shortened Scale (ASPH-S; Turkum, 2001)	1
8 Items from Karabenick’s help-seeking scale (2003)	2
Help-seeking intentions	
Willingness to Seek Counselling Questionnaire (WSCS; based on Solberg et al., 1994)	1
The General Help-Seeking Questionnaire (GHSQ; Ciarrochi & Dean, 2001)	1
Intentions of Seeking Counselling Inventory (ISCI; Cash, Begley, McCown & Weise, 1975)	3
Help-seeking behaviours	
The Ways of Coping Checklist (WOSC; Folkman & Lazarus, 1980)	4
Self-Report Coping Scale (SRCS; Causey & Dubow, 1992)	1
Children’s Coping Strategies Checklist (Program for Prevention Research, 1999)	1
COPE inventory (Carver et al., 1989)	1
CASQ (Sniffle- Krenke, 1995)	1
Stress & Social Feedback Questionnaire (SSFQ: Panzarella & Alloy, 1997)	1
The Seeking Help from Teachers and Peers, Test of Reactions and Adaptation in College (SHT/TRAC; Larose & Roy, 1995)	2
Support-seeking daily diary	1
Support-seeking (Korabik, Lero & Ayman, 2003)	1

*Three studies (Lopez et al., 1998; Larose et al., 1999; Shaffer et al., 2006) each used two help-seeking measures.

Quality of studies

The overall quality of the evaluated studies was high. Please refer to appendix D for ranking of the papers included in this systematic literature review.

The majority of the studies sufficiently described the research questions (Mean item (M) = 1.8), but a small number (n = 6) only described a general aim and did not clarify any specific hypotheses. All studies (M = 2) clearly defined their study design, which seemed appropriate to address the study objective. Additionally, overall studies used a reasonable sample size (M = 1.6), which varied according to the nature of the target population. When the researchers were interested in a specific population such as soldiers in training or college students who experienced the loss of a sibling (Charles & Charles, 2005; Mikulincer & Florian 1995), the sample size had to be compromised.

The majority of the studies utilized robust outcome measures and adequately reported their psychometric properties (M = 1.88). Overall, participant characteristics were sufficiently described (M = 1.72) and included demographics such as age, ethnicity, level of education, and socioeconomic status. Studies varied in the extent to which they described the method of subject selection (M = 1.64). While the majority of studies provided sufficient detail about sampling strategy, others offered little or no information on their method of subject selection.

With regards to data analysis, studies seemed to appropriately describe and justify the analytic methods that were employed and stated results in sufficient

details ($M = 1.96$). Nine studies, however, did not report estimates of variance and as a result compromised their overall QualSyst score ($M = 1.2$).

Most studies used a specific sample (e.g. college students), which automatically controlled for some variables such as age and level of education ($M = 1.44$). Additionally, a few studies used a male or female only sample (Mikulincer & Florian, 1995; Riggs et al., 2012), which automatically controlled for gender. These studies were given a rating of '1' as it was assumed that the lack of further controlling was unlikely to seriously affect the study results. Other studies additionally controlled for demographic variables such as years of study and socioeconomic status (e.g. Moked & Drach Zahavy, 2015).

The majority of studies reached appropriate conclusions ($M = 1.8$) that were relevant to the study goals and were based on sufficiently detailed results ($M = 1.88$). In terms of generalizability, since most studies used specific populations of college students, results should be interpreted with caution and do not necessarily reflect the general population.

Two studies (Larose et al., 1999; Moked & Drach-Zahavy, 2015) were given a perfect score as they articulated clear study questions and employed a robust study design to investigate them. They used appropriate analytic methods and clearly described the results from which conclusions were drawn.

Results of studies

The relationship between attachment and help-seeking

The following section reviews the evidence gathered across the studies regarding the link between attachment and help-seeking. Studies are organised

according to the nature of the help-seeking construct being measured. Please see appendix E for a summary of the main findings.

Attachment and help-seeking attitudes

Five studies measured attachment as a continuous construct (Nam & Lee, 2015; Larose et al., 1999; Holt, 2014.a; Holt, 2014.b; Kealy et al., 2016). Three of them explored adult attachment (Nam & Lee, 2015; Larose et al., 1999; Kealy et al., 2016) while the remaining two measured attachment to parents (Holt, 2014.a; Holt, 2014.b).

Nam and Lee (2015) found a non-significant relationship between attachment and attitudes towards help-seeking among South Korean undergraduate students. Individuals with an anxious attachment tended to regard help-seeking more positively than those with an avoidant attachment. Larose et al. (1999) examined ‘network orientations’ (i.e. general support expectations, beliefs and attitudes) and found slightly different relationships between attachment and attitudes. Among college students, both attachment anxiety and avoidance were negatively related to network orientations. Individuals with higher levels of avoidant attachment showed the most negative attitudes.

From a secure attachment perspective, Holt (2014.a, 2014.b) found that students with a more positive attachment quality had more positive attitudes about academic help-seeking. Turan and Erdur-Baker (2014) found similar patterns by measuring attachment in romantic relationships as a categorical construct. Attachment security was found to be a predictor of favourable help-seeking attitudes.

Kealy et al. (2016) explored patients’ specific attitudes towards psychotherapy. They found that attachment anxiety was related to feeling distressed

about psychotherapy while attachment avoidance was negatively related to openness towards psychotherapy. However, these results should be interpreted with caution due to the overall low-quality score of this study.

Attachment and help-seeking intentions

Cheng et al. (2015) and Shaffer et al. (2006) measured adult attachment as a continuous construct and found a positive association between attachment anxiety and help-seeking intentions among college students. Vogel and Wei (2005) also found that individuals with attachment avoidance were less willing to seek psychological help.

Two more studies measured adult attachment as a categorical construct (Lopez, Melendez, Sauer, Berger & Wyssmann, 1998; Moran, 2007). Both found that individuals who were securely attached were more willing to seek help. Lopez et al. (1998) additionally found that individuals with anxious attachment had more positive orientations towards seeking therapeutic help than those with avoidant attachment. Moran (2007) also reported a trend in young people with dismissive attachment to be less likely to seek help than those with anxious or fearful attachment. However, this relationship was not significant.

It is important to note that Lopez et al.'s (1998) findings were only significant when using the WSCS measure that assesses an individual's help-seeking intentions, and not when applying the ATSPPHS, which assesses more general attitudes toward help-seeking.

Attachment and help-seeking behaviour

Several studies explored the relationship between attachment and the use of support-seeking as a coping strategy in response to different types of stressors. Five

studies measured adult attachment as a categorical construct (Mikulincer, Florian & Weller, 1993; Mikulincer and Florian, 1995; Defronzo, Panzarella & Butler 2001; Charles & Charles, 2006; Ognibene & Collins, 1998). A similar pattern emerged across the different studies: individuals with secure attachment were significantly more likely to engage in support-seeking behaviour than those with avoidant attachment.

Four of the studies also found that individuals with anxious attachment were more likely to use support-seeking than those with avoidant attachment. Conversely, Mikulincer et al. (1993) found that individuals with secure attachment were significantly more likely to engage in support-seeking strategies than those with anxious attachment when assessed two weeks after a missile attack. According to the authors, this could have been the results of individuals with attachment anxiety retrospectively changing their reliance on others.

In summary, the results from these studies suggest support-seeking to be a function of the ‘other’ model rather than the ‘self’ model: individuals with either secure or anxious attachment (i.e. positive other model) were more likely to seek support than those with dismissive or fearful avoidant (i.e. negative other model) attachment. It is important to note that a few of the studies (Defronzo et al., 2001; Charles & Charles, 2006; Ognibene & Collins, 1998) suffered from various methodological deficits (e.g. small sample size), which resulted in compromised quality scores. Accordingly, although results from these studies were in accordance with theoretical assumptions and the overall pattern of findings from other research, they should be considered cautiously.

Two more studies (Shirk et al., 2005; Gaylord-Harden et al., 2009) measured attachment to parents as a dimensional construct and found similar results, i.e. young adolescents who were more securely attached to their parents were also more likely to show higher levels of support-seeking.

Taking a different perspective, Seiffge-Krenke and Beyers (2005) explored the developmental course of coping styles from adolescence to early adulthood. By using the AAI, they found that over time individuals with secure attachment developed more support-seeking coping strategies than those with insecure attachment. Interestingly, the authors found somewhat different developmental trajectories for attachment anxiety and avoidance. While the level of support-seeking was found to be low and stable in the attachment avoidance group, it was initially relatively high in the attachment anxiety group. In contrast to the secure group, however, they showed slower gains over time. According to the authors, this may be related to their previous disappointing support experiences hindering the development of support-seeking as a coping strategy.

Some studies explored the link between attachment and seeking help from a specific figure. Larose et al. (1999) and Larose and Bernier (2001) explored the relationship between attachment and seeking help from a teacher and found that both avoidant and anxious students reported more difficulties in seeking help. In an effort to replicate results from the first study in a real-life setting (i.e. following an interaction with a mentor), Larose et al. (1999) carried out a second prospective study of at (academic) risk students and their mentors. Only avoidant attachment was found to be negatively linked to network orientations. The authors suggest that avoidant attachment and help-seeking are not only related to mental representations but to real behaviours in social relationships.

Moked and Drach Zahavy (2016) examined the way nursing students sought support from their clinical supervisors. They found no association between anxious/avoidant attachment and support-seeking. Inconsistent with previous research, only the secure attachment group was negatively related to student support-seeking.

Two more studies constructed help-seeking behaviour as ‘participation in therapy’ and measured it as a categorical construct by using an interview (AAI). Caspers et al. (2006) found that dismissive individuals demonstrated lower rates of participation in treatment while reporting significant substance abuse problems. They also divided the secure group into earned and continuous attachment. Both groups demonstrated a secure state of mind. However, the earned group scored low on positive childhood experiences whereas the continuous group experienced a supportive relationship with at least one parent. They found that both the anxious and earned-secure individuals that reported high rates of substance abuse problems demonstrated higher rates of treatment participation. On the other hand, continuous-secure individuals who reported low levels of substance abuse problems reported low rates of participation in treatment.

Rigger et al. (2012) looked at the history of participation in psychotherapy in a normative adult female sample. They also found that avoidant adult women were less likely to report participation in therapy than anxious or secure adults. The secure group was found to report the highest rates of previous therapy exposure.

Two studies looked more specifically at support-seeking strategies employed by individuals. Armstrong and Kammrath (2015) looked at the *breadth* – the total amount of support an individual sought (the number of people approached) – and the *depth* – the amount of support an individual sought in a specific interaction. They

found that avoidant individuals sought less support in total (i.e. from fewer potential support providers) than individuals low in avoidance. However, when avoidant individuals decided to turn to a support provider they reported seeking as much help as the other attachment groups. Attachment anxiety was not found to be a significant predictor of either the use of depth or breadth of support-seeking tactics.

DeFronzo et al. (2001) explored individual preferences for support figures and contrary to their hypothesis found no difference between attachment groups and the rates at which they turn to different support givers. Interestingly, securely attached participants did not show a preference for their primary support givers. They were also more likely to turn to friends for support than to teachers or relatives. Avoidant individuals turned more to friends than to relatives or teachers, but did not prefer friends over primary support figures as expected. Finally, avoidant individuals were more likely to approach primary support figures for help rather than teachers and relatives.

What factors mediate the relationship between attachment and help-seeking?

A few papers proposed that the association between attachment and help-seeking could be more comprehensively understood by considering potential mediators.

Ognibene and Collins (1998) identified perceived support as a variable that can provide a better understanding of the link between attachment and help-seeking. They found that the relationship between secure attachment and support-seeking could be explained by perceived social support. Individuals with secure attachment are more likely to seek support because they perceive support as more available. The positive relationship between preoccupied attachment and help-seeking, however,

could not be explained by perceived support. Vogel and Wei (2005) further elaborated on this model by also considering the moderating role of psychological distress. Although attachment anxiety was directly and positively associated with help-seeking intentions, and attachment avoidance was directly and negatively associated with help-seeking intentions, both of these relationships were mediated by perceived social support and psychological distress. Individuals with both attachment anxiety and avoidance felt a lack of social support, which was associated with more distress and predicted increased help-seeking intentions. These results may suggest that while attachment avoidance is directly associated with less help-seeking, it may also be linked to increased help-seeking indirectly, through the perception of less social support and more distress. Attachment anxiety was found to be both directly and indirectly positively associated with help-seeking (Vogel and Wei, 2005).

Vogel and Wei (2005) and Cheng et al. (2015) also found another path through which psychological distress mediates attachment and help-seeking intentions. Attachment anxiety predicted increased psychological distress which in turn was related to an increased willingness to seek help. Attachment avoidance, on the other hand, was not linked to psychological distress.

Cheng et al. (2015) further tested the mediating role of self-stigma. They found that attachment anxiety predicted heightened self-stigma about help-seeking, which was subsequently linked to fewer help-seeking intentions. Nam and Lee (2015) further differentiated between the roles of self and public stigma as mediators and found that attachment anxiety was a stronger predictor of self-stigma. Attachment avoidance, on the other hand, was not found to be directly linked to help-seeking, but was a stronger predictor of public stigma. Both self and public

stigma negatively influenced help-seeking attitudes. Both studies thus showed that although attachment anxiety was positively and directly linked to increased help-seeking, it was also linked to help-seeking through self-stigma, indirectly and negatively.

Nam and Lee (2015) additionally considered the moderating role of previous counselling experience and found it to promote negative attitudes towards help-seeking. Exposure to previous counselling, however, influenced help-seeking in different ways: in individuals with previous counselling experience, attachment avoidance was a significant predictor of self-stigma and was associated with negative help-seeking attitudes. In individuals with no previous counselling experience, attachment anxiety was a significant predictor of public-stigma, which was linked to negative attitudes.

Shaffer et al. (2006) offered a model that considers the mediating role of different cognitions. Attachment anxiety was found to be not only directly and positively linked to help-seeking intentions, but was also indirectly and positively linked to help-seeking intentions through the mediating role of more anticipated benefits from help-seeking. Interestingly, attachment anxiety was also found to be indirectly and negatively associated with help-seeking intentions. The researchers found that when individuals with higher levels of attachment anxiety anticipated greater risk, they were less likely to have positive help-seeking attitudes and to seek help. Although no direct association was found between attachment avoidance and intentions to seek counselling, an indirect link suggests that undergraduate students with higher levels of attachment avoidance anticipated more risk and fewer benefits from seeking counselling, had less positive attitudes towards counselling, and thus exhibited fewer intentions to seek help.

Larose et al. (1999) recognised a similar mediational path. In his study, the association between attachment and help-seeking seemed to be mediated by students' network orientation (i.e. their beliefs and attitudes towards counselling). Both attachment dimensions (i.e. anxiety and avoidance) were negatively linked to network orientation, which in turn was a predictor for less help-seeking.

What factors moderate the relationship between attachment and help-seeking?

Two studies considered the moderating role of gender in the relationship between attachment and help-seeking. Turan and Erdur-Baker (2014) conducted a separate analysis for male and female university students in Turkey and found that women with a positive 'other' model (i.e. secure, anxious) were more likely to have favourable help-seeking attitudes. Contrarily, a positive 'self' model (i.e. secure, avoidant) was a predictor for favourable help-seeking attitudes in men.

Greenberger and McLaughlin (1998) compared the relative importance of early and current attachment to help-seeking in adolescents, and looked at the effects of maternal and paternal attachment on support-seeking among males and females. They found that for males, current adult attachment security and early attachment security to a father figure were predictors of seeking emotional support. On the other hand, early parental attachment (to both mothers and fathers) uniquely contributed to seeking instrumental support. For females, current attachment played a more substantial role (as compared to early attachment) in both emotional and instrumental support.

A few studies examined the role of the severity and nature of the stressor as a potential moderator of the relationship between attachment and help-seeking.

Lopez et al. (1998), Ognibene and Collins (1998), and Armstrong and Kammrath (2015) all found that the negative effect of avoidance attachment on help-seeking becomes stronger with more severe stressors. Lopez et al. (1998) and Ognibene and Collins (1998) additionally found that stress was found to increase help-seeking among secure individuals. Regarding anxious attachment, however, findings are less consistent. Whereas Lopez et al. (1998) found that anxious individuals described more positive help-seeking during times of serious distress, Ognibene and Collins (1998) reported that the relationship between anxious attachment and support-seeking was not dependent on stressor severity.

Shirk et al. (2005) further elaborated on this point and offered a moderated mediation model. They examined the role of support-seeking as a mediator between attachment (conceptualised as maternal representations) and depressive symptoms. The link between attachment and depressive symptoms was found to mostly be evident under condition of high stress. In line with previous findings, negative representations of the mother seemed to undermine the use of help-seeking when stress levels were elevated.

Armstrong and Kammrath (2015) additionally explored the moderating role of the nature of the stressor. Findings suggest that avoidant individuals seek less help for issues with an instrumental component, but not for those with no instrumental component. Attachment anxiety, on the other hand, only had an effect on support-seeking when issues had an emotional component; then, individuals sought help from fewer supporters.

Charles and Charles (2006) and Ognibene and Collins (1998) examined the relationship between attachment and support-seeking in relation to a specific

stressor. One study looked at the loss of a sibling versus everyday stressors (Charles & Charles, 2006) while the other explored everyday interpersonal and achievement-related type of stressors (Ognibene & Collins, 1998). Both found that secure and anxious individuals were equally likely to seek support for the different kinds of stressors.

To summarise, the findings collected for the current literature review aimed to explore a possible association between attachment and help-seeking and what factors may mediate or moderate such an association. Overall, the findings support the existence of the suggested link and show that individual differences in attachment are linked to individual differences in help-seeking tendencies and behaviour. Potential mediators and moderators were found to explain and contribute to this relationship.

1.5 Discussion

The above literature review systematically evaluated the link between attachment and help-seeking, and examined the specific variables that may mediate or moderate this link. The 25 studies reviewed in this context approached this relationship from several different perspectives. Some studies examined help-seeking tendencies (i.e. attitudes and intentions) while others looked at different forms of actual help-seeking behaviour. Overall, the evidence gathered by these studies appears to support the association between attachment and help-seeking.

The results of this review seem to fit well with attachment theory and are consistent across studies even when they measure attachment differently: some look at it as a continuous versus a categorical construct, some measure early attachment to parents versus adult attachment, and others evaluate attachment using either self-report or interviews. Moreover, across the different studies, a similar pattern between

attachment and help-seeking emerged when exploring help-seeking attitudes, intentions and actual behaviours. Finally, the link between attachment and help-seeking remained consistent across studies using different age groups.

Epistemic Trust (ET) is a psychological mechanism that may offer a possible explanation to the observed relationship between attachment and help-seeking. Epistemic trust refers to an individual's willingness to consider new information as trustworthy and relevant to the self (Fonagy & Allison, 2014). ET facilitates the transmission of knowledge between human beings. In contrast, a state of epistemic vigilance refers to human being's critical, evolutionary position in which they are distrustful of their environment and question the reliability of new information.

Fonagy and Allison (2014) explain that ET is developed in the context of secure attachment. Secure attachment opens up an 'epistemic superhighway', which allows the individual to relax epistemic vigilance and to open up to communication and learning from others. Secure individuals are less defensive and therefore more receptive to new information from their social environment. Insecure attachment on the other hand is linked to rigidity and knowledge inflexibility, which results in difficulty learning from the social environment.

Secure individuals who have a history of positive experiences with available and reliable caregivers are therefore more likely to trust the other, value their importance, and have positive expectations of them. They are more likely to be open to learning from others and relying on them in times of need. As a result, individuals with secure attachment are more likely to turn to others and seek help when experiencing distress in order to regulate their emotions (Mikulincer & Shaver, 2003; Kobak & Sceery, 1998). In line with these theoretical considerations, secure attachment was widely found to be associated with increased help-seeking

tendencies and behaviours across the different studies. Only one study (Moked & Drach- Zahavy, 2015) found attachment security to predict less such behaviours with regards to nursing students seeking help from their mentors. This finding is inconsistent with theory-derived assumptions and previous studies, but may be explained by the reciprocal evaluation of clinical mentors and students. Secure students who expect to be assessed may become more independent as a result and may avoid seeking support from their evaluator (Moked & Drach- Zahavy, 2015).

Things become more complex in insecure attachment, where attachment anxiety and avoidance seem to be associated differently with help-seeking. Individuals with attachment avoidance whose caregivers have been consistently unavailable are more likely to learn to deactivate their attachment system in order to protect themselves from rejection. Through repeated negative experiences, those individuals learn to devalue the importance of others and to rely only on themselves as a source of help (Mikulincer & Shaver, 2003; Kobak & Sceery, 1998). According to Fonagy and Allison (2014), a history of attachment avoidance may generate a state of epistemic mistrust. Avoidant individuals are less able to reduce epistemic vigilance, to have confidence in others, and to be open to learning from others. This may explain why they are less likely to have positive help-seeking tendencies or engage in help-seeking behaviours. Overall, all but two studies (Cheng et al., 2015; Shaffer et al., 2006) evaluated in this literature review found attachment avoidance to be predictive of fewer help-seeking tendencies and behaviours. Those that did not establish such an immediate relationship still found attachment avoidance to be indirectly linked to help-seeking via mediational variables.

Individuals with attachment anxiety were described to have a history of negative experiences in which caregivers were unpredictable and unreliable. They

are likely to value the importance of others, yet fear rejection and abandonment. Moreover, those individuals tend to perceive themselves as incompetent at affect regulation and cling to others. Fonagy and Allison (2104) explain that anxious individuals may be in a state of epistemic uncertainty and over-rely on the support of others. As a result, those individuals are more likely to approach others for support in times of distress, but at the same time often feel ambivalent about the other's ability to provide help and be trusted (Mikulincer & Shaver, 2003; Kobak & Sceery, 1998).

The reviewed studies found less consistent evidence for the link between attachment anxiety and help-seeking. Although the majority of studies were able to establish a positive link between attachment anxiety and help-seeking tendencies and behaviours, a few either failed to find a significant association or found different result patterns. Larose et al. (1999) and Larose and Bernier (2001) found attachment anxiety to be negatively linked to help-seeking. Likewise, Mikulincer et al. (1993) and Seiffge-Krenke and Beyers (2005) found that individuals with both attachment anxiety and avoidance engage in less support-seeking than those with secure attachment. Other studies did not find any relationship between attachment anxiety and help-seeking (Larose, 1999; Armstrong & Kammrath, 2015).

Those findings however can perhaps also be understood in the context of attachment theory. Although attachment theory proposes that individuals with attachment anxiety are likely to value the importance of others and rely on them for support, it has also been argued that anxious individuals often pay too much attention to their distress and act of support-seeking (Allen & Hauser 1996; Rholes, Simpson, & Orina, 1999).

Stressful situations activate the attachment system and urge the individual to seek proximity to caregivers for affect regulation. However, in the context of insecure attachment, alternative strategies are developed when proximity-seeking fails to reduce distress (i.e. when the caregiver is unavailable). Anxious individuals may develop hyper-activating responses, which include strongly approaching and clinging to others in order to minimise distance (Mikulincer & Shaver, 2003). However, the hyper-activation of the attachment system may overemphasize an anxious individual's perception of the stressful event and elevate their need for support to such a degree that they perceive support as unavailable. This in turn may result in difficulties receiving sufficient comfort from a support giver, and in feeling rejected and disappointed. Individuals with anxious attachment often give up on seeking support or do so in an inappropriate manner.

Further examination of the different variables that were proposed to mediate and moderate the relationship between attachment and help-seeking can possibly shed more light on the complex paths through which attachment is associated with help-seeking. Evidence from extant literature describes perceived social support, psychological distress, stigma, and anticipated risks and benefits from help-seeking as possible mediators that may explain this link. Interestingly, although attachment anxiety and avoidance seem to have different direct links with help-seeking, similar factors were found to play a role in both dimensions. For example, Vogel and Wei (2005) found perceived social support and psychological distress to explain the link between both attachment dimensions and help-seeking intentions. Moreover, studies have also highlighted the role of gender as well as the severity and nature of the stressor as potential moderators that may contribute to the relationship between attachment and help-seeking.

A few studies offered oppositional paths by which attachment anxiety affects help-seeking. For example, Cheng et al. (2015) found that although attachment anxiety was directly and positively linked to help-seeking attitudes, it was also negatively associated to help-seeking attitudes through self-stigma. Similarly, Shaffer et al. (2006) suggested that individuals with attachment anxiety seem to have mixed views on help-seeking: while attachment anxiety was found to be both directly and indirectly positively linked to help-seeking intentions through more anticipated benefits, it was also indirectly negatively linked to intentions to seek help through the mediating role of anticipated greater risk. Regarding help-seeking behaviour, Armstrong and Kammrath (2015) did not find it linked to attachment anxiety. Only when a problem contained an emotional component did attachment anxiety predict less help-seeking behaviour.

In light of attachment theory, these findings suggest that people with attachment anxiety may be ambivalent about help-seeking. On the one hand, they value others as a source of support while devaluing their own competence at coping with stress, but on the other may fear rejection, which may hold them back from effectively seeking support in times of need.

Although the evidence to support a link between attachment avoidance and help-seeking seems strongest when attachment avoidance is linked to less help-seeking, results from the mediation/moderation analysis suggest that attachment avoidance may also be indirectly and positively linked to help-seeking. Vogel and Wei (2005) found that attachment avoidance was positively linked to help-seeking through the mediating role of less perceived social support and increased psychological distress that predict more intentions to seek help. With regards to proposed moderating variables, Turan and Erdur-Baker (2014) finding conflicts with

attachment theory. They found that avoidant attachment was actually predictive of more positive help-seeking attitudes among Turkish men, and that for these men the self-model rather than the other model was a predictor of help-seeking attitudes. The authors suggest that this unexpected finding may be explained by the collectivist nature of Turkish culture in which the study took place. Men's feelings of lack of self-worth (self-model) rather than their lack of trust in others (other model) were linked to negative help-seeking attitudes. The authors explain that Turkish men who value dominance and self-reliance, which both reduce help-seeking attitudes, may view help-seeking as a threat to masculinity. Their self-model and feelings of self-competence could therefore be influencing their help-seeking attitudes. Another interesting finding comes from Armstrong and Kammrath (2015) who found that once support had been initiated, avoidant individuals actually sought the same amount of support as non-avoidant ones.

To summarise, the studies evaluated for this literature review support a link between attachment and help-seeking tendencies and behaviours. The different paths through which attachment and help-seeking are associated, however, are more complex and may display oppositional ways in which attachment affects the help-seeking process.

Limitations

A number of limitations should be noted. First, all studies in this review employed correlational designs, disallowing us from drawing any conclusions about a causal association between attachment and help-seeking. We therefore cannot state with certainty that positive help-seeking experiences do not actually lead to more secure attachment or that an unmeasured third variable may better account for both constructs. However, it is important to note that a few studies utilized prospective

designs and found a similar pattern of association between attachment and help-seeking.

Second, the majority of participants across the different studies were emerging adult students recruited from different universities across mostly Western countries. Therefore, the results may not be generalisable to other demographics. Moreover, cultural variables were not assessed and could potentially contribute to the relationship between attachment and help-seeking.

Third, most studies used self-report measures that require conscious self-appraisal and may therefore be at risk of subjective bias. Finally, although some studies considered the moderating role of psychological distress, the majority did not directly measure participants' level of current stress. According to attachment theory, the attachment system becomes activated in times of distress. Therefore, it may be that important findings were missed because levels of distress among individuals were too low to activate the attachment system.

The way this review was conducted was also limited by several factors. The overall objective was to evaluate existing literature for a link between attachment and formal help-seeking. However, a few studies examined general help-seeking, which also includes formal help-seeking but not exclusively so. Nevertheless, we still chose to include those studies since eliminating them would have resulted in a loss of valuable data that seemed of high relevance to the topic in question.

Finally, the studies evaluated for this review conceptualised and measured attachment and help-seeking in different ways. This complicated the ability to properly compare the relationship between these factors across studies without the risk of drawing inappropriate conclusions. Extra care was taken when presenting and summarising results.

Despite these limitations, this literature search was conducted systematically and is the first known review in the field of attachment and help-seeking. Overall, studies reviewed as part of the current review were of high quality as assessed by the Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields (QualSyst; Kmet, et al., 2004). A few studies were lower than others on quality due to different methodological deficits. However, results from these studies were in line with the overall pattern of results and therefore did not seem to compromise the overall quality of the review.

Clinical Implications and recommendations for future research

Based on the limitations discussed above, future studies would benefit from applying different methodologies and approaches to their research. More prospective studies would help paint a more accurate picture of the nature of the relationship between attachment and help-seeking. It would also be interesting to further examine whether an actual experience of positive supportive interaction could perhaps shift an individual's attachment representations. Future research might also want to consider the potential role that cultural variables play in the link between attachment and help-seeking. In terms of the possible role of different stressors, future studies should assess current levels of stress or psychological problems in participants and further examine whether these factors affect individuals with different attachment orientations differently. Another aim worth exploring in future research would be the role that different psychological disorders play in the relationship between attachment and one's ability to seek help.

From a clinical perspective, attachment processes can provide an important understanding of the different stages along the therapeutic process. Findings from the current literature review can be understood in the context of existing research in the

field of the differential effects of attachment on the therapeutic process and outcome. A body of research has investigated the role attachment plays in the development of the therapeutic alliance. In a meta-analysis of 17 studies, Diener and Monroe (2011) found attachment to predict the quality of the therapeutic alliance. Secure attachment was a predictor of a stronger alliance while insecure attachment predicted a weaker one. In relation to therapy outcome, a meta-analysis of 14 studies (Levy, Ellison, Scott & Bernecker, 2011) demonstrated that secure individuals showed the most positive outcomes. Anxious patients benefited less from therapy and showed the least symptom remission. Avoidance attachment was minimally related to treatment outcome. These findings suggest that while anxious individuals tended to have more intense and inconsistent therapy and overall seemed to benefit less from it, avoidant individuals were overall less affected by therapy (Cassidy & Shaver, 2016).

The findings outlined above are in line with attachment theory and overall match the current review regarding attachment and help-seeking. A combination of these findings suggests that insecure attachment affects the therapeutic process throughout, from the initial decision to seek help to therapeutic engagement to the final outcome of therapy. A sense of security allows closeness and facilitates curiosity. This in turn encourages secure individuals to seek help in times of need, allows them to engage in the therapeutic process and to benefit from therapy. Insecure attachment on the other hand seems to inhibit the development of any supportive relationship, albeit differently among anxious and avoidant individuals (Cassidy & Shaver, 2016).

Another field of research explores how therapists' own attachment may affect therapy outcomes. Dozier, Cue and Barnett (1994) explored how a therapist's attachment interacts with the patient's. Findings suggest that secure therapists were

more able to work flexibly with patients with different attachment styles. Those therapists were able to recognise the underlying defences anxious and avoidant patients use to protect themselves from their need for closeness and autonomy, and were more likely to attend to and work through those defences. More specifically, secure therapists were more able to respond to the dependency need of avoidant patients and encourage autonomy with anxious patients (Cassidy & Shaver, 2016). Petrowski, Nowacki, Pokorny and Buchheim, (2011) additionally found that anxious patients rated therapists who scored higher on avoidance as more helpful. Cassidy and Shaver (2016) concluded that secure clinicians are more able to respond to patients with different attachment styles in a non-complementary way and are less likely to be dysregulated by their defences.

Those findings have important implications for how clinicians should respond to a patient's attachment along the course of therapy. Furthermore, those implications might even be relevant during the earlier, help-seeking stage. Clinicians should be aware of how individual differences in attachment may affect the help-seeking process and take those differences into account during outreach efforts. The development of programmes geared towards those individuals whose attachment may hold them back from seeking help may be a good first step in creating more inclusive intervention options. This is true especially for those individuals who have an avoidant attachment and tend to rely on themselves rather than others for support. Outreach programmes should be driven by these attachment theory-based assumptions and be designed to offer individual targeted interventions. For example, it may be useful to incorporate strategies that respect an individual's personal space and do not solely rely on interpersonal communication and self-disclosure. As offered by Armstrong and Kammrath (2015), the main difficulty of seeking help may

lie in the approaching-help stage. Clinicians should therefore direct their efforts at providing help that is easy and convenient to approach. For example, long and complex referral processes may be a serious obstacle to help-seeking among avoidant individuals. Providing a direct and simple referral process such as self-referral could potentially improve access to treatment.

Findings also suggest that individuals with attachment anxiety are generally more open to seeking help, but may still experience ambivalent feelings about reaching out to others. Clinicians should be aware of this ambivalence and provide such individuals with reliable information about available resources, which would turn the help-seeking process into a more predictable and safe mechanism. Future studies could investigate whether putting such attachment theory based outreaching strategies in place would in fact increase help-seeking.

Finally, clinicians and researchers should consider the contribution of different moderators and mediators that may hinder the help-seeking process among individuals who are generally more willing to seek help. For example, among individuals with anxious attachment, factors such as self-stigma (Cheng et al., 2015) and anticipated risk (Shaffer et al., 2006) were found to negatively affect help-seeking. Being aware of and aiming to reduce these factors among individuals with attachment anxiety is therefore of high importance. Simultaneously, other factors were found to facilitate the help-seeking process among those who are generally more hesitant to seek help. For example, mental health concerns were found to increase help-seeking among avoidant individuals (Vogel & Wei, 2005). Interventions aimed at increasing awareness of mental health symptoms among this attachment group could potentially support these individuals along the help-seeking process. Clinicians and researchers should therefore assess these factors and

intervene on the moderator/mediator level. Moreover, since attachment is usually considered stable across the life-span, attending to the mediators and moderators could be extremely beneficial when trying to enhance help-seeking among individuals with different attachment styles. Future studies should continue to explore the role of other mediators and moderators and aim to provide a more in-depth understanding of the different factors that hinder or facilitate the help-seeking process among individuals with different attachment styles.

Conclusions

The current literature review aimed to evaluate the available literature for the link between attachment and help-seeking. Overall, the collected evidence supports the suggested link. Secure attachment was found to be positively associated with help-seeking. The findings pertaining to insecure attachment suggest that avoidant individuals are less likely to seek help. Anxious individuals on the other hand were generally found to seek more help, but were more ambivalent about seeking help for fear of rejection. This in turn rendered findings less consistent. A number of factors were offered to moderate and mediate the relationship between attachment and help-seeking. While these factors offer a more comprehensive attachment/help-seeking model, future research is still needed to help understand the different paths between attachment and help-seeking. This review has important implications for developing outreach programmes in order to increase help-seeking among individuals in need.

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Part Two: Empirical Paper

Exploring the relationships between attachment, epistemic trust, and expectations of helping relationships in adolescents.

2.1 Abstract

Aims

Prior research has shown a relationship between attachment and help-seeking among young people. The current study aims to explore the association between attachment and the initial stage of the help-seeking process. This initial stage can be understood as young people's expectations of helping relationships in the context of the social network and in the specific context of the therapeutic environment. The study also aims to explore the role of Epistemic Trust (ET) as a potential mechanism underpinning this relationship.

Method

79 young people between the ages of 12 and 18 were recruited from community and clinical settings. Participants completed a trust game on the computer and a battery of instruments including an epistemic trust measure and self-report questionnaires on parent and peer attachment, expectations of relationships and expectations of therapy.

Results

A series of correlation analyses showed that attachment to both parents and peers was a predictor of expectations of help in the context of the social network and therapy. Mediation analysis showed that ET mediated the relationship between attachment to parents and the expectation to receive instrumental help from the social network. No other evidence was found to support our mediation hypothesis.

Conclusions

The results are consistent with previous research and attachment theory. Individual differences in attachment were shown to affect young people's expectations of helping relationships. Future research is needed to develop standardised tools to

measure ET and to further explore the mechanisms that may contribute to the observed relationship.

2.2 Introduction

Expectations of therapy are “...anticipatory beliefs that clients bring to treatment, and can encompass beliefs about the procedures, outcomes, therapists, or any other facet of the intervention and its delivery” (Nock & Kazdin, 2001, p. 155). Common positive expectations about the process of therapy that have been addressed in academic literature include expectations that therapy will provide a safe and comfortable environment (Joyce & Piper, 1998) and that the therapist will be empathic, genuine, and trustworthy (Tinsley, Workman, & Kass, 1980; Tinsley, Brown, Aubin, & Lucek, 1984).

Patients arrive to therapy with different expectations about the therapeutic process and outcome. Expectations of therapy are considered to be at “the heart and soul of change” (Cooper, 2008, p. 60) and have been considered an important factor to affect the therapeutic process and outcome (Dew & Bickman, 2005). From the very first stage of making the decision to seek help, negative expectations were found to hinder the help-seeking process and to contribute to the underutilisation of mental health services (Gonzalez, Alegria, & Prihoda, 2005). Moreover, patient expectations were found to affect both the process and the outcome of therapy. Research has also shown expectations to be associated with the development of a therapeutic alliance (Connolly-Gibbons et al., 2003; Constantino, Arnow, Blasey, & Agras, 2005). Weinberger and Eig (1999) proposed patient expectations to be a major contributing factor to therapy outcome among different forms of psychotherapy. Lambert (1992) was also able to explain 15% of improvements in therapy with the effect of patient expectation.

In the more general context of the individual’s social network, research has shown that young people’s expectations of quality of support from various relationships such as with parents, peers and teachers lead to better adjustment

outcomes including academic achievement (Ahmed, Minnaert, van der Werf, & Kuyper, 2009) and emotional wellbeing (Becker & Schmaling, 1991; Cheng, 1997).

As a result, understanding the mechanisms that underpin support expectations is of high value. In the more general context of someone's social network, more insight into those systems could potentially lead to the development of effective intervention programmes to increase adjustment. In the specific context of the therapeutic relationship, better understanding of individual's hopes and expectations before they enter therapy could potentially facilitate help-seeking, increase engagement in therapy, and improve therapy outcome. A more in-depth comprehension of those underlying processes could also help clinicians develop intervention strategies to facilitate adaptive expectations and decrease unhelpful ones (Greenberg, Constantino, & Bruce, 2006). Finally, a better grasp on those mechanisms could assist clinicians in their outreach efforts and when seeking to reduce dropout rates. However, despite their obvious importance, individuals' expectations – especially in young people - have been widely overlooked (Weinberger & Eig, 1990; Greenberg et al., 2006; Midgely et al., 2016).

Existing research suggests different factors that affect expectations of therapy. Goldfarb (2002) found hopelessness to be linked with lower outcome expectations at the onset of therapy. Other studies identified factors such as symptom severity (Safren, Heimberg, & Juster, 1997) and specific symptoms of substance abuse and personality disorders (Constantino et al., 2005) to be linked with negative expectations. Moreover, low levels of psychological mindedness (Beitel, Hutz, Sheffield, Cecero, & Barry, 2009) were found to predict negative expectations. In relation to the wider social network, gender was found to affect expectations of quality of support. For example, women were found to have higher expectations of

receiving support, intimacy, and closeness in relationships than men (Antonucci, 1990 & 1994). Additionally, Lynch (1998) found that support expectations increase with age.

Internal Working Models of Attachment

Attachment theory may be a useful framework to better understand individual differences in expectations of helping relationships in general and expectations of therapy in particular. Attachment refers to the relationship between the infant and its caregiver. The attachment system serves survival needs and is a human propensity to seek proximity to caregivers in times of stress. This early bond is seen as forming the basis for close interpersonal relationships throughout the lifespan (Bowlby, 1973 & 1980).

According to Bowlby (1973, 1980), the caregiver's responsiveness to the infant's needs will determine whether the growing child will view others as trustworthy and supportive and the self as valuable and worthy of love and support. Those beliefs and expectations about the availability of support then form what is called 'Internal Working Models' [IWM] of the self and others. These IWMs are dynamic during the first years of life, but with repeated experiences and interactions with caregivers soon become more stable, resistant to change, and the driving force behind shaping future relationship experiences.

IWMs are considered to be the mechanism that underlies the difference between attachment groups. When infants experience their caregivers as responsive, a secure attachment bond is likely to develop, in which the caregiver serves as a 'secure base' that encourages the infant's exploratory behaviour and development. On the other hand, when the caregiver is inconsistently responsive or consistently resentful, an insecure bond is likely to form, which is characterised by excessive

activation (i.e. attachment anxiety) or chronic deactivation of the attachment system (i.e. attachment avoidance) (Mattanah, Lopez, & Govern, 2011).

Research has shown that attachment style and underlying IWMs influence relationships in adulthood and that both adults and adolescents with a secure model of the other as trustworthy and reliable have generally more positive expectations of helping relationships. Wallace and Vaux (1993) found that as compared to insecure individuals, secure people held more positive beliefs about expectations of help from their social network. Secure individuals also demonstrated more positive attitudes about help-seeking (Holt, 2014a, 2014b; Turan & Erdur-Baker, 2014) and were more likely to engage in support-seeking behaviour (Mikulincer, Florian, & Weller, 1993; Mikulincer & Florian, 1995; Defronzo, Panzarella, & Butler, 2001; Charles & Charles, 2006; Ognibene & Collins, 1998). In the more specific context of a therapeutic relationship, attachment was found to be related to positive expectations and attitudes towards therapy (Shaffer, Vogel, & Wei, 2006), to willingness to seek therapy (Moran, 2007; Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998), and to actual participation in therapy (Kealy, Tsai, & Ogrodniczuk, 2016). Additionally, secure adults and adolescents were found to perceive others as more reliable and trustworthy and felt more comfortable relying on them in times of need (Collins & Read, 1990; Hazan & Shaver, 1987).

Research on help expectations from an attachment perspective is still sparse. Moreover, the processes that may underline the suggested relationship between attachment and help expectations are yet to be explored. The current research is relying on previous work in the area of attachment and expectations of helping relationships and aims to achieve a more comprehensive understanding of this relationship.

Epistemic trust

Epistemic trust (ET) is a mechanism that could possibly shed more light on the proposed association between attachment and expectations of help, in the context of the individual's social network and in the more specific context of the therapeutic relationship. ET refers to 'an individual's willingness to consider new knowledge from another person as trustworthy, generalizable and relevant to the self' (Fonagy & Allison, 2014, p. 373). 'Epistemic vigilance,' on the other hand, is an evolutionary stance according to which human beings have developed a critical alertness to the reliability of communication and therefore are mistrustful of others (Sperber et al., 2010).

The theory of natural pedagogy (Csibra & Gergely, 2009) explains how the attachment between child and caregiver can affect the child's epistemic states. According to this theory, human communication allows the transmission of generic, cognitively opaque knowledge. An agent uses ostensive cues, i.e. signals that prepare the addressee for the agent's intent to communicate. These cues facilitate the suspension of epistemic vigilance in the addressee since the information communicated by the agent is deemed relevant and therefore should be remembered and encoded. Theory speculates that securely attached children, for example, are more likely to view their caregiver as a reliable source of information because they are more likely to use ostension.

The attachment between child and caregiver plays a crucial role in the formation of ET and may mediate the transmission of knowledge and information between human beings. In an attachment study conducted by Corriveau et al. (2009), children between the ages of 50 and 61 months were presented with

conflicting claims made by both their mother and a stranger. The results illustrated that children were more likely to accept their mother's claim, even when perceptual cues were consistent with both claims. Additionally, children were more likely to accept the stranger's claim when it was favoured by perceptual cues. However, a child's attachment pattern was found to impact the child's responding pattern: secure children were more likely to use available perceptual cues before relying on either their mother or the stranger. Insecure-avoidant children on the other hand were less likely to rely on their mother, and insecure-resistant children were more likely to rely on their mother than on the stranger, irrespective of any cues. In other words, the nature of the child's attachment was found to have an impact on how much a child trusted information provided by either an attachment figure or a stranger. Secure children were more capable of using a flexible strategy and accepted their mother's claims when plausible, but trusted their own perception when their mother's claims seemed improbable. It is possible that secure individuals are less defensive and therefore can be more receptive to new information. In other words, secure attachment opens up an 'epistemic superhighway' that facilitates learning from others (Fonagy & Allison, 2014).

In contrast, insecure attachment was shown to be linked to knowledge inflexibility: insecure individuals tend to rely on existing knowledge even when they know it is misleading (Pierro & Kruglanski, 2008). Moreover, insecure patterns of attachment may have a long-term impact on development and carry into adulthood. For example, previous research showed that a high number of patients diagnosed with antisocial and borderline personality disorders have had a history of abuse, neglect and inconsistent treatment from their caregiver (Davidson, 2008). Attachment trauma is also related to a loss of trust. ET loss is associated with

increased rigidity and an absence of the capacity to change. From a ‘natural pedagogy’ point of view, an addressee with reduced epistemic trust is likely to be less sensitive to ostensive signals from the agent and to have a reduced capacity to learn.

Mikulincer (1998) suggested that the association between attachment and expectations of helping relationships may be explained by the increased tendency of secure individuals to trust others. Attachment was found to play an important role in the development of positive attitudes towards trust. Secure people were found to believe that their partners would not hurt them if they trusted them. They were also more likely to develop a trustful relationship with their partners and see them as trustworthy (Baldwin, Fehr, Keedian, Seidel, & Thompson 1993).

To summarise, within the context of a secure attachment, the caregiver is sensitive to a child’s emerging intentionality. Under these circumstances, children adopt a more flexible thinking style. They can reduce their epistemic vigilance and develop the kind of trust that underpins most learning processes. In contrast, in the context of an insecure attachment, a child is unable to trust another individual and cannot successfully reduce their epistemic vigilance, potentially impeding their ability to learn and benefit from social interactions.

Measuring trust

Existing experimental literature in the field of trust has traditionally focused on cooperation and trusting behaviour. The Trust Game (King-Casas et al., 2008) is an economic trust exchange game in which the investor can send up to 20£ to a trustee. The amount sent is then tripled and the trustee decides how much to send back to the investor. The more cooperative and trustful the investor is, the higher the mutual gain is. Research has shown that patients with BPD, which has been

suggested to have a strong association with insecure attachment (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004), were less likely to demonstrate a trustful and cooperative behaviour than healthy controls once cooperation breaks down.

More recently, a new instrument was developed specifically for measuring ET: the Epistemic Trust Instrument (ETI; O'Connell, 2014). The ETI includes dilemma situations followed by advice from either the participant's mother or a professional unrelated to the dilemma. Participants are then asked to select which advice they are more likely to trust, to rate how strongly they trust the selected person, and to indicate how likely are they to change their mind about their decision. In a research study conducted with adult BPD patients and healthy controls, O'Connell (2014) found a relationship between adult attachment security and ET.

The current study

As outlined above, research suggests that the securely attached individual is more likely to trust others in close relationships and to be more curious and confident about relationships. Moreover, the secure person is more open to new information and is less defensive. Those factors are in turn likely to impact the secure individual's expectations to be helped and supported by others. Further, this sense of trust and openness likely contributes to their expectations about relationships and how much they can rely on others in times of need.

Any form of social interaction, including the therapeutic setting, involves exchange of information between human beings. Fonagy and Allison (2014) state that epistemic trust triggers the opening of an 'epistemic superhighway', an evolutionary protective mechanism that is necessary for acquiring knowledge and learning from others. This process, however, is less effective among insecure individuals as they are likely to be more rigid and less able to trust. Therefore, the

internal working models of insecure individuals – i.e. their expectations about others are impermeable to social experiences.

Both insecure attachment and epistemic mistrust then may have important implications for what an individual expects from different relationships (including those found in social, educational and therapeutic settings) and may impact the extent to which such a relationship can facilitate change.

In summary, positive help expectations and the belief that this help can facilitate change can only take place in the context of a secure attachment when the individual's epistemic superhighway is opened. It can be assumed that insecure individuals in a state of epistemic mistrust are less likely to reduce epistemic vigilance and to perceive the other as a reliable and trustworthy source of support and incentive of learning and change. When clients enter the therapeutic environment in a state of epistemic mistrust and with negative help expectations, neither social learning nor the taking in and incorporating of new information are likely to occur in therapy (Fonagy & Allison, 2014). This in turn may have important implications for engaging in the therapeutic relationship and subsequently for the therapeutic outcome.

Aims and hypotheses

As outlined above, the literature proposes an association between attachment and expectations of quality of support in the context of the individual's social environment as in the more specific context of the therapeutic relationship. Research on how ET affects one's capacity to learn and benefit from social situations is still an emerging field, and no research exists on the potential contribution of ET to the relationship between attachment and help expectations.

This study aims to build on the current knowledge in the field of attachment and trust formation, explore how attachment affects an individual's expectations of helping relationships, and understand whether ET contributes to this relationship. This study does not investigate early attachment to parents only, however, but also considers the impact of peer attachment that grows increasingly influential during adolescence (Mikulincer & Shaver, 2007). The study explores expectations of helping relationships in the context of the individual's social environment and in the more specific context of the therapeutic environment. It includes participants from both community and clinical settings in order to achieve more diversity and variance of the different variables (e.g. - ET and attachment) and to increase power. Because it was assumed that adolescents from the clinical settings would present with higher rates of insecure attachment and more difficulties to trust others, their inclusion was expected to increase variation of the different variables assessed in the current study.

ET will be measured by a novel instrument designed specifically to measure ET. As the current study takes an attachment perspective, it will mainly focus on maternal ET that is likely to be triggered by the attachment system and its underlying internal working models.

The study aims to test the following hypotheses:

1. A correlational relationship exists between attachment and expectations of helping relationships. Specifically, higher levels of attachment security will predict more positive expectations of helping relationships.
2. If a relationship exists between attachment and expectations of helping relationship, ET is hypothesised to be a mediator of this relationship.

2.3 Method

The study has a cross-sectional design to investigate the association between attachment, ET, and expectations of helping relationships in a mixed sample of normally developing and clinical adolescents between 12 and 18 years old.

Recruitment was conducted within the community and at two clinical sites from October 2016 to April 2017.

The two clinical sites were:

An adolescent mental health inpatient unit, which provides assessment, care, and treatment for young people between the ages of 12 and 18 years with severe psychological, behavioural, and emotional difficulties.

Substance Use Service, which focuses on drug and alcohol use and provides information, support, and specialist treatment to young people and their families under the age of 18.

Recruitment was carried out with two other doctoral trainees who explored the relationship between ET and trauma/ BPD symptomology. Appendix F offers more information about the joint project.

Participants

Inclusion criteria for the study were young people between the ages of 12 and 18 who spoke fluent English. Exclusion criteria were based on acute risk of suicidality, acute psychotic episodes, head injury/severe neurological disorder, and learning disabilities. This was confirmed with the clinicians on the clinical sites.

Participants for the current study included 79 young people (42 females, 37 males). 64 were recruited from the community and 15 from clinical settings. Table 1 details the demographic characteristics of the sample.

Table 1. Demographic characteristics of the sample (n = 79)

Demographic Variables		Total Sample
Sample	Community	64
	Clinical	15
Gender	Male	37 (47%)
	Female	42 (53%)
Age	Mean	15.8
	Std.	1.9
	Range	12-18
Ethnicity	Majority	67 (85%)
	Minority	12 (15%)
Social Economic Status*	Low-Middle	58 (73%)
	High	21 (27%)
IQ	Mean	106.4
	Std.	14.2
	Range	67-139

*SES was coded based on young people parents' occupational status (Office of National Statistics, 2103)

Sample Size

Sample size was determined by using the 'G*Power 3.1.3' software programme (Faul, Erdfelder, Lang & Buchner, 2007). Since no previous research has used ET measures, power analysis was informed by prior work by Fonagy and Rossouw (2012), who compared the effectiveness of MBT and TAU among self-harming adolescents. They assessed mentalization using the HOW I FEEL questionnaire and attachment using the Experience of Close Relationship Inventory, and found an effect size of ~ 0.4 . The current study used different measures to explore different constructs. However, a conservative effect size of 0.4 was also selected for the current research because it used new measures that have not been

used before. Power calculation was carried out specifying $\alpha = 0.05\%$ and a desired power of 80%. The required indicated sample size estimated 68 individuals.

Procedure

For the clinical sample, case managers identified those young people who seemed suitable to take part in the research. For the community participants, we obtained an opportunity sample by approaching potential participants who were thought to be suitable for the study (i.e. - families with adolescents). Individuals were introduced to the project, given study information, and offered to take part. More participants were subsequently identified and recruited through word of mouth (i.e. by hearing about the study from previous participants).

If a young person or their parents were interested, we followed specific procedures:

For young people under the age of 16, a letter with information sheets was sent to both the young person and their parents (see appendix G and H). They were offered to be contacted by the researcher if they wished to ask any questions or wanted additional information. For young people above the age of 16, only the young person was contacted in the same manner (see appendix I).

Young people were given at least 24 hours to consider their participation in the study. If a young person was still interested in participating, they were consented/assented as followed:

Young people under the age of 16 were asked to provide written assent (see appendix J) as well as give permission to contact their parents to obtain written consent (see appendix K). Participants above the age of 16 were asked to provide written consent (see appendix L). Participants from the clinical sample were reminded that the study was conducted by an independent researcher not affiliated

with the unit. Therefore, their participation in the study would not affect any therapy they receive at the unit.

The entire testing battery comprised a computer task, a short IQ test, and a pack of questionnaires (please see appendix M). All measures were completed at the clinical site or at participants' homes. For the clinical sample, the young person's key worker was available during the time of testing. Testing duration was between 2.5 and 3 hours and participants were provided with breaks whenever required. Participants were paid £30 in vouchers (clinical sample) or cash (community sample) for their participation in the study. At the end of testing, participants were debriefed and given the opportunity to ask questions.

Figure 1 presents a breakdown of the recruitment stages.

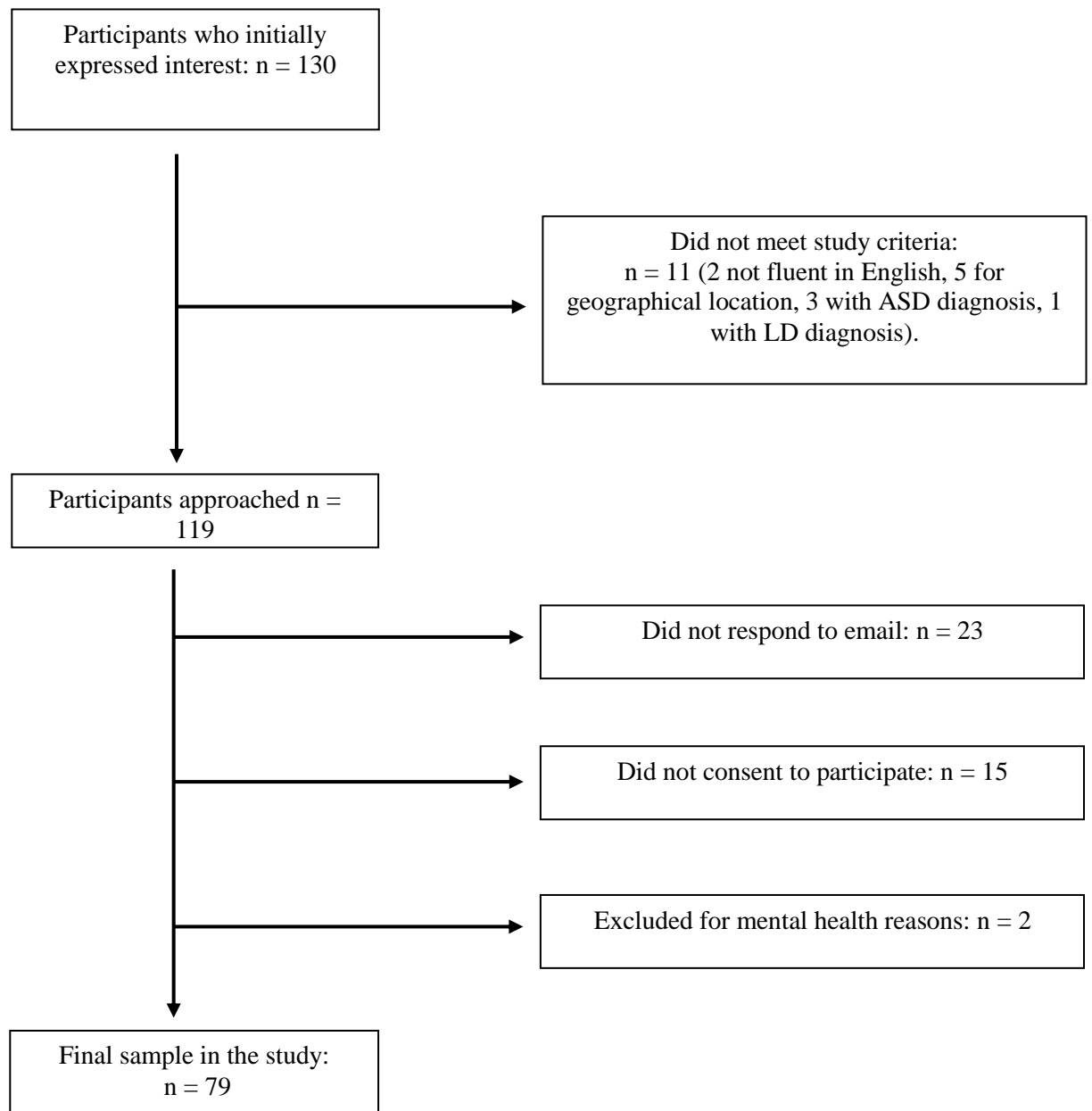


Figure1.Recruitment stages

Ethics

Ethics approval was obtained from University College London for the community sample (see appendix N) and from the NHS Bloomsbury Research Ethics Committee for the clinical sample (see appendix O).

Study subjects were informed that all collected data would remain de-identified and that they had the right to withdraw consent at any point if they no longer wished to participate.

Measures

Epistemic Trust was measured using two different tasks:

The Trust Game (TG) - The TG is part of a computer task that was designed by Dr. Michal Moutoussis from the Wellcome Trust Centre for Neuroimaging to capture the presence or absence of ET among children and adolescents. The computer task was previously used in a pre-adolescent sample (Smithers, 2015) as well as in child and adolescent samples (O’Callaghan, 2017). The computer task consists of four parts: a trust game (King-Casas et al., 2008) followed by three learning tasks. The current study used the trust game only to measure trust behaviour. Participants (i.e. ‘the investor’) are asked to trade coins as if playing with ‘a trustee’. Participants can gain or lose coins and receive computer feedback throughout. See appendix P for more details on the TG.

Scoring:

The trust game computed a total of 7 variables. These variables are descriptive indices that are approximations of interpersonal trust behaviour.

Initial Investment- Refers to the initial level of trust (i.e. the amount of coins the investor gives to the trustee in the first round).

Investment second round- Refers to the level of trust during the second round of the task (i.e. the amount of coins the investor hands to the trustee after receiving feedback from the trustee)

Total Investment- Refers to the investor's overall level of trust across ten rounds.

Initial by Total- Refers to the change in the investor's investment (i.e. trust) across rounds (as a function of the trustee feedback).

Total Investor Earnings- Refers to the total amount of coins earned by the investor.

Total Trustee Repay- Refers to the total amount of coins given back by the trustee.

Total Trustee Earn- Refers to the total amount of coins earned by the trustee.

Epistemic Trust Instrument (ETI) (O'Connell, 2014) - The aim of this task is to look at how young people make decisions in dilemma situations. The task consists of 20 moral and amoral dilemma situations. For each of these situations, conflicting advice is given by the participant's mother and an uninformed professional. The order of the two sources is counterbalanced across the task to minimise order effect. The young person is then asked to choose which person they would trust, how strongly they would trust the selected person on a scale from 'mildly trust to strongly trust', and how likely they are to change their mind regarding their decision on a scale from 'very unlikely' to 'very likely'. Participants are provided with an instruction sheet for this task. They are also asked to ignore their own opinions and assume they had no idea about what was considered right or wrong in these situations. Please see appendix Q for the ETI measure.

Scoring:

Responses to the first question (i.e. which person they would trust) were scored on a scale from 1 to 100. Scores between 1 and 50 reflect the trust source on the left side of the paper while scores between 51 and 100 reflect the trust source on the right side

of the paper. Lower scores reflect low levels of trust for the chosen source. Scores for each source (i.e. Professional and Mother) are tallied across all 20 items. Each participant is given two 'total scores', which reflect the total strength of trust in the mother and the total strength of trust in the professional. The current study only used the strength of maternal ET score.

Attachment was measured using the Inventory of Parent and Peer Attachment - Revised (IPPA-R) (Gullone & Robinson, 2005). This measure assesses the quality of attachment between young people and their parents (28 items) and close friends (25 items). Participants are asked to rate how often each statement was true for them and their friends/parents on a 5-point Likert scale from 1 (never true) to 5 (always true) where a higher score represents better relationship quality. Higher scores also reflect greater perceived attachment. Gullone and Robinson (2005) have demonstrated good validity ($r=.73$) for this questionnaire. Armsden and Greenberg (1987) also found adequate reliability ($.87 < \alpha < .92$). In the current sample, the Cronbach's alpha were .91 and .88 for the IPPA-Parents and Friends' total scores, respectively.

Expectations of helping relationships were measured using two measures: *The Psychotherapy Expectations and Perceptions Inventory (PEPI)* (Stewart, Steele, & Roberts, 2014) assesses young people's expectations and perceptions of psychotherapy. Participants are first asked to imagine that they are starting therapy this week and are then directed to complete 40 statements about expectations that complete the sentence 'I expect...' (e.g. 'therapy to be helpful'). Participants are asked to rate their answer on a 5-point Likert scale from 1 (not true) to 5 (definitely true). The measure consists of three subscales: negative expectations and perceptions (e.g. 'the therapist to be on my parents' side'), therapeutic process and outcome (e.g.

to practice things I need to learn in the therapy session), and positive therapeutic relationship (e.g. ‘the therapist to understand my position and help my parents change’). Stewart et al. (2014) reported good internal consistency of $\alpha = .78$, $\alpha = .78$, and $\alpha = .7$ for the three subscales. They also demonstrated adequate validity ($\alpha = .83$). In the current sample, Cronbach’s alphas were .70, .83 and .61 for the positive therapeutic relationships, negative expectations and perceptions, and therapeutic process and outcome, respectively.

The revised version of *the Network of Relationship - Social Provisions Version (NRI-SRV)* (Furman & Buhrmester, 1985) assesses the extent to which different network members (Mother, Father, Friend, Boy/Girlfriend) satisfy different social needs. Participants are asked to rate each relationship quality on a 5-point Likert scale from 1 (‘little or none’) to 5 (‘the most’). For this study, three subscales were used: Instrumental Aid (IA) (e.g. how much does this person teach you things that you do not know), Intimate Disclosure (ID) (e.g. how much do you talk about everything with this person), and Affection (AF) (e.g. how much does this person like or love you). Additionally, for each subscale, a score for each type of relationship can be calculated (e.g. IA-Mother). Furman and Buhrmester (1985) report a satisfactory internal consistency of $\alpha = .8$ for the scale scores. In the current sample, Cronbach’s’ alphas were .78, .76, and .86 for the IA, ID and AF subscales.

IQ was measured in order to control for IQ when exploring the link between ET and expectations of helping relationships. The Wechsler Abbreviated Scale of Intelligence (WASI) (Wechsler, 1999) assesses intellectual abilities in individuals between the ages of 6 and 89. Although the WASI consists of four subtests, only two can be used to estimate general cognitive ability. Therefore, this study used matrix reasoning and vocabulary only. With children, the WASI has shown good reliability

of the full-scale IQ, ranging from .95 to .97 (Wechsler, 1999). The WASI has also shown good validity; the correlation between the WASI and the Wechsler Intelligence Scale for Children (WISC-III) was found to be .81 for full scale IQ (Wechsler, 1999).

Data Analysis

Data was analysed using SPSS 21. First, a Missing Value Analysis (MSA) procedure was performed to help understand and deal with missing values. Subsequent factor analysis using principal component analysis (PCA) examined whether the number of variables could be reduced to a smaller number of underlying constructs.

The main analysis consists of a series of correlation analyses to test the first hypothesis about an association between attachment and expectations of helping relationships. Main predictors and outcomes variables were also correlated with the sample's demographics to identify covariates. A regression analysis was then conducted in order to achieve a more comprehensive understating of the predicting model.

Next, we ran mediation analysis to investigate the second hypothesis about the mediational role of ET. A preliminary exploration of associations between the predictors (i.e. parent and peer attachment), mediators (i.e. ET), and outcome (i.e. expectations of helping relationship) variables was employed. Significant associations were further explored using PROCESS mediation analysis (Hayes, 2013) with a single-mediator model to examine whether the relationship between attachment and expectation of helping relationships is mediated by ET.

Data analysis is discussed in more details in the results section.

2.4 Results

Preparing the Data

Missing values analysis

MSA was used in order to test whether values were randomly missing. Little's Missing Completely at Random (MCAR) was not significant for all the variables containing missing values, suggesting that cases with missing values were not systematically different from cases without missing values. Therefore, the 'Expectation Maximization' (EM) algorithm function in SPSS was used to replace missing data with computed values. The EM is a method for obtaining the Maximum Likelihood (ML) for missing data. It consists of expectation and maximization steps that are repeated multiple times to calculate the best prediction for the missing value (Allison, 2001). This technique overcomes some of the limitations of other techniques, which generate biased estimations and underestimate standard errors (Schafer, 1997; Schafer & Olsen, 1998).

Normality Checks

To see whether parametric tests could be used to analyse the data, normality checks were carried out. First, an inspection of outliers was conducted. The 'Peer attachment' distribution contained one outlier, the Network of Relationship' (NRI) distribution contained one outlier, and the Psychotherapy Expectations and Perception Inventory (PEPI) distribution contained three outliers (two for the PEPI Negative and one for the PEPI Outcome). Winsorizing transformation was used to limit extreme values and reduce the effect of outliers.

Based on an examination of variable histograms as well as skewness and kurtosis scores, all distributions were found to approximate normality. Further examination of residuals was conducted to assess whether any assumptions underpinning parametric tests were violated.

Data Reduction

Due to the multiple subscales for the NRI and various behavioural performance indices from the Trust Game (TG) measures – all of which were thought to represent similar constructs – Principal Component Analysis (PCA) was used to examine whether the different variables could be reduced to fewer underlying factors. The aim of reducing data was to achieve parsimony and increase power by using the smallest number of variables to explain the maximum amount of common variance (Fields, 2009).

Based on Fields' (2009) guidelines, suitability of the data for PCA analysis was checked for each one of the variables as detailed below:

NRI Parents and NRI Friends

A separate PCA analysis using oblimin rotation was conducted for the NRI-Parents and NRI-Friends subscales to assess whether the six variables of the NRI-Parents and the three variables of the NRI-Friends could be narrowed down. As the majority of the sample did not have a boy/girlfriend, this subscale was not included in the analysis.

First, an inspection of the correlation matrix showed that for the NRI-Parents, coefficients were below the threshold of .3 for two variables (Instrumental Aid (IA) Father; Intimate Disclosure (ID) Father). For the NRI-Friends, one variable (IA Friends) was below threshold. These variables were thus removed from PCA analysis.

For the NRI-Parents, The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was found to be sufficiently high ($KMO = .682$) and Bartlett's test was significant ($\chi^2 (6) = 153, p < .001$). The communalities were all above the threshold of .4. Table 2 summarizes factor loadings and communalities for the four

variables. One factor emerged from the data and explained 67% of all variance (eigenvalue = 2.68). This factor was labelled ‘NRI Parents’.

Table 2. Factor loadings and communalities for NRI-Parents subscales.

	Factors Loadings	Communalities
IA Mother	.9	.811
ID Mother	.79	.632
AF Mother	.87	.770
AD Father	.69	.477

For the NRI Friends, The KMO Measure of Sampling Adequacy (KMO) was found to be sufficiently high (KMO = .5) and Bartlett’s test was significant ($\chi^2(1) = 30.3, p < .001$). The communalities were all above the threshold of .4. Table 3 represents factor loadings and communalities for the two variables. One factor emerged from the data and explained 78% of all variance (eigenvalue = 1.57). This factor was labelled ‘NRI Friends’

Table 3. Factor loadings and communalities for NRI-Friends subscales.

	Factors Loadings	Communalities
ID Friends	.88	.78
AF Friends	.88	.78

Trust game (TG)

An examination of the correlation matrix revealed coefficients of above .8 / under .3 for three variables (Initial by Total, Total Trustee Repay, and Total Trustee Earn), which were thus removed from PCA analysis. The KMO of Sampling Adequacy (KMO) was found to be sufficiently high (KMO = .688) and the Bartlett’s test was significant ($\chi^2(6) = 93.3, p < .001$). The communalities were all above the threshold of .4. Table 4 shows factor loadings and communalities for the four

variables. One factor emerged from the data and explained 60% of all variance (eigenvalue = 2.39). This factor was labelled ‘Trust Behaviour’ (TB).

Table 4. Factor loadings and Communalities for TG subscales.

	Factors Loadings	Communalities
Initial Investment	.74	.55
Investment Second Round	.65	.42
Total Investment	.89	.79
Total Investor Earnings	.78	.61

Hypothesis 1- Correlating attachment with expectations of helping relationships

Table 5 details the descriptive data for the main predictors and outcome variables.

Table 5. Descriptive data for predictors and outcomes variables. N = 79

Variable	M	SD	Range	
			Min	Max
Parent Attachment	98.73	18.38	57	128
Peer Attachment	94.09	16.46	49	120
Positive Expectations	2.71	0.58	1.27	4.18
Outcome Expectations	3.51	0.51	2.08	4.54
Negative Expectations	1.9	0.56	1	4.06
NRI IA	3.25	0.64	1.87	4.67
NRI AF	3.64	0.66	1.20	4.67
NRI ID	2.87	0.71	1.23	4.33

* Note. NRI IA = Network of relationships Instrumental Aid; NRI AF = Network of Relationships, Affection; NRI ID = Network of Relationships, Intimate Disclosure; PEPI Negative = Psychotherapy Expectations and Perceptions Inventory, Negative Expectations and Perceptions; PEPI Positive = Psychotherapy Expectations and Perceptions Inventory, Positive Therapeutic Relationship; PEPI Outcome = Psychotherapy Expectations and Perceptions Inventory, Therapeutic Process and Outcome.

It was hypothesised that there would be a positive correlational relationship between attachment and expectations of helping relationships. Specifically, it was hypothesised that higher perceived attachment would predict higher expectations of helping relationships.

Pearson's correlations were used to explore associations between Parent and Peer attachment, expectations of therapy (PEPI), expectations of helping relationships (NRI), and the sample's demographics. First, a correlation of all variables and demographic values was conducted to investigate covariates for subsequent analysis. Table 6 presents the correlation matrix.

Table 6. Correlation Matrix: study's variables and the sample's demographics.

	Predictors		Mediators					Outcome Variables				
	Parent Attachment	Peer Attachment	TB	MET	PEPI Positive	PEPI Negative	PEPI Outcome	NRI IA	NRI AF	NRI ID	NRI Parents	NRI Friends
Demographics												
Gender	-.02	.18	.01	-.05	-.08	-.07	.07	.07	-.04	.14	-.03	-.06
Age	-.44**	-.24*	.26*	-.19	-.15	-.15	-.09	-.32*	-.003	-.08	.01	-.08
SES	.15	.13	-.23*	.01	.03	.06	.21	-.01	.03	-.01	-.11	-.12
Ethnicity	.03	-.07	-.15	.08	.02	-.01	.004	.09	.009	.07	.12	.09
IQ	.07	.06	.06	.04	.05	.00	.18	.14	-.004	.22	-.002	-.15

- SES = Social Economic Status; TB = Trust Behaviour, MET = Maternal Epistemic Trust, PEPI Negative = Psychotherapy Expectations and Perceptions Inventory, Negative Expectations and Perceptions; PEPI Positive = Psychotherapy Expectations and Perceptions Inventory Positive Therapeutic Relationship. PEPI Outcome = Psychotherapy Expectations and Perceptions Inventory, Therapeutic Process and Outcome; NRI IA = Network of Relationships Instrumental Aid, NRI AF = Network of Relationships Affection; NRI ID = Network of Relationships Intimate Disclosure, NRI Parents = Network of Relationships Parents; NRI Friends = Network of Relationships Friends.

Expectations of therapy (PEPI)

After controlling for age, Parent and Peer attachments were found to be associated with expectations of therapy. Table 7 presents the correlation Matrix.

Parent attachment was found to be positively associated with Positive Expectations [$r(76) = .39, p < .001$] and Outcome Expectations [$r(76) = .38, p < .001$], suggesting that higher perception of attachment to parents was a predictor of better therapeutic relationship expectations and of therapeutic process and outcome expectations.

Moreover, Parent attachment was found to be negatively associated with Negative Expectations [$r(76) = -.31, p = .005$], suggesting that higher perception of attachment to parents was a predictor of less negative expectations and perceptions of therapy.

Peer attachment was found to be negatively associated with Negative Expectations [$r(76) = -.36, p = .001$], suggesting that higher perception of attachment to peers was a predictor of less negative expectations and perceptions of therapy. Moreover, Peer attachment was found to be positively associated with Positive Expectations [$r(76) = .28, p = .01$].

In order to further explore how a combination of Parent and Peer attachment would predict expectations of therapy, multiple regression analysis was conducted. Standard multiple regression was carried out with Positive and Negative Expectations as outcome variables (they demonstrated the strongest correlations with Parent and Peer attachment) and age as a covariate. Preliminary analyses were carried out to ensure that the assumptions of linearity, multicollinearity and homoscedasticity were not violated. In order to assess normality, an analysis of residuals was conducted. Since this analysis showed a deviation from normality, 1000 samples for biased-corrected bootstrap confidence intervals was used in the

following regression analysis. Bootstrap analysis does not require distributional assumptions and is therefore robust to deviations from normality (Davison & Hinkley, 1997).

The prediction model for Negative Expectations was significant [$F(3, 78) = 5.67, p < .001$] and accounted for 18% of all variance of Negative Expectations (Adjusted $R^2 = .15$).

Negative Expectations were predicted by Peer attachment and age. Parent attachment did not contribute to the prediction of Negative Expectations. The overall contribution of Peer attachment and age accounted for 16 % of all variance. Appendix R details regression coefficients of the predictors, significance levels, and confidence intervals.

The prediction model for Positive Expectations was significant [$F(3, 78) = 5.97, p = .001$] and accounted for 19% of all variance of Positive Expectations (Adjusted $R^2 = .16$).

Positive Expectations were only predicted by Parent attachment. Age and Peer attachment did not contribute to the prediction of Positive Expectations. The overall contribution of Parent attachment accounted for 16 % of all variance. Appendix R details regression coefficients of the predictors, significance levels, and confidence intervals.

Expectations of helping relationships (NRI)

After controlling for age, Parent and Peer attachment were found to be associated with expectations of helping relationships. Table 7 presents the correlation matrix.

Parent Attachment was found to be positively associated with two of the NRI subscales, Instrumental Aid (NRI IA; $r(75) = .58, p < .001$) and Intimate Disclosure

(NRI ID; $r(75) = .47, p < .001$), suggesting that attachment to parents was a predictor of expecting to receive more help from the social network and of greater levels of expectations of intimacy in relationships.

Peer attachment was found to be positively associated with all three NRI subscales: NRI IA [$r(75) = .5, p < .001$], NRI ID [$r(75) = .47, p < .001$] and NRI Affection (AF) [$r(75) = .35, p = .002$], suggesting that attachment to peers was a predictor of expecting to receive more help, greater levels of expectations of intimacy in relationships and expectations of more affectionate relationships.

Additionally, unlike Parent attachment, Peer attachment was a predictor of the NRI-Parents subscale ($r(75) = .28, p = .01$), suggesting that attachment to friends was a predictor of higher expectations of quality of parental relationships. The NRI-Friends subscale was not found to correlate with any of the predictor variables.

A subsequent regression analysis was conducted with NRI IA and NRI ID as the outcome variables and age as a covariate.

The prediction model for NRI IA was significant [$F(3, 78) = 23.6, p < .001$] and accounted for 48% of all variance of NRI IA (Adjusted $R^2 = .46$).

NRI IA was equally predicted by Parent and Peer attachment. Age did not contribute to the prediction of NRI IA. The overall contribution of Parent and Peer attachment accounted for 38% of variance. Appendix R details regression coefficients of the predictors, significance levels, and confidence intervals.

The prediction model NRI ID was significant [$F(3, 78) = 12.08, p < .001$] and accounted for 32% of all variance of NRI ID (Adjusted $R^2 = .29$).

NRI ID was equally predicted by Parent and Peer attachment. Age did not contribute to the prediction of NRI ID. The overall contribution of Parent and Peer attachment

accounted for 31% of the variance. Appendix R details regression coefficients of the predictors, significance levels, and confidence intervals.

Table 7. Correlation matrix: Predictors and Outcome Variables

	Predictors		Outcome Variables							
	Parents Attachment	Friends Attachment	PEPI Positive	PEPI Negative	PEPI Outcome	NRI IA	NRI AF	NRI ID	NRI Parents	NRI Friends
Predictors										
Parental Attachment	-----									
Friends Attachment	0.43**	-----								
Outcomes										
PEPI Positive	.39**	.28**	-----							
PEPI Negative	-.31**	-.36	-.19	-----						
PEPI Outcome	.38**	.17	.5**	-.18	-----					
NRI IA	.58**	.50**	.35**	-.03	.37**	-----				
NRI AF	.14	.35**	.1	-.09	.07	.22*	-----			
NRI ID	.47**	.47**	.35**	-.19	.19	.69**	.03	-----		
NRI Parents	.15	.28**	.14	-.11	.004	.15	.72**	.04	-----	
NRI Friends	.07	.21	.03	-.11	.02	.13	.45**	-.01	.09	-----

- PEPI Positive = Psychotherapy Expectations and Perceptions Inventory Positive Therapeutic Relationship; PEPI Negative = Psychotherapy Expectations and Perceptions Inventory, Negative Expectations and Perceptions; PEPI Outcome = Psychotherapy Expectations and Perceptions Inventory, Therapeutic Process and Outcome; NRI IA = Network of Relationships Instrumental Aid, NRI AF = Network of Relationships Affection; NRI ID = Network of Relationships Intimate Disclosure, NRI Parents = Network of Relationships Parents; NRI Friends = Network of Relationships Friends.

Hypothesis 2- Mediation analysis

It was hypothesised that Epistemic Trust (ET) would mediate the relationship between attachment and expectations of helping relationships.

First, correlations between the predictors (i.e. Parent/ Peer attachment) and the hypothesised mediators [i.e. Maternal Epistemic Trust (MET as derived factor from the ETI paradigm) and Trust Behaviour (TB)] were examined. After controlling for age, an association was found between Parent attachment and MET [$r(73) = .23$, $p < 0.05$]. However, after Bonferroni correction was applied, this correlation lost its significance. No other significant correlations emerged between the predictor and mediator variables. See appendix S for correlation matrix.

Second, correlations between the hypothesised mediator and the outcome variables (i.e. PEPI and NRI) were examined. After controlling for age, no significant correlations emerged between the mediators and the PEPI. A significant correlation emerged between MET and the NRI IA subscale [$r(72) = .31$, $p < 0.01$]. A non-significant trend also emerged between MET and the NRI AF subscale [$r(72) = .21$, $p = .06$] and the NRI ID subscale, [$r(72) = .2$, $p = .08$]. See appendix S for correlation matrix.

To further examine the mediation model, a mediation process was implemented using the SPSS PROCESS macro (Hayes, 2013). Preliminary analyses were carried out to ensure that the assumptions of linearity, multicollinearity and homoscedasticity were not violated. In order to assess normality, an analysis of residuals was conducted. The analysis showed that residuals were greater in the lower end of the distribution, suggesting that the model is less accurate in predicting low scores. To address this, 5,000 samples for biased-corrected bootstrap confidence intervals were used in the following PROCESS analysis.

The observed significant correlations between the predictors, mediators and outcome variables were tested as part of the mediation model. Figure 2 presents the examined models.

The single-mediator model was used. Analysis was controlled for age. The predictor was the continuous variable of Parent attachment. Outcomes were the continuous variables of NRI IA and NRI ID. The mediator was the continuous variable of MET.

As shown in figure 2, the effect of attachment on the level of maternal trust is represented in path α . The effect of maternal trust levels on each of the outcome variables is represented in path β . If the indirect effect excludes zero, there is a significant mediation.

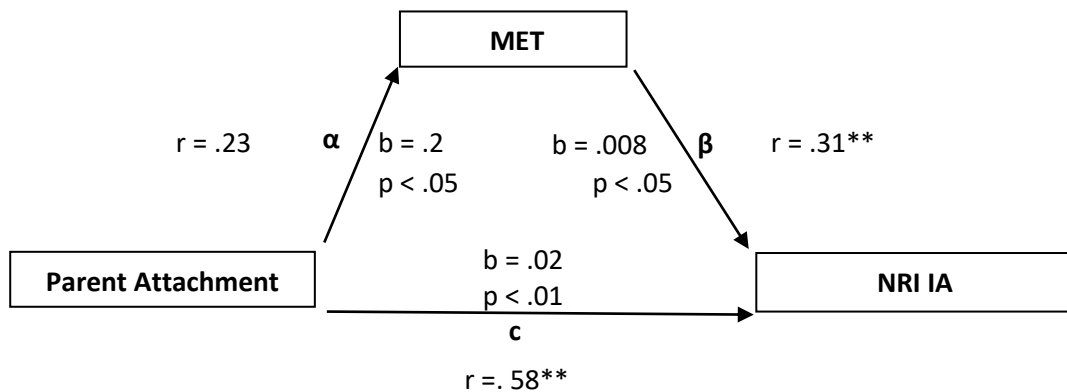
As suggested by model 1, Parent attachment had a significant impact on the levels of MET (α path). This finding shows that higher perception of parental attachment was a predictor of higher levels of maternal ET. Path β shows a significant relationship between MET and the NRI IA. This finding suggests that higher levels of maternal ET were related to more expectations to receive instrumental help from the social network. Path c demonstrates a significant relationship between Parent attachment and NRI IA, having controlled for MET. An indirect effect of MET as a mediator on the outcome variable was found [$b = .001(.000-.006)$], suggesting that maternal ET partially mediated the association between attachment to parents and expectations to receive instrumental help from the social network.

As suggested by model 2, Parent attachment had a significant impact on the levels of MET (α path). However, as represented in path β , MET did not have a

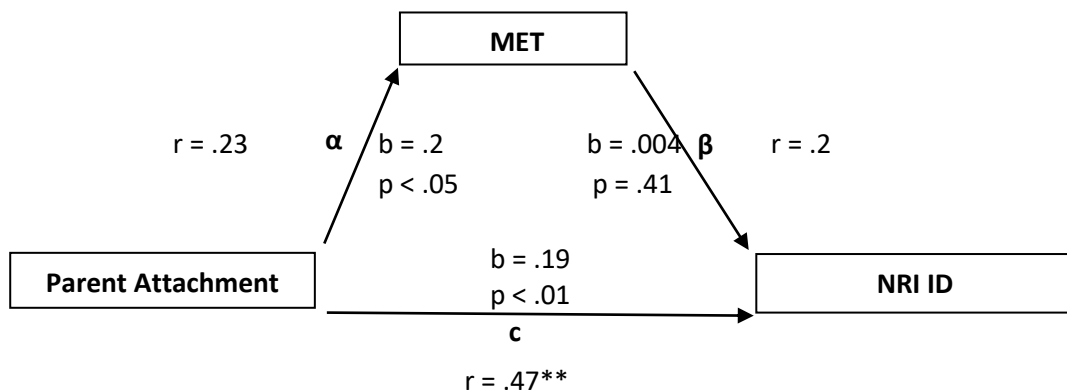
significant impact on the NRI ID subscale. The indirect effect of MET as a mediator on the outcome variable was not significant [$b = .0008(-.0007-.004)$].

Figure 2. Mediation models.

Model 1.



Model 2.



2.5 Discussion

This study sought to explore the relationships between attachment and expectations of helping relationships in the general context of young people's social environments and in the more specific context of therapeutic relationships. Further, the study hoped to help understand the mechanism that underpins said association between attachment and expectations of helping relationships. We suggest that ET may play a mediational role and can explain these relationships. As hypothesized, attachment was found to predict expectations of helping relationships.

In the context of young people's social environment, attachment to parents and peers was found to be associated with expecting to receive more help from the social network and with greater expectations for intimacy in close relationships. Interestingly, unlike attachment to parents, attachment to peers was found to predict expectations for affectionate relationships and expectations of parental relationship quality. These findings highlight the increasing importance and impact of the peer group on young people's life. During adolescence, the peer group gradually replaces the parents as primary attachment figures (Mikulincer & Shaver, 2007). Moreover, research has shown that during adolescence, peer attachment may be even more influential than parent attachment (Liable, Carlo & Raffaelli, 2000).

However, although parental positions usually change during adolescence, they are still extremely important in the young person's life and are not completely relinquished as attachment figures (Allen & Land, 1999). In evidence of that, further examination of the prediction model revealed that a combination of attachment to peers and parents was equally predictive of higher expectations to receive help from the social network and for intimacy in close relationships.

In the more specific context of the therapeutic environment, parent attachment was found to be associated with higher expectations of the therapeutic relationships as well as of the therapeutic process and outcome. Both peer and parent attachment were found to be associated with less negative expectations and perceptions about therapy. Further examination of the prediction model revealed that while peer attachment was a better predictor of less negative therapy expectations, parent attachment was a better predictor of increased positive expectations of the therapeutic relationship.

It may well be that peer attachment is extremely influential in shaping young people's perceptions and negative expectations of therapy. Perceptions of therapy were suggested to be negatively influenced by stigma around mental health among adolescents. In fact, among young people stigma was found to be one of the most important factors to affect help-seeking (Ting & Hwang, 2009). It was further suggested that young people's desire for peer approval contributes to mental health stigma as they may be worried about being judged by their peers for seeking help (Nam & Lee, 2015). This potentially offers an explanation for why young people with higher perceived peer attachment were less likely to have negative perceptions and expectations about therapy.

On the other hand, closer parent attachment was more strongly linked to better expectations of the therapeutic relationship. A successful therapeutic alliance and relationship are widely suggested to be associated with early attachment (Dozier, 1990). A sense of security allows for closeness in relationships and predicts a stronger working alliance (Cassidy & Shaver, 2016). Additionally, the concept of 'transference', which refers to the patient's distorted feelings towards the therapist that are based on past interpersonal experiences, can potentially offer an explanation for the effect parent attachment had on expectations of the therapeutic relationship. The transference relationship with the therapist is impacted by early attachment experiences and conflicts with parents. It may well be that early attachment to a parent contributes not only to the actual therapeutic relationship but to expectations of this relationship as well.

The findings outlined above combined with findings from previous research into attachment and help-seeking (e.g. Wallace & Vaux, 1993; Mikulincer et al., 1993; Shaffer et al., 2006; Moran, 2007), suggest that attachment plays an important

role in shaping an individual's expectations of their social networks as well as their expectations and attitudes towards therapy. Those expectations in turn are suggested to affect their capacity to benefit from social relationships and interactions within their wider social network and in therapeutic encounters.

Findings from the current research also fit well with attachment theory. Internal Working Models, which are considered to be the mechanisms that underpin individual differences in attachment, include expectations and beliefs about the helpfulness of others. As proposed by Bowlby, the founder of attachment theory (1973, 1982), these internal working models are developed during infancy and early childhood and carry into adulthood where they continue to shape an individual's expectations of relationships. A sense of security is formed through repeated positive experiences of the attachment figure as reliable and trustworthy. As a result, the secure individual is more likely to expect others to be available and to develop positive expectations of support, which in turn form the basis for future expectations of any form of helping relationships.

The second aim of this study was to further explore the mechanism that may explain the association between attachment and expectations of helping relationships. However, our hypothesis that ET plays a mediating role was only partially supported by the Epistemic Trust Inventory (ETI) measure. Trust behaviour, as measured by the trust game, was not found to be associated with peer or parent attachment, or with expectations of helping relationships.

Maternal Epistemic Trust (MET), as measured by the ETI, was not found to be associated with expectations of therapy. However, in the context of expectations of help from the social network, MET was found to be associated with parent attachment and with expectations for receiving instrumental aid. Moreover, as shown

by mediation analysis, MET was found to partially mediate the relationship between parent attachment and young people's expectations of receiving instrumental aid from their social network.

The latter finding is in line with Fonagy and Alison's (2014) theory of ET. Epistemic trust is formed and developed in the context of a secure attachment. The securely attached individual is more trustful of others, and less rigid and defensive. This trust then triggers the opening of an epistemic superhighway that is necessary for information exchange, a crucial element of social interactions. Secure individuals with enhanced ET are therefore more open and likely to hold positive expectations of different social interactions and their helpfulness. On the contrary, insecure individuals are less able to relax their epistemic vigilance or to perceive the other as a reliable source of help. They are therefore likely to hold less favourable expectations about receiving help from their social environment.

Alternative explanation

Overall, findings did not support our second hypothesis. The following section considers the main possible explanation for the disconfirmation of the mediational role of ET:

Measures

A measurement error could possibly account for our mediation hypothesis being only partially supported. The relationship between attachment and expectations of helping relationships may have been mediated by ET, but was not captured accurately by the measures used in this study.

The ETI measure aims to capture ET and to examine participants' preferable source of trust (i.e. mother or stranger/professional). However, it should be noted that the measure may also be capturing different constructs. Participants are asked to

set aside their own opinions and judgments. However, it can be presumed that some participants did not fully follow this rule and that the measure therefore captured participants' personal values and moral standards rather than their ET. Moreover, it is possible that participants were not familiar with all the professions that are listed on the ET measure or did not have a full sense of what this profession involves (e.g. janitor). If this was indeed the case, their response to some of the items might have been biased by their limited knowledge, resulting in these items not accurately capturing ET.

Research on ET is an emerging field with a gap in current epistemological literature. We used the ETI measure to assess ET as this is currently the only research tool available to do so. The ETI has been used once before in a study with an adult population and demonstrated good evidence for an association between attachment and ET (O'Connell, 2014). However, its psychometric properties are not yet well-established. Moreover, the ETI has never been used with adolescent population.

The Trust Game (TG) is an established measure that has been used more widely; however, because it was designed as an interpersonal trusting behaviour task that focuses mainly on cooperation behaviour, it does not specifically capture ET. In the context of this study, it is possible that these measurement limitations may have overlooked an existing effect.

It is important to note that the mediation hypothesis was partially supported for the ETI measure but not for the TG, which highlights the importance of considering the differences between the two measures. Whilst the ETI asks participants to evaluate social situations and moral dilemmas and allows participants time to reflect and think, the TG is an instinctual task that requires participants to

quickly respond and adjust their trusting behaviour in response to another person's (i.e. the other player's) behaviour. As a result, it is possible that these measures capture two different aspects of ET. For example, the ETI measure might capture a conscious form of ET, which is perhaps more related to attachment and expectations of helping relationships and therefore plays a mediational role in the association between the two.

Theory

Another possible explanation for the lack of evidence for our second hypothesis is that the underlying assumptions were incorrect and attachment and expectations of helping relationships are not being mediated by ET. It is conceivable that instead of ET, different mechanisms that were not considered for this research better account for the observed relationship between attachment and expectations of helping relationships.

As suggested in the literature review, a number of factors were found to mediate the relationship between attachment and help-seeking. Vogel and Wei (2005) and Cheng, Mcdermott, and Lopez (2015) found psychological distress to mediate the relationship between attachment and intentions to seek help. Cheng et al. (2015) additionally suggested that stigma was a mediator. Shaffer et al. (2006) observed the mediating role of different cognitions such as anticipated risks and benefits from help-seeking intentions. Such mediators may have potentially contributed to the relationship between attachment and expectations of helping relationships in this study. For example, attachment security might have contributed to anticipating more benefits and less risks from help-seeking and therefore increased positive expectations of helping relationships.

Another possible explanation for the relationship between attachment and help expectations may lie in individual differences in information processing. Mikulincer (1997) found secure individuals to have more favourable attitudes towards information processing. Secure individuals were more likely to actively search for new information and rely on new information when making social judgments, and to have greater tolerance for unpredictability than insecure individuals. A secure person also tends to have more confidence in others and to believe that others would help in times of need (Collins & Read, 1990). Perhaps it is this confidence combined with an openness to new information that leads securely attached individuals to have more positive expectations to be helped and be supported by others.

Limitations

Findings from the current research should be interpreted with a number of limitations in mind.

As mentioned above, the main limitation of this study was the use of novel, unstandardized measures. In addition to the ETI measure, the Psychotherapy Expectations and Perceptions Inventory (PEPI) is a newly developed tool without fully established psychometric properties. We chose the PEPI to measure expectations of therapy as no other validated measure was available to assess therapy expectations among young people. Although Stewart et al. (2014) previously used the PEPI and demonstrated adequate reliability and validity, a full account of its psychometric properties has not yet been published.

Another limitation is the cross-sectional nature of this study. Any observed associations must therefore be considered with caution and cannot be used to draw causal inferences. Regarding the mediation analysis, it should be noted that a causal relationship between attachment and expectations of helping relationship that are

mediated by ET cannot be inferred. It may be, for example, that a third variable that is independent from the proposed mediator is responsible for the observed effect between attachment and expectations of helping relationships, or that an effect exists, but in the opposite direction (i.e. help expectations may increase trust which in turn facilitates more secure attachment).

Additionally, findings from this study may not be generalisable to other populations. It is important to note that ethnic minorities were underrepresented in the current study, which mandates further exploration of the association between attachment and help-seeking expectations among minority groups. It may well be that ethnicity and other cultural variables not assessed during this study have contributed to the relationship between attachment, ET, and help expectations.

Moreover, in light of the generalisability of the study result, the lower end of perceptions of attachment quality (i.e. insecure attachment) was also underrepresented. We believe that this was likely due to the clinical population only making up 23% of total study participants. The remaining 77% came from the community sample and were normally developing adolescents who were presumably more likely to demonstrate a more positive quality of attachment (i.e. secure). Therefore, the results of this study may be based on a biased sample and may not be representative of a wide spectrum of attachment quality.

Finally, the differences between the community and clinical samples used in this study should be noted. Although recruiting from both community and clinical samples contributed to the sample's variance and increased the power of this study, it is very likely that these different groups had different help-seeking experiences. The majority of the community sample did not have any previous experience of professional help-seeking, while the clinical sample had different kinds of past and

present help-seeking experiences. Additionally, participants from the clinical sample were at different stages along the help-seeking trajectory: some young people were already receiving therapy while others were about to begin treatment. Therefore, it is likely that the meaning of help-seeking varied between and even within the samples and that these differences impacted the results of this study.

Implications and future research

Based on the limitations discussed above, further standardization of the PEPI must take place before it can be considered a reliable and valid measure to systematically assess young people's expectations of therapy. It would also be beneficial for future research to focus on developing similar tools. Further prospective research is necessary to make more accurate inferences as to the direction of our observed effects. Additional examination of cultural factors that may contribute to the relationship between attachments and help expectations could perhaps offer a more comprehensive model of the observed association.

Existing research established a clear relationship between attachment and expectations of help, and suggests that attachment is a useful framework for broadening our understanding of individual differences in young people's help expectations. However, this area of research is still sparse, especially among young people. Negative help expectations are likely to hinder help-seeking among young people who suffer from mental health problems. Since help-seeking is a fundamental skill and crucial for young people's adjustment and well-being (Lee, 1999), more research is needed to provide a better understanding of help expectations in general and the role of attachment in particular.

Future research could also help clarify the mechanisms that underpin the relationship between attachment and help-seeking. More research into the emerging

field of ET and the development of assessment tools is necessary to provide a clearer understanding of whether the individual's trust in the relevance of new, interpersonal knowledge may offer an explanation of why more securely attached individuals tend to have better help-expectations. Moreover, more research is needed to investigate possible other mechanisms that play a role in the relationship between attachment and help expectations.

Regarding clinical implications, findings from the current research suggest that attachment affects the help-seeking process from the very beginning of intervention efforts. This may have important implications for promoting mental health among young people. Awareness of the effect attachment has on young people's expectations to be helped could potentially contribute to a development of more effective outreach efforts that are tailored to address individual differences in attachment.

Moreover, since attachment is considered stable over time and difficult to change (Vogel and Wei, 2005), it is crucial to better understand any other factors involved in the relationship between attachment and help expectation. With that, more interventions could hopefully be developed that aim to enhance positive help expectations and facilitate the help-seeking process.

Finally, our findings link both parent and peer attachment to support expectations of the social network. Improving clinical interventions that are designed to facilitate social support processes therefore seem of high importance. The growing relevance of peer groups in young people's lives may suggest that increasing mental health awareness and reducing stigma among this age group (e.g. by addressing it in the school context) could be highly beneficial.

Conclusions

The present study aimed to explore the relationship between attachment and expectations of helping relationship and to further evaluate the role ET may play in this relationship.

Findings were consistent with previous research and showed that secure attachment is linked to higher expectations of receiving help in the general context of an individual's social network as well as in the more specific context of therapy expectations. However, the study found only partial and limited support for the role of ET as mediator of the observed relationship. Future research is needed to develop more standardized tool to measure ET and to further explore the mechanisms behind our observations.

Overall, findings from the current research together with those from the literature review, suggest that individual differences in attachment affect the entire process of help-seeking: from the initial stage of perceptions and expectations of help to the stage of intentions to seek help to the stage of actually seeking and engaging with help and support. These findings fit well both with general attachment theory and broader findings about the role attachment plays in the actual therapeutic process and outcome.

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Part Three: Critical Appraisal

Introduction

This critical appraisal reflects on the process of research and the different challenges that arose during conceptualization, preparation and administration of the project. The critical appraisal will offer personal reflections on the research process before addressing more specific issues that arose when conducting research within an adolescent population. It will also reflect on the process of defining and measuring the construct of 'expectations of a helping relationships' as well as focus on some aspects and challenges of carrying out research in a new, emerging field. The final discussion includes a conclusion and directions for future research.

General reflections on the research process

Prior to my training in clinical psychology, I was involved in multiple studies as a research assistant where most of my experience was qualitative in nature. My main role on those projects was to explore subjects' experiences of coping with mental illness. I enjoyed my position as the interviewer and was able to observe how many interviewees, even while sharing difficult experiences, seemed to enjoy being treated as the experts of their own past and responded positively to my questions and interest. In stark contrast to this, the quantitative research I conducted within the context of my doctoral work required an entirely different mind-set and perspective. I soon came to appreciate the numerous advantages of quantitative methods as they allowed more precision in measurement and facilitated the comparison of large numbers of subjects (Baker, Pistrang, and Elliot, 2015). While maintaining an objective, less involved position was challenging at times, it made it easier to reflect on the research process and to use my professional judgment to make important decisions when needed.

Another personal challenge I encountered was separating my roles as a clinician from that of a researcher. Orb, Eisenhauer and Wynaden (2000) confirmed this experience by explaining that clinicians are trained to advise and treat patients and may therefore find it challenging to observe without interfering when assuming the researcher role. This apparent passivity may cause discomfort and stress. When my participants completed measures about sensitive domains such as their mental health and attachment experiences, I sometimes found it difficult and unnatural to not spend more time on exploring those issues and offering advice. It took time for me to learn to temporarily suspend my clinical curiosity, which I very much value when working as a clinician with children and adolescents.

Unlike other research I had been involved in in the past, for the present study I also had to apply for joint ethical approval with two fellow trainees involved in this project. We successfully went through the UCL approval process, but had to apply for an NHS ethics approval as well in order to recruit a clinical sample. Obtaining ethical approval was the most serious challenge for this project. After a lengthy preparation process, our first application received an unfavourable opinion as the research committee panel questioned our capacity to cope with any potential safeguarding concerns. Without a mental health expert on their board, we struggled to make a convincing argument that as part of our trainee work we had already completed multiple safeguarding trainings and had been exposed to a variety of safeguarding issues in clinical settings. As our timeframe narrowed, we had to come together as a team to decide how to best move forward. Although opinions on methodology differed, we all agreed that losing the clinical sample would undermine the quality of this research. We felt invested in our original project and did not want to change our research questions and aims, so decided to submit a new ethical

application. While our excitement over secondary approval was somewhat dampened by the short window it had left us for subject recruitment, it also motivated us to work as efficiently as possible.

To me, the ethics approval process felt like a bureaucratic nightmare that often left me struggling to anticipate the most practical way forward. Since this was already a time-restricted project, it was upsetting to spend the time we had allocated for recruiting young people and analysing results on repetitive paperwork. However, I also took away a valuable lesson on how to work efficiently as a team. All team members were highly supportive of each other throughout the entire process and each contributed as much as they could in their area of expertise. In a way, the time pressure inspired us to work harder than we thought possible and use every opportunity to pull together on the same rope.

Adolescent Population

Another challenge this study faced was the recruitment of young people. For the community sample we were after, it was first decided to contact nine schools that were allocated to UCL as part of the ‘Widening Access to Clinical Psychology’ scheme. These schools have established contacts with UCL, which we hoped could help facilitate recruitment. The research team emailed the key person at each school with an invitation for their young people to participate in our study and gain insight into psychological research. The email briefly outlined the aim and procedure of the research and highlighted that young people would receive £10 per hour for their participation. We offered to provide more details over the phone or in person. Unfortunately, response rates to both initial and follow-up emails were low. When

we did get a response, they were eventually lost to follow-up. We therefore resorted to recruiting young people and their families directly.

Recruitment was even more challenging for the clinical sample. Although the teams at the clinical sites were keen to help us identify young people who met all inclusion criteria, the clinicians at the inpatient unit felt it would be more appropriate to introduce the study to young people themselves and to hand out information sheets (to the patients and their parents if they were under the age of 16). Unfortunately, the busy nature of the inpatient unit made it difficult to arrange testing dates in advance and to keep regular contact with the clinical team. These realities in combination with the extremely tight timeframe for recruitment resulted in a smaller clinical sample than originally anticipated.

Another issue that arose during community data collection was frequent appointment cancellations. Young people seemed to struggle to keep their sessions in mind and often did not show for their scheduled time. Fortunately, arranging appointments with their parents instead proved more helpful and efficient. From the beginning of this study we had decided to establish a rapport with all parents, even if the young person was older than 16 and technically able to give consent independently. It also felt to be good practice to provide parents with information about the study and to ensure that they understood and approved our study procedures. Parents generally responded positively to the project and seemed to support the idea that their children both contributed to an important cause and learned to manage their own money. Many parents also spread the word about our study among their friends and helped us greatly to increase recruitment numbers. Testing location further improved attendance: assessments were conducted at the homes of participants (for the community sample) or at the unit (for the clinical

sample). These familiar environments seemed to relax young people, made testing sessions less anxiety-provoking, and may have even increase the reliability of our data.

Keeping the young participants involved and engaged throughout the entire testing session, which took between 2.5 to 3 hours, posed another challenge to this project. Prior to the onset of the study, we piloted our assessment battery with young people in both clinical and community settings. Although time consuming, results from this pilot study were extremely helpful and highlighted which aspects of the study could be changed to accommodate young people's needs. One of the main issues raised was about the length of the procedure. Participants reported that testing time felt long and advised us to provide breaks whenever needed, which we incorporated into our original protocol. For some participants, the computer task felt boring or frustrating at times, so we decided to pay close attention to the young person's reaction to the computer task and provide prompts and reinforcements when needed. As the study progressed, we learned that younger participants required more encouragements and emphasized positive feedback when testing this age group.

Another main concern associated with the clinical sample was participants' vulnerability. All young people experienced mental health problems and frequently had a history of trauma and abuse. Conducting our research with this population therefore, often also took on a component of holding and containing. To address this need, a clinician who knew the young person well was present during testing to offer support and advice when required. In one situation, a young person was not feeling well during testing. The clinical team helped us manage the situation by calmly advising the young person not to continue the session. The young person was given

the opportunity to complete the research another day, but was still compensated for her time and effort.

Overall, although challenging at times, the experience of working with young people was positive and rewarding. I learned about the importance of being flexible during both the recruitment and the assessment phase, and about balancing reliable methodological practice with adjusting different study aspects to the developmental stage of participants.

The construct of ‘expectations of helping relationships’

My initial aim was to investigate the relationship between attachment, ET and therapy outcomes in young people. Unfortunately, due to the limited timeframe this was not feasible and we decided to instead focus on the period prior to onset of therapy. We now chose to explore how young people’s attachment and ET states may influence their expectancy to be helped by others. Our decision was supported by the fact that expectations were found to have a significant effect on the therapeutic process and outcome (Dew & Bickman, 2005).

Defining the actual construct of expectations about help, however, was not a straight-forward undertaking. Regarding the more specific domain of ‘expectations of therapy’, some authors divide expectations into ‘role expectations’ – the expected behaviours from both client and therapist – and ‘outcome expectations’ – the expectations about therapy being able to create change (Dew & Bickman, 2005). Other authors suggest a more general definition that refers to the sum of anticipatory beliefs client bring into treatment (Nock & Kazdin, 2001).

For this project, we consulted existing literature to help further clarify the definition of the ‘help expectation’ construct. The review highlighted that previous

research has used different terms in relation to expectations. The terms ‘client expectations’ and ‘perceptions’ in particular were used interchangeably (Stewart, Steele & Roberts, 2014). Additionally, some authors discussed help expectations in the more general context of ‘help-seeking’, a term that incorporates a broad definition of individuals who can provide help, including formal figures such as therapists and teachers and informal ones such as friends and relatives (Boldero & Fallon, 1996; Garland & Zigler, 1994).

Keeping in mind that the current research includes young people from both clinical and community settings, I felt that adopting a more general definition that includes young people’s expectations of support from their entire social network and not only therapy would be more appropriate and interesting. The construct was therefore broadened to encompass expectations of different forms of helping relationships, which can be found in clinical, educational and informal social environments and was named ‘expectations of helping relationships’.

After specifying the construct I aimed to measure, I needed to determine an appropriate method to assess it. However, when looking for an ‘expectations of therapy’ measure, I quickly learned that measurements in this area of expectations was greatly underdeveloped and that no ‘gold standard’ measure of expectations existed (Dew & Bickman, 2005). Even smaller number of measures were found for evaluating young people’s expectations of therapy. The existing literature was either interested in the expectations of young people’s parents (Nock & Kazdin, 2001; Shuman & Shapiro, 2002) or employed qualitative methods to explore expectations (Midgely et al., 2012). The tool used in this study was the only tool we could find that had been validated to measure young people’s therapy expectations. The Psychotherapy Expectations and Perceptions Inventory (PEPI) is a new measure

developed by Stewart et al. (2014) that was designed specifically for use in young people. This measure, however, is not well established or broadly used and therefore requires further standardisation and validation.

Another important point to note in the context of exploring young people's expectations of therapy is participant diversity and the wide scope of past and current experiences. Our participants came from both clinical and community samples where some had previously experienced therapy while others were either receiving therapy at the time of testing or had no experience of therapy at all. Dew and Bickman (2005) commented on the problem of timing expectancy assessments. Since expectations refer to anticipatory belief, it seems logical to measure expectations before the onset of any kind of therapy. However, some previous studies assessed expectations when therapy was already in progress (Al-Darmaki & Kivilghan, 1993; Borkovec & Costello, 1993) or at different points in treatment (Otto & Moos, 1974). Dew and Bickman (2005) explained that assessing expectations after having contact with the therapist is different to assessing pure pre-treatment expectations. It is likely that the client's expectations and perceptions change after meeting the therapist and starting therapy. The current research initially aimed to measure expectations (in the clinical sample) at the assessment stage and prior to starting therapy. However, due to our limited timeframe we included participants at all stages of therapeutic intervention. We are aware that broadening recruitment may have skewed our findings accordingly.

In addition, the clinical sample was collected at two different settings, which vary in their setup and therapy they provide. One service was an inpatient unit where most patients have experienced outpatient therapy before and based on their experiences have likely developed different perceptions of therapy. Therapy at the

unit is usually conducted in a traditional sense (i.e. on a weekly basis at the therapist's office), but the therapist can usually also be found on the ward if necessary. The second service, on the other hand, is an outreach service for young people with substance abuse problems. Young people can attend without the parents' knowledge and are encouraged to invite along other substance users – this allows the service to work with the entire network of people patients use substances with. Those differences are very likely to influence and shape participants' current expectations and perceptions of therapy. For example, one of the items on the PEPI states: 'I expect the therapist to reveal my secrets to my parents'. Responses to such items would be expected to vary greatly among those two services.

However, exploring expectations among young people who come from different backgrounds and have different experiences can potentially illuminate different aspects of the help-seeking process. For example, exploring expectations of young people who never had therapy before (usually the non-clinical sample) can improve understanding of barriers to help-seeking. Exploring expectations among young people who have had therapy before or who are about to begin or in the process of therapy can perhaps improve understanding of how those expectations may affect the therapeutic process (i.e. the therapeutic alliance) and outcomes.

Introspectively, my own understanding of expectations of therapy has also changed and developed throughout this research process. In hindsight, it would have been interesting to systematically ask participants about their past experiences of therapy and examine how this may interact with their current expectations and with the different variables explored in the study. Such an exploration would make an interesting area for future research.

Finally, it is important to note that the PEPI asks participants to imagine that they were to start therapy this week. Midgely et al. (2012) interviewed young people about their expectations of therapy and commented that interviewees generally seemed to find it difficult to imagine therapy. This was not only true for those who had never experienced therapy before. Even young people who have had previous experience of therapy struggled to draw on this familiarity when asked to imagine how therapy within a child mental health service would be like. Perhaps the challenge lies in imagining relationship with someone they have never met, particularly in relation to the unknown and potentially anxiety-provoking domain of mental health services. Additionally, symptoms of depression might make it even more difficult to imagine the future and could impact whether individuals carry any therapy expectations at all (Midgely et al., 2012). For our study, this challenge of prospective imagination might have impacted individual responses and should be taken into account when interpreting results.

Research into an emerging field

As the project progressed, my own understanding of the construct of Epistemic Trust evolved and began to inform my work as a researcher and trainee clinical psychologist. During training, I approached my clinical interactions from different therapeutic approaches, but was often left wondering why some patients improved more than others. I speculated about the effectiveness of the different models and tried to detect a pattern in which different approaches worked for different individuals. I also wondered whether a shared mechanism could potentially explain the process of change across different forms of therapy.

ET, I learned, is a mechanism that underpins different learning processes and creates a setting in which new information about the self and the environment can be absorbed (Fonagy & Alison, 2014). ET could therefore potentially be a helpful mechanism to explain the process of change in therapy, which is independent of a specific therapeutic model or approach. Perhaps therapeutic change is not due to one form of therapy being superior to the other, but can rather be tied to the therapeutic relationship itself. Maybe it is this emerging relationship itself that creates a sense of trust and allows the potential for new learning to make a difference.

Research on ET is an emerging field that currently offers no well-established tools to measure it. Taking part in a novel field of research was exciting and interesting, yet frequently raised uncertainty about the research process. Because the available literature is still very limited, important decisions concerning the use of measures could not be based on previous work and recommendations. Application of measures had to be considered carefully and inevitably involved taking risks and adjusting methodology throughout the testing process.

The Epistemic Trust Instrument (ETI) we used to measure ET in adolescents had only been used in adult populations thus far and was not specifically adjusted for our population. It is possible that young people struggled to relate to the moral dilemmas included in the ETI, or did not fully understand some of items on the measure. If this was indeed the case, it could have affected young people's ability to reliably complete the ETI and may have influenced research results.

To address some of these concerns, we paid extra attention to the ETI measure during the piloting stage. In this measure, participants are asked to keep a number of rules in mind throughout the entire questionnaire (e.g. ignore your own

opinions and judgments). Participants reported that it was hard to keep those rules in mind while completing this relatively long measure (the ETI contains 20 items). Based on this feedback, we ensured that the four rules were always visible during completion and encouraged participants to refer back to the rules whenever necessary. Nevertheless, it was hard to tell whether young participants were able to follow those rules and truly set aside their own opinions and judgments. In retrospect, it might have been beneficial to pay even closer attention to this issue and find ways to ensure that participants followed rules throughout the entire study.

Moreover, pilot participants reported that the instructions were somewhat confusing and hard to understand. To address this, we began reading through the instructions together with the participants and encouraged them to ask questions while reassuring them that some of the instructions might be quite complicated to understand. We also completed the first item of the ETI together with the young person to make sure it was sufficiently understood and done correctly.

The extra time we invested in delivering the ETI accurately was hopefully successful in overcoming some of the challenges of using a novel, unstandardized tool. However, before further validation of the tool takes place it is hard to know whether other adjustment should have been made. At the end, researching an emerging field required creativity and reflection, but was also a rewarding experience.

Conclusions

This critical appraisal presented reflections on the research process. I have discussed some of the challenges I encountered when looking for ways to define and measure the construct of ‘expectations of helping relationships’. These may be important points for future researchers to consider. First, the psychometric properties of the existing measure of young people’s expectations and perceptions should be further validated. Additionally, future research should consider developing a broader variety of measures to assess this construct. Finally, it would be interesting to explore how therapy expectations affect the more advanced stages of the help-seeking process such as approaching help, developing therapeutic relationships, and therapy outcome.

I also reflected on the advantages and challenges of conducting research in the emerging field of trust formation. ET is a new and exciting field that can offer a better understanding of the mechanism of change across different forms of therapy. However, more research is needed to better understand this theory and to develop robust measures to study it.

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Appendices

Appendix A: Search terms for literature review

Search Terms Table

Database	Search Terms	Results
PsychINFO	Attachment or Internal Working Models	136
	AND	
	Support seeking or Help seeking behavior or Help seeking attitudes or Attitudes toward* help-seeking or Attitudes toward* counseling or Attitudes towards treatment or Help seeking intentions or Help seeking intent or Treatment seeking	
	And subject heading term:	
	'Help-Seeking Behavior'	
Medline	As above	62
EMBASE	As above	91
Total		289
Duplicates Removed		214

Appendix B: QualSyst checklist

f. Checklist for assessing the quality of quantitative studies

	Criteria	YES (2)	PARTIAL (1)	NO (0)	N/A
1	Question / objective sufficiently described?				
2	Study design evident and appropriate?				
3	Method of subject/comparison group selection <u>or</u> source of information/input				
4	Subject (and comparison group, if applicable) characteristics sufficiently				
5	If interventional and random allocation was possible, was it described?				
6	If interventional and blinding of investigators was possible, was it reported?				
7	If interventional and blinding of subjects was possible, was it reported?				
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias?				
9	Sample size appropriate?				
10	Analytic methods described/justified and				
11	Some estimate of variance is reported for the				
12	Controlled for confounding?				
13	Results reported in sufficient detail?				
14	Conclusions supported by the results?				

Appendix C: Summary table for literature review studies

Summary table of studies' characteristics

Reference	Study design	Attachment measure	Help seeking measure	Participants
Holt (2014.a)	Prospective	Parent form of the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987).	8 items from Karabenick's (2003) help-seeking scale	Emerging Adults (EA) sample: 204 (48% F) first year students from a private liberal arts institution in the Northeastern USA. Mean age was 18.1. Majority of participants were Caucasian (71%). Three fourths of the sample reported that their parents had a college degree.
Holt (2014.b)	Prospective	IPPA	8 items from Karabenick's (2003) help-seeking scale	EA sample: 93 (64% F) first year students from a private liberal arts institution in the Northeastern USA. 68% White, 18% Asian/Asian American, 5% Black/African American, 5% Hispanic/Latino, and 3% Other. Participant mean age was 18.9.
Nam & Lee (2015)	CS	Experience of close relationships (ECR; Brennan, Clark, & Shaver, 1998).	Attitudes Toward Seeking Professional Help Scale (ATSPPHS; Fischer & Turner, 1970)	EA sample: 298 (95 M, 203 F) South Korean undergraduate students. Age range: 18-45.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Larose et al. (1999)	1. CS 2. Prospective	Attachment Style Questionnaire (ASQ; Feeney et al., 1994).	The Network Orientation Scale (NOS; Vaux et al., 1986) The Seeking Help from Teacher subscale of the Test of Reactions and Adaptation in College (SHT/TRAC; Larose & Roy, 1995)	EA samples: 1. 174 (56 M, 118 F) first year students recruited from a population of urban college students in Quebec City, Canada. Average income was in the \$40,000–\$49,000 CAN range for fathers and in the \$20,000–\$29,000 CAD range for mothers. Participant mean age was 18.9. Mean level of education was 13.5 years for fathers and 13.4 years for mothers. All participants were native French-speaking Caucasians. 2. 92 (26 M, 66 F) participants recruited from two different colleges that offered a volunteer mentoring programme to students at high academic risk. Participant mean age was 17.9. Average income was in the \$30,000–\$39,000 CAD range for fathers and in the \$10,000–\$19,000 CAD range for mothers. Mean level of education was 12.0 years for fathers and 11.9 years for mothers.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Turan et al. (2014)	CS	Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991)	Attitudes towards Seeking Psychological Help-Shortened Scale (ASPH-S; Turkum, 2001).	EA sample: 589 students (278 F, 308M) from nine universities in Ankara and Istanbul via convenient sampling method. Participant mean age was 22.43.
Kealy et al. (2016)	CS	ECR	The Readiness for Psychotherapy Index (RPI; Ogrodniczuk, Joyce, & Piper, 2009)	Adults sample: 92 (71% F) adults who had been admitted for a Surrey Mental Health outpatient assessment and underwent a subsequent treatment programme in Greater Vancouver, British Columbia. Participant mean age was 37. 40% were unemployed, and 21% had alternative circumstances (e.g. student or parent).
Cheng et al. (2015)	CS	ECR	Intentions of Seeking Counselling Inventory (ISCI; Cash, Begley, McCown & Weise, 1975).	EA sample: Southwest American sample of 1,682 college students (65% F) between the ages of 18 and 25. The majority of participants were Caucasian (42.4%) or Latino (41.3%).

Reference	Study design	Attachment measure	Help seeking measure	Participants
Vogel & Wei (2005)	CS	ECR	ISCI	EA sample: 355 (118 M, 237 F) undergraduate students from a psychology class in a Midwestern American university. The majority of participants were Caucasian (85%).
Shaffer et al. (2006)	CS	ECR	ATSPPH ISCI	EA sample: 821 (53% F) undergraduate students in a psychology course at a large Midwestern university. The majority of participants were Caucasian (91%), which is representative of the university's overall population.
Moran (2007)	CS	RQ	The General Help-Seeking Questionnaire (GHSQ; Ciarrochi & Dean, 2001)	Adolescent sample: 112 (71 M, 38 F) participants in Year 10 (age range 14-15) from a London state secondary school. 61% identified as Asian, 18% as White, 14% (15) as Black or Black British, 6% (7) as Mixed and 1% (1) as Other.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Lopez et al. (1998)	CS	RQ	Willingness to Seek Counselling Questionnaire (WSCS; based on Solberg et al., 1994) ATSPPHS	EA sample: 253 (95 M, 157 F) college students from undergraduate education and psychology courses at a large Midwestern American University. Participant ages ranged from 17 to 48. The majority of participants were Caucasian (78%).
Mikulincer et al. (1993)	CS	Hazan and Shaver's description of how people typically feel in close relationship (HS; 1987)	The Ways of Coping Checklist (WOSC; Folkman & Lazarus, 1980)	EA sample: 140 (77 M, 96 F) undergraduate students from Bar Ilan University, Israel between the ages of 20 to 37.
Mikulincer & Florian (1995)	Prospective	HS	WOCS	EA sample: 92 single males who were 18 years old at the beginning of their compulsory 4-month long intensive combat training in the Israeli Defence Forces (IDF). 89% were from urban areas and 90% completed high school.
R. DeFronzo et al. (2001)	CS	Relationship Scale Questionnaire (RSQ: Griffin & Bartholomew, 1994)	Stress & Social Feedback Questionnaire (SSFQ: Panzarella & Alloy, 1997).	EA sample: 265 (80 M, 185 F) undergraduate students from an urban American university.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Charles & Charles (2006)	CS	RQ	WOSC	EA sample: 34 (10 M, 24 F) undergraduates who attended University of Michigan psychology courses and had experienced sibling loss. Mean age was 18.35. 26 participants were Caucasian, 6 were African American, and 2 were Asian.
Ognibene & Collins (1998)	CS	RSQ	WOSC	EA sample: 81 (40 M, 41 F) participants from an undergraduate psychology course.
Shirk et al. (2005)	CS	Maternal Expectations scale (MES; Shirk et al., 1999)	Self-Report Coping Scale (SRCS; Causey & Dubow, 1992).	Young Adolescent sample: 168 (70 M, 98 F) eighth graders between the ages of 12 and 15, recruited from three middle school in urban and suburban areas in the Rocky Mountains West states. The majority of participants were of European American descent (79.6%). The sample was mainly comprised of middle-class families.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Gaylord- Harden et al. (2009)	Prospective	IPPA	Children's Coping Strategies Checklist (Program for Prevention Research, 1999)	Adolescent sample: 393 participants (55% F) between the ages of 10-16 were recruited from seven urban American public schools as part of a larger study about the impact of stressful life experiences on low-income adolescents. 70% of participants identified as African American.
Seiffge-Krenke & Beyers (2005)	Prospective	Adult Attachment Interview (AAI; Main & Goldwyn, 1985/1998).	CASQ (Seiffge-Krenke, 1995)	112 individuals (64 F, 48 M) participated in all five stages of this study. Mean age at time point one was 14.05 years. The sample was matched for the overall German population (e.g. socioeconomic status and education).
Larose & Bernier (2001)	Prospective	AAI	The Test of Reactions and Adaptation in College (TRAC; Larose & Roy, 1995)	Adolescent sample: 62 (31 M, 31 F) participants between 16 and 17 were randomly chosen from a larger study on adjusting to college. Average parental income ranged from \$10,000 to \$19,999 USD for mothers and from \$40,000 to \$49,999 USD for fathers. Level of education averaged 13.1 years for the father and 12.6 years for the mother.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Moked & Drach Zahavy (2016)	Prospective	Self-Reliance Inventory II (Daus & Joplin, 1999).	Support seeking (Korabik et al., 2003)	EA sample: 187 (79% F) nursing students from two major universities in Israel. Participant ages ranged from 22 to 50. 50% of participants were Jewish, 32% Muslim, and 17% of other faith.
Caspers et al. (2006)	CS	AAI	The Semi-Structured Assessment for the Genetics of Alcoholism – II (SSAGA-II; Bucholz KK et al., 1994).	Adult sample: 208 (approximately 53% F) participants recruited as part of an ongoing longitudinal adoption study. Ages ranged from 24 to 66. The majority of participants were Caucasian (92%). Average household income was \$40,000 to \$49,999 USD per year.
Riggs et al. (2012)	CS.	AAI	Mental health survey (Riggs et al., 2012).	Adult sample: 120 predominantly Caucasian participants recruited from a larger longitudinal study that investigates transition to parenthood and family relationships. Ages ranged from 16 to 41. Median family outcome was \$30,000 to \$45,000 USD.

Reference	Study design	Attachment measure	Help seeking measure	Participants
Armstrong (2015)	Prospective	Berry, Wearden, Barrowclough, & Liversidge (2006)16 items scale	Support seeking daily dairy	EA sample: 170 (76M, 94F) undergraduate students between the ages of 18 and43 (M = 20.12).
Greenberg & McLaughlin (1998)	CS	Early Parental Attachment- Hazan and Shaver's description of how people typically feel in close relationship (HS; 1987). Current attachment to non-parental others- RQ	COPE inventory, (Carver et al., 1989)	EA sample: 157 (107 F, 50 M) students enrolled in one of eight social science courses in a large public university in Western America. Participant ages ranged from 18 to 22. Participants were 49.4% Caucasian, 26.9% Asian American, 7.7% Hispanic or Latino, 7.1% Pacific Islander, 3.8% African American, and 5.1% Others. This is representative of the overall university student population.

- Studies are presented according to the order of appearance in the results section

Appendix D: QualSyst Ranking

Item Number	1	2	3	4	8	9	10	11	12	13	14	Score
Gaylord- Harden et al. (2009)	2	2	2	2	2	2	2	2	1	2	2	0.95
Kealy et al. (2016)	1	2	1	2	2	1	2	0	1	1	1	0.63
Larose et al. (1999)	2	2	2	2	2	2	2	2	2	2	2	1
Turan & Erdur-Baker (2014)	1	2	2	2	2	2	2	2	2	2	2	0.95
Shaffer et al. (2006)	2	2	2	2	2	2	2	2	1	2	2	0.95
Holt (2014.a)	2	2	2	2	1	2	2	2	2	2	2	0.95
Holt (2014.b)	2	2	2	2	1	1	2	0	2	1	1	0.72
Defronzo et al. (2001)	2	2	0	0	1	2	1	2	2	2	2	0.72
Greenberger & S. McLaughlin (1996)	2	2	1	2	2	2	2	0	1	2	2	0.81
Armstrong & Kammrath (2015)	1	2	2	1	2	2	2	0	1	2	2	0.77
Moked & Drach-Zahavy (2015)	2	2	2	2	2	2	2	2	2	2	2	1
Ognibene & Collins (1998)	2	2	2	1	2	0	2	0	1	2	2	0.72
Larose & Bernier (2001)	2	2	2	2	2	1	2	0	2	2	2	0.86
Seiffge-Krenke & Beyer (2005)	2	2	0	2	2	2	2	2	2	2	2	0.9
Lopez et al. (1998)	2	2	2	2	2	2	2	0	1	2	2	0.86
Moran (2007)	1	2	1	2	2	1	2	2	2	2	2	0.86
Nam & Lee (2015)	1	2	2	1	2	2	2	2	1	2	2	0.86

Cheng et al. (2015)	2	2	2	2	2	2	2	2	1	2	2	0.95
Charles & Charles (2005)	2	2	2	2	2	0	2	0	1	1	1	0.68
Vogel & Wei (2005)	2	2	2	2	2	2	2	2	1	2	2	0.95
Mikulincer & Florian (1995)	2	2	2	1	2	1	2	2	1	2	1	0.81
Mikulincer et al. (1993)	2	2	1	1	2	2	2	2	1	2	2	0.86
Shrik et al. (2005)	2	2	2	2	2	2	2	0	2	2	2	0.90
Caspers et al. (2006)	2	2	1	2	2	2	2	2	2	2	2	0.95
Riggs et al. (2012)	2	2	2	2	2	1	2	0	1	2	1	0.81
Item Mean	1.8	2	1.64	1.72	1.88	1.6	1.96	1.2	1.44	1.88	1.8	

Appendix E: Summery of main findings for literature review studies

Table of Main findings of studies

Reference	1. Does a relationship exist between attachment and help seeking?			2. What are the mediators of this relationship?	3. What are the moderators of this relationship?
	Help-seeking attitudes	Help-seeking intentions	Help seeking behaviours		
Holt (2014.a)	Secure (+) Correlational analysis showed that parental attachment quality was positively linked with academic help-seeking attitudes ($r = .29$, $p < .01$)				
Holt (2014.b)	Secure (+) Correlational analysis showed that parental attachment quality was positively linked with academic help-seeking attitudes ($r = .29$, $p < .001$)				
Nam & Lee (2005)	Anxiety (+) (ns)			Public stigma was	

	<p>Avoidance (-) (ns)</p> <p>Chi-squared tests showed a non-significant association between attachment and help-seeking. Anxious individuals were more likely to have positive help-seeking attitudes ($b = .12$), whereas those with attachment avoidance were less likely to have positive help-seeking attitudes ($b = -.08$).</p>			<p>found to mediate the link between anxious attachment avoidance and help-seeking.</p> <p>Self-stigma was found to mediate the link between attachment anxiety and help-seeking.</p>	
Larose et al. (1999)	<p>1. Anxiety (-)</p> <p>Avoidance (-)</p> <p>Chi-squared tests showed that both attachment anxiety ($b = -.25$) and avoidance ($b = -.86$) were</p>				

	<p>negatively associated with students network orientations [$b = -25$, $\chi^2 (1, 174) = 10.85$, $p < .001$], which in turn accounted for 47% of the variance in seeking help behaviours from a teacher.</p> <p>2. Avoidance (-)</p> <p>Chi-squared tests showed that attachment avoidance was negatively related to network orientation [$b = -.63$, $z = -2.64$, $p < .01$], which in turn accounted for 23% of the variance in help-seeking behaviours from a teacher.</p> <p>Attachment anxiety was not significantly related to network orientations</p>				
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Turan et al. (2014)	Attachment security was linked to help-seeking attitudes. Different patterns emerged for males and females.				<p>Regression analysis (conducted separately for male and females) found gender to moderate the relationship between attachment and help-seeking attitudes.</p> <p>Men- Secure, Avoidance > Anxiety</p> <p>Men with positive self-model (i.e. secure, avoidant) were found to have more positive help-seeking attitudes ($b = .11, p < .05$)</p> <p>Women- Secure, Anxiety > Avoidance</p> <p>Women with positive other models were found to have more positive help-seeking attitudes ($b = .26, p <$</p>
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					.05)
Kealy et al. (2016)	<p>Anxiety (+ distress)</p> <p>Avoidance (- openness)</p> <p>Regression analysis showed that attachment anxiety was positively linked with distress about psychotherapy and accounts for 7% of the variance ($F = 4.36$, $p = .016$)</p> <p>Attachment avoidance was negatively linked with openness to psychotherapy and accounted for 13% of the variance ($F = 6.62$, $p = .002$)</p>				
Cheng et al. (2015)		<p>Anxiety (+)</p> <p>Chi-squared</p>		Psychological distress and self-stigma were found to	

		<p>analysis showed that attachment anxiety directly predicted help-seeking intentions ($b = 0.2$, $p < 0.001$)</p> <p>Attachment avoidance was not found to be significantly related to help-seeking intentions.</p>		mediate the relationship between attachment anxiety and help-seeking.	
Vogel & Wei (2005)		<p>Anxiety (+)</p> <p>Avoidance (-)</p> <p>Chi-squared testes showed that Individuals with attachment anxiety were more likely to</p>		Perceived social support and psychological distress were found to mediate the relationship between attachment anxiety and help-seeking intentions.	

		<p>seek help [b = 0.17, Z = 2.24 p < .05] whereas those with attachment avoidance were less likely to seek help [b = -.25, Z = -3.76 p < .001]</p>		<p>Perceived social support and psychological distress were found to mediate the relationship between attachment avoidance and help-seeking intentions.</p>	
Shaffer et al. (2006)		<p>Anxiety (+)</p> <p>Chi-squared tests showed that attachment anxiety was associated with more increased intentions to seek help (b = .15, Z = 4.84 p < .001)</p> <p>Attachment avoidance was not significantly directly associated to help-seeking intentions</p>		<p>Anticipated risk, anticipated benefits and attitudes towards seeking help were found to mediate the link between attachment and help-seeking intentions.</p>	

Moran (2007)		<p>Secure > Insecure</p> <p>T-test showed that secure individuals ($M = 4.32$) were more willing to seek help than insecure (3.56) individuals [$t(96) = -2.04, p < 0.05$]</p> <p>Anxiety, Fearful > Dismissive (ns)</p> <p>One-way Anova test showed a non-significant trend towards anxious ($M = 4.11$) and fearful ($M = 3.58$) individuals being more likely to seek help than dismissive individuals ($M = 3.20$). $F(3,94) = 2.39, p < 0.07$</p>			
Lopes et al. (1998)		<p>Positive other model (Secure,</p>			

		<p>Anxiety) > Negative other model (Avoidant)</p> <p>*Supported only for the WSCS</p> <p>One-way Anova test showed that individuals with secure and anxious attachment were found to have more positive attitudes towards help- seeking than those with avoidant attachment [F (1,241) = 5.18].</p>			
Mikulincer et al. (1993)			<p>Secure > Avoidance, Anxiety</p> <p>One-way Anova test showed that individuals with secure attachment</p>		

			(M = 3.20) used more support seeking than individuals with avoidant (M = 2.93) and anxious (M = 2.89) attachment [F(2, 120) = 3.94, p < .05].		
Mikulincer et al. (1995)			Anxious > Avoidance One way Anova showed that secure (M = 2.83) and anxious (M = 2.78) people used more support-seeking coping strategies than avoidant people (M = 2.24) [F(2, 89) = 7.08, p < .01].		
Defronzo et al. (2001)			Secure > Avoidance 2X2 Anova test showed that individuals with		

			secure attachment engaged in more help-seeking behaviour than those with avoidant attachment style in response to a common stressor [$F(2,182) = 7.685, p < .001$].		
Charles & Charles (2006)			Secure > Insecure Independent t-test showed that secure individuals were more likely to use support seeking than insecure individuals for coping with sibling loss [$t(30) = 1.84, p < .05$; $t(32) = 1.962, p < .05$] for coping with general stressors.		
Ognibene & Collins (1998)			Secure, Anxiety > Avoidance	Regression analysis showed that	

			One-way Anova showed that individuals with secure ($M = 0.45$) and anxious ($M = 0.18$) attachment were more likely to seek support than those with avoidant dismissive ($M = -.38$) and fearful ($M = -.27$) attachment styles [$F(3, 77) = 4.71, p < .01$].	perceived social support from family and friends mediated the link between secure attachment and support-seeking, but not between anxious attachment and support-seeking [$F(4, 76) = 15.53, p < .001$].	
Shirk et al. (2005)			Secure (+) Regression analysis showed that individuals with more negative maternal representations reported less support-seeking than those with more positive representations [$b =$		

			0.49, $F(1,165) = 51.58$, $p < .001$].		
Gaylord- Harden et al. (2009)			Secure (+) Chi-squared tests showed that maternal attachment predicted higher levels of support-seeking [$\chi^2 (1) = 0.21$, $p = .65$].		
Seiffge-Krenke & Beyers (2005)			Secure > Anxiety, Avoidance Repeated measures MANOVA test showed that secure individuals showed greater gains in support-seeking coping strategies over time than insecure individuals [$F(8, 424) = 3.02$, $p < .01$].		
Larose et al. (2001)			Anxiety (-)		

			Avoidance (-) Correlational analysis showed that both attachment anxiety ($r = -.27, p < .05$) and avoidance ($r = -.30, p < .05, r = -.31, p < .05$) were related to difficulties in seeking help from a teacher.		
Moked & Drach Zahavy (2016)			secure (-) Regression analysis showed that only secure attachment was significantly and negatively linked to support-seeking [$b = -.015, p = .03$].		
Caspers et al. (2006)			Avoidance < Earned Secure, Anxious Logistic regression		

			showed that dismissing individuals were less likely to report speaking to a professional ($\chi^2 (1) = 6.772, p < .009$) or participating in out-patient treatment ($\chi^2 (1) = 2.995, p = .084$) than anxious or earned secure individuals, despite the presence of substance abuse problem.		
Rigger et al., (2012)			Avoidance < Anxious, Secure Chi-squared analysis showed that avoidant adults reported less experience in some form of therapy [χ^2		

			(2, 119) = 6.78, $p < .03$] and couples therapy [χ^2 (2, 119) = 6.62, $p < .04$] than anxious and secure individuals. Secure adults reported the highest rates of previous therapy (n = 59) and anxious (n = 12) adults were midway between the secure and avoidant groups (n = 6).		
Armstrong et al., (2015)			Regression analysis showed that: Avoidance (-) Individuals with attachment avoidance sought less support overall (from fewer support providers) ($r = -.85$, $p < .05$). This affect was		

			<p>present for breadth ($r = -.13, p < .05$) but not for depth.</p> <p>The effect of attachment avoidance on support seeking was stronger when issues were more severe [$b = -.03, t(170) = -2.06, p = .04$] or had instrumental component [$b = -.13, t(170) = -2.2, p = .03$].</p> <p>Anxiety (-)</p> <p>Attachment anxiety was not found to be significantly linked with support-seeking, but only when issues had an emotional component [$b = -.1,$</p>		
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			t(170) = -2.56, p = .01].		
Greenberg & McLaughlin (1998)			<p>Secure (+)</p> <p>Early and adult attachment security was linked to seeking emotional and instrumental support.</p> <p>Different pattern emerged for males and females.</p>		<p>Regression analysis conducted separately for males and females showed that gender moderated the relationship between attachment and help-seeking.</p> <p>For males, current attachment security (b = .31, p < 0.5) and early attachment to father (b = .31, p < .05) were linked to seeking emotional support.</p> <p>Early attachment to mother (b = .3, p < .05) and father (b = .3, p < .05) was linked to seeking instrumental support.</p> <p>For females, current attachment (b = .31, p <</p>

					0.5) was linked to both seeking instrumental and emotional help.
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- Studies are presented according to the order of appearance in the results section

Appendix F: Joint project Statement

Joint Thesis Statement

This thesis was part of a joint project carried out with two fellow trainees on the DclinPsy course (Greisbach, 2017; Draper, 2017). All trainees were equally involved in the following stages of this project: application for ethical approval, data collection (trainees collected data from different settings), and data recording.

Regarding research topics, Greisbach (2017) focused on trauma and epistemic trust while Draper (2017) focused on epistemic trust and symptoms of borderline personality disorder. Data analysis and write-up were completed separately and independently.

References

- Greisbach, J. (2017). The impact of early adversity and trauma on adolescent's epistemic trust. *Unpublished manuscript*.
- Draper, E. (2017). Exploring the relationship between epistemic trust and borderline personality disorder in adolescents. *Unpublished manuscript*.

Appendix G: Participants information sheets for young people under the age of 16



Epistemic Trust and Learning in Adolescence

INFORMATION FOR YOUNG PEOPLE

Invitation and brief summary

We would like to invite you to join a research project. We want to learn more about how teenagers learn and what makes learning easier or harder. We are specifically looking at epistemic trust, which means an openness to learn from others. We are looking at how difficult situations and mental health in childhood may lead to people being less trusting of things that they are told and therefore find it more difficult to learn new information. We are also looking at how trust affects young people's expectations of helping relationships. This is important to us because the information that we get from this project might help us understand the process of learning and help people in the future.

What would taking part involve?

Before meeting we will ask half of the young people joining the project to email the researcher a photograph of their mother, so we can include it in a section of the computer task.

We will meet you at **name of service** and your key worker will introduce us. We will ask you to sign a form, complete some computer tasks, fill in some questionnaires and then do a short activity. Each of these things are described below.

- **The form**

The assent form shows that you agree to take part in the study.

- **The computer tasks**

You will be asked to play some games on a computer, these involve:

- Trading coins with the computer
- Making decisions whether to move towards or away from different objects
- A dilemma task - the purpose of this task is to look at how people make decisions in a dilemma situation, where different people may act in different ways. Before you begin playing each game, the researcher will go through it with you to make sure you understand what you're doing.

- **The questionnaires**

There are questions about:

- Your behaviour and how you are feeling
- How you get on with friends and family
- Difficult situations you may or may not have experienced
- Your expectations of helping relationships

The questionnaires we will ask you to complete are the Strength and Difficulties Questionnaire, Reflective Functioning Questionnaire for Youth, The Inventory of Parent and Peer Attachment Revised questionnaire, The Borderline Personality Disorder Features Scale for Children, Childhood Trauma Questionnaire, the Childhood Traumatic Events Scale, the Network of Relationship Questionnaire Manual, Psychotherapy Expectation & Perception Inventory, and the Child Rejection Sensitivity Questionnaire.

- **The short activity**

We would like to give you some words and ask you what they mean. For example, words that describe animals and words that describe feelings, such as anger. There is also another short activity, like a puzzle. The short activities have been taken from the Wechsler Abbreviated Scale of Intelligence.

It is important to note that this is **NOT** a test.

All this should take around 2-3 hours (with breaks). If you decide that you want to stop before all the different tasks are finished then you can.

We would like to say thank you for helping us by giving you a £30 voucher for completing the tasks.

What are the possible benefits of taking part?

If you do decide to participate you will be helping us to understand the part trust plays in learning. This may help other people in the future. You may find some of the tasks enjoyable to complete.

What are the possible disadvantages and risks of taking part?

The research is not intended to be upsetting. But, if you do find it stressful or upsetting we will give you information about who you can contact for support.

Rules that we must follow

There are a few things for you to know before you decide whether or not to take part in this study. We have to follow some important rules to make sure that people who help us are treated well and are safe:

(1) Consent or agreeing to take part in the study

- You do not have to agree to take part if you do not want to. You are completely free to decide whether or not you want to take part in the study.
- If you decide you would like to take part in the study both you and your parent or carer have to agree
- **If you do agree to take part, you can change your mind and stop at any time, without giving a reason. This will not affect any support you are receiving. Your decision not to take part or to withdraw from the study will override the wishes of your parent or carer.**

(2) Confidentiality: keeping what you tell us private

The information you give is private. Nothing you say will be told to anyone outside the research team, except in three circumstances:

- You tell us that you or another person are planning to seriously harm a specific person.
- You tell us that you or another young person is at risk of harm.
- We may inform your mental health worker if we are concerned about your mental health.

If it was necessary to take any of the above steps, this will be discussed with you first.

Further supporting information

How will my information be kept confidential?

We will keep all the information that you give us private (confidential). You will be given an ID number (e.g. 001) so your name will not be on any of your answers. All information stored on the computer from the computer task will be filed under this ID number. All data gathered through the questionnaires will also be filed under the ID number and will be securely stored in a locked filing cabinet at University College London. No one will have access to the key to this code other than the researchers. The documentation linking your name to the ID codes will be stored separately from the data.

Data will be stored in accordance with the Data Protection Act 1998. Data will be stored for up to 3 years following completion of the study. The information will not be shared with anyone (e.g. school) and it will be used only for this project. Once the project is finished we will happily tell you what we have learnt.

What will happen to the results of the study?

The report will be written about the results of the study. In that report, no one could identify you, or your parent or carer. In other words, we can guarantee that information about you will be secret and private because we talk about groups not the individual.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect you. This study has been reviewed and given favourable opinion by **insert name** Research Ethics Committee (Project ID Number): **(number)**

How have young people been involved in this study?

Young people have provided consultation to the research project by reviewing materials, planning how to present the questionnaires and computer tasks to young people and making adaptations to the questionnaire pack and computer tasks.

Who is organising and funding the study?

Doctoral trainees at the Department of Clinical, Educational and Health Psychology at University College London have set up the project. Professor Peter Fonagy and Dr Tobias Nolte are supervising the research. The research is being funded by University College London and is an educational project.

What if something goes wrong?

If you have any worries about how this study is being run, you should ask to speak to the researcher who will do their best to answer your questions. If you would like to contact someone outside the team you can do this through the Research Governance Sponsor, University College London (UCL). You can write to Joint UCLH/UCL Biomedical Research Unit, R&D Directorate (Maple House), Rosenheim Wing,

Ground Floor, 25 Grafton Way, London, WC1E 5DB quoting reference 16/0021. All communication will be in confidence.

If something does go wrong and you are harmed then you may have grounds for a legal action for compensation against University College London (UCL).

Thank you for reading ☺

We will contact you shortly to answer any questions and discuss whether this is a project that you would like to join.

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

Appendix H: Participants information sheets for parents



Epistemic Trust and Learning in Adolescence

INFORMATION FOR YOUNG PEOPLE

Invitation and brief summary

We are asking you to help us with a study that we are doing to learn about how teenagers learn and generalise new pieces of information. We are telling all teenagers who attend **name of service** about this project.

We want to learn more about how adolescents learn and what makes learning easier or harder. We are specifically looking at epistemic trust, which refers to an openness to learn from others. We are looking at how difficult situations and mental health in childhood may lead to people being less trusting of things that they are told and therefore find it more difficult to learn new information. We are also looking at how trust influences young people's expectations of helping relationships. This is important to us because the information that we get from this project might help us understand the process of learning and help people in the future.

Do I have to take part?

As a legal guardian of your child you are the person who must legally consent on their behalf. If you do not wish your child to participate then that will be respected and we will not contact you or your child about this project in the future. However even if you consent, if your child does not want to participate then that will be respected and they will not be approached to participate in this project in the future. There are no consequences for not participating.

What would taking part involve?

Before meeting we will ask half of the young people joining the project to email the researcher a photograph of their mother, so we can include it in a section of the computer task. We may ask for a photo as we are interested to see whether the presence of the image affects how young people learn a new task.

We will meet your child at **name of service** and their key worker will introduce us. Your child will be asked to sign a form to show that they have agreed to take part, complete some computer tasks, fill in some questionnaires and then do a short activity. Each task is described below in more detail.

- **The computer task**

Your child will be asked to play a game on a computer where they will be trading coins with the computer. Then they will play a different game that involves making decisions about whether to move towards or away from different objects. The last section is a dilemma task – the purpose of this task is to look at how people make decisions in a dilemma situation. The dilemmas will contain a mixture of moral and amoral situations. Before they begin playing each game, the researcher will go through it with them to make sure they understand and answer any questions.

- **The questionnaires**

Your child will be asked to complete a questionnaire pack that the researcher will offer to read to them and complete together. The pack includes questions about their behaviour, mental health, how they get on with friends and family, difficult situations they may or may not have experienced and their expectations of helping relationships.

The names of these questionnaires are the Strength and Difficulties Questionnaire, Reflective Functioning Questionnaire for Youth, The Inventory of Parent and Peer Attachment Revised questionnaire, The Borderline Personality Disorder Features Scale for Children, Childhood Trauma Questionnaire, the Childhood Traumatic Events Scale, the Network of Relationship Questionnaire Manual, Psychotherapy Expectation & Perception Inventory, and the Child Rejection Sensitivity Questionnaire.

- **The short activity**

The activities include asking the meaning of words. For example, words that describe animals and words that describe feelings, such as anger. There is also another short activity, like a puzzle. The short activities have been taken from the Wechsler Abbreviated Scale of Intelligence.

The above tasks will take approximately 2-3 hours (with breaks).

It is important to note that this is **NOT** a test.

If they decide that they want to stop before all the different tasks are finished then they can.

We would like to show your child our appreciation for agreeing to participate by offering them a £30 voucher for completing the tasks.

What are the possible benefits of taking part?

If your child does decide to participate they will be helping us to understand the part trust plays in learning. This may help other people in the future. Your child may also find completing some of the activities enjoyable.

Are there any risks to you if you take part in the research?

The research is not intended to be upsetting. However, if you or your child do find it stressful or are upset by it we will provide you with information on who you can contact for support. They can also stop participating at any point during the research.

Rules that we must follow

There are a few things for you to know before you decide whether or not you would like your child to take part in this study. When running studies, there are some important rules we have to follow to make sure that people who help us are treated well and not harmed in any way. Here are those rules:

(3) Consent

First, you should know that your child does not have to agree to take part, if they or you do not want them to. In other words, this is voluntary. If your child does not take part, it will not disadvantage them in any way. If they do agree to take part, you or your child can change your mind and withdraw consent at any time and without giving a reason. This will result in no negative consequences and it will not affect any support you or your family are receiving. If your child decides not to consent or chooses to withdraw consent at anytime their wishes will be respected and override any consent given by yourself.

(4) Confidentiality

Secondly, you should know that all the information your child gives is confidential. All data will be collected and stored in accordance with the Data Protection Act 1998. Nothing you or your child says will be told to anyone outside the research team, except in three circumstances:

- We would have to tell the police or another relevant agency if we were told that someone was planning to seriously harm a specific person.
- We would also have to tell the police or another relevant agency if we were to learn that a person under the age of 18 was currently at risk.
- We may inform your child's mental health worker if we are concerned about their mental health.

If it was necessary to take any of the above steps, this will be discussed with the young person.

Further supporting information

How will our information be kept confidential?

All the information that your child provides will be treated confidentially. Your child will be assigned an ID number (e.g. 001) and they won't be identified by name to anyone. The information will not be shared with anyone (e.g. school) and it will be used solely for this project. Once the project is finished we will happily give you a report of our findings if you are interested.

What will happen to the results of the study?

The report will be written about the results of the study. In that report, the results will be presented in such a way that no one can identify the young person or you. In other words, we can guarantee that information will be anonymous because we talk about groups not the individual.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by **insert name** Research Ethics Committee (Project ID Number): **(number)**

How have young people been involved in this study?

Young people have provided consultation to the research project by reviewing materials, planning how to present the questionnaires and computer tasks to young people and making adaptations to the questionnaire pack and computer tasks.

Who is organising and funding the study?

Doctoral trainees at the Department of Clinical, Educational and Health Psychology at University College London have set up the project. Professor Peter Fonagy and Dr Tobias Nolte are supervising the research. The research is being funded by University College London and is an educational project.

What if something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do their best to answer your questions. If you have any concerns and would like to contact someone outside the team you can do this through the Research Governance Sponsor, University College London (UCL). You can write to Joint UCLH/UCL Biomedical Research Unit, R&D Directorate (Maple House), Rosenheim Wing, Ground Floor, 25 Grafton Way, London, WC1E 5DB quoting reference 16/0021. All communication will be dealt with in strict confidence.

If in the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against University College London (UCL).

Thank you for reading ☺

We will contact you shortly to answer any questions and discuss whether this is a project that you would like to join study.

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

t.nolte@ucl.ac.uk

Appendix I: Participants information sheets for young people above the age of 16



Epistemic Trust and Learning in Adolescence

INFORMATION FOR YOUNG PEOPLE

Invitation and brief summary

We would like to invite you to join a research project. We want to learn more about how teenagers learn and what makes learning easier or harder. We are specifically looking at epistemic trust, which means an openness to learn from others. We are looking at how difficult situations and how people feel in childhood may lead to people being less trusting of things that they are told and therefore find it more difficult to learn new information. We are also looking at how trust influences young people's expectations of helping relationships. This is important to us because the information that we get from this project might help us understand the process of learning and help people in the future.

What would taking part involve?

Before meeting we will ask half of the young people joining the project to email the researcher a photograph of their mother, so we can include it in a section of the computer task.

We will meet you at **name of service** and your key worker will introduce us. We will ask you to sign a form that shows you have agreed to take part, complete some computer tasks, fill in some questionnaires and then do a short activity. Each of these things are described below.

- **The form**

The consent form shows that you agree to take part in the study.

- **The computer tasks**

You will be asked to play a game on a computer where you will be trading coins with the computer. Then you will play a different game that involves you making decisions about whether to move towards or away from different objects. Then there will be a dilemma task looking at how people make decisions in a dilemma situation. The dilemmas will contain a mixture of moral and amoral situations. Before you

begin each task, the researcher will go through it with you to make sure you understand what you need to do.

- **The questionnaires**

There are questions about:

- Your behaviour and how you are feeling
- How you get on with friends and family
- Difficult situations you may or may not have experienced
- Your expectations of helping relationships

The questionnaires we will ask you to complete are: the Strength and Difficulties Questionnaire, Reflective Functioning Questionnaire for Youth, The Inventory of Parent and Peer Attachment Revised questionnaire, The Borderline Personality Disorder Features Scale for Children, Childhood Trauma Questionnaire, the Childhood Traumatic Events Scale, the Network of Relationship Questionnaire Manual, Psychotherapy Expectation & Perception Inventory, and the Child Rejection Sensitivity Questionnaire.

Some people prefer to fill these out themselves and other people prefer them read to them, either way we will be pleased to help you with any difficulties in answering or understanding the questions.

- **The short activity**

We would like to give you some words and ask you what they mean. For example, words that describe animals and words that describe feelings, such as anger. There is also another short activity, like a puzzle. The short activities have been taken from the Wechsler Abbreviated Scale of Intelligence.

It is important to note that this is **NOT** a test.

All this should take around 2-3 hours (with breaks). If you decide that you want to stop before all the different tasks are finished then you can.

We would like to show you our appreciation for agreeing to complete the computer task, questionnaires and activities by offering you a £30 voucher for completing the tasks.

What are the possible benefits of taking part?

If you do decide to participate you will be helping us to understand the part trust plays in learning. This may help other people in the future. You may also find some of the tasks enjoyable to complete.

Are there any risks to you if you take part in the research?

The research is not intended to be upsetting. However, if you do find it stressful or are upset by it we will provide you with information on who you can contact for support. You can also stop participating at any point during the research.

Rules that we must follow

There are a few things for you to know before you decide whether or not to take part in this study. We have to follow some important rules to make sure that people who help us are treated well and are safe. Here are those rules:

(5) Consent or agreeing to take part in the study

- You do not have to agree to take part if you do not want to. You are completely free to decide whether or not you want to take part in the study.
- **If you do agree to take part, you can change your mind and stop at any time, without giving a reason. This will result in no negative consequences and it will not affect any support you are receiving.**

(6) Confidentiality: keeping what you tell us private

Secondly, you should know that all the information you give is private. Nothing you say will be told to anyone outside the research team, except in three circumstances:

- You tell us that you or another person are planning to seriously harm a specific person.
- You tell us that you or another young person is at risk of harm.
- We may inform your mental health worker if we are concerned about your mental health.

If it was necessary to take any of the above steps, this will be discussed with you first.

Further supporting information

How will my information be kept confidential?

All the information that you provide (from the questionnaires and computer games) will be treated confidentially. You will be assigned an ID number (e.g. 001) and we won't identify you by name to anyone. The information will not be shared with anyone (e.g. school) and it will be used solely for this project. Once the project is finished we will happily give you a report of our findings if you are interested.

What will happen to the results of the study?

The report will be written about the results of the study. In that report, the results will be presented in a way that no one can find out that it is you or know that you took part. In other words, we can guarantee that information about you will be secret and private because we talk about groups not the individual.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by **insert name** Research Ethics Committee (Project ID Number): **(number)**

How have young people been involved in this study?

Young people have provided consultation to the research project by reviewing materials, planning how to present the questionnaires and computer tasks to young people and making adaptations to the questionnaire pack and computer tasks.

Who is organising and funding the study?

Doctoral trainees at the Department of Clinical, Educational and Health Psychology at University College London have set up the project. Professor Peter Fonagy and Dr Tobias Nolte are supervising the research. The research is being funded by University College London and is an educational project.

What if something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do their best to answer your questions. If you have any concerns and would like to contact someone outside the team you can do this through the Research Governance Sponsor, University College London (UCL). You can write to Joint UCLH/UCL Biomedical Research Unit, R&D Directorate (Maple House), Rosenheim Wing, Ground Floor, 25 Grafton Way, London, WC1E 5DB quoting reference 16/0021. All communication will be dealt with in strict confidence.

If in the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against University College London (UCL).

Thank you for reading ☺

We will contact you shortly to answer any questions and discuss whether this is a project that you would like to join.

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

t.nolte@ucl.ac.uk

Appendix J: Assent form for young people under the age of 16



Centre Number:

Study Number:

Participant Identification Number for this trial:

ASSENT FORM

Title of Project: **Epistemic Trust and Learning in Adolescence**

Name of Researcher:

Please initial

box

1. I confirm that I have read the information sheet dated 05.01.2017 (version V3.0) for the
above study. I have had the opportunity to consider the information, ask
questions and have
had these answered satisfactorily.

☐

2. I understand that my participation is voluntary and that I am free to withdraw at
any time
without giving any reason, without my medical care or legal rights being
affected.

☐

3. I understand that some documents from the study may be looked at by
responsible people appointed by UCL, who must make sure (as Research
Governance sponsor) that the study is being run properly. I give permission for
this group to have access to the necessary information.

☐☐

4. I understand that information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1988.

5. I understand that the information collected about me may be used to support other research in the future, and may be shared anonymously with other researchers.

☐

6. I agree that the research project named above can request information from my clinical records held at the support service that referred me to this research project.

☐

7. I agree that someone from the research study can contact me in the future.

☐

8. I agree to take part in the above study.

☐

_____	_____	_____
Name of Participant	Date	Signature

_____	_____	_____
Name of Person	Date	Signature

taking consent

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

t.nolte@ucl.ac.uk

Appendix K: Consent form for parents



Centre Number:

Study Number:

Participant Identification Number for this trial:

CONSENT FORM

Title of Project: **Epistemic Trust and Learning in Adolescence**

Name of Researcher:

Please initial

box

1. I confirm that I have read the information sheet dated 05.01.2017 (version V.0) ☐
for the
above study. I have had the opportunity to consider the information, ask
questions and have
had these answered satisfactorily.
2. I understand that my child's participation is voluntary and is free to withdraw ☐
any time without giving any reason, without their medical care or legal rights
being affected.
3. I understand that some documents from the study may be looked at by ☐
responsible people appointed by UCL, who must make sure (as Research
Governance sponsor) that the study is being run properly. I give permission for
this group to have access to the necessary information.

4. I understand that information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1988. ☐
5. I understand that the information collected may be used to support other research in the future, and may be shared anonymously with other researchers. ☐
6. I agree that the research project named above can request information from my child's clinical records that is held at the support service that referred my child to this research project. ☐
7. I agree that someone from the research study can contact me in the future
8. I agree to my child taking part in the above study. ☐

_____	_____	_____
Name of Participant	Date	Signature

_____	_____	_____
Name of Person	Date	
Signature		

taking consent

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

t.nolte@ucl.ac.uk

Appendix L: Consent form for young people above the age of 16



Centre Number:

Study Number:

Participant Identification Number for this trial:

CONSENT FORM

Title of Project: **Epistemic Trust and Learning in Adolescence**

Name of Researcher:

Please initial box

9. I confirm that I have read the information sheet dated 05.01.2017 (version V3.0) for the
above study. I have had the opportunity to consider the information, ask
questions and have
had these answered satisfactorily.

☐

10. I understand that my participation is voluntary and that I am free to withdraw at
any time
without giving any reason, without my medical care or legal rights being
affected.

☐☐

11. I understand that some documents from the study may be looked at by responsible people appointed by UCL, who must make sure (as Research Governance sponsor) that the study is being run properly. I give permission for this group to have access to the necessary information. ☐

12. I understand that information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1988.

13. I understand that the information collected about me may be used to support other research in the future, and may be shared anonymously with other researchers. ☐

14. I agree that the research project named above can request information from my clinical records held at the support service that referred me to this research project. ☐

15. I agree that someone from the research study can contact me in the future. ☐

16. I agree to take part in the above study. ☐

_____	_____	_____
Name of Participant	Date	Signature

_____	_____	_____
Name of Person	Date	Signature

taking consent

Our contact details are

Jessie Greisbach, Tal Reches and Elise Draper are researchers on the project. If you have any questions about the project you can contact them on:

j.greisbach@ucl.ac.uk

tal.reches.13@ucl.ac.uk

elise.draper@ucl.ac.uk

Dr Tobias Nolte is a supervisor on the project. If you have any concerns you wish to discuss, you can contact him on:

t.nolte@ucl.ac.uk

Appendix M: testing pack

Young Person's Questionnaire



Thank you!!!!

This booklet contains some questions about you, your family and your friends.

We know that some of the questions are hard to answer but please answer all the questions as best you can. There are no right or wrong answers; we just want to get your point of view.

The questions are not intended to be upsetting. However, if you find it stressful or are upset by the questions we will provide you with information of who you can contact for support. You can also stop participating at any point during the research

Psychotherapy Expectation and Perception Inventory

Imagine you were to start therapy with a therapist this week. Answer the statements about what you expect to happen in therapy. For each statement, indicate how true each expectation is for you by circling one of the following answer choices: “Not True” (1), “Somewhat True” (2), “Fairly True” (3), “Very True” (4), or “Definitely True” (5).

I expect...

		Not True	Some-what True	Fairy True	Very True	Definitey True
1.	that most therapists give clients medication for their problems.	1	2	3	4	5
2.	the therapist to be on my parents' side.	1	2	3	4	5
3.	the therapist to reveal my secrets to my parents.	1	2	3	4	5
4.	the therapist to judge me and tell me what I am doing is wrong	1	2	3	4	5
5.	to be able to bring my friends to therapy if I wanted to	1	2	3	4	5
6.	to be able to call my therapist by their first name.	1	2	3	4	5
7.	therapy to usually occur in the therapist's office.	1	2	3	4	5
8.	that if I don't want to go to therapy, then there is no way therapy can help	1	2	3	4	5
9.	to talk a lot about my past in therapy	1	2	3	4	5
10.	the therapist to understand my position and help my parents change	1	2	3	4	5

11.	the therapist will help me figure things out	1	2	3	4	5
12.	peers to make fun of me if they found out I was in therapy	1	2	3	4	5
13.	to have regularly scheduled therapy appointments	1	2	3	4	5
14.	to practice things I need to learn in the therapy session	1	2	3	4	5

I expect...

		Not True	Some-what True	Fairy True	Very True	Definitely True
15.	that a goal of therapy is to make me uncomfortable	1	2	3	4	5
16.	the therapist to make me talk about things I don't want to talk about	1	2	3	4	5
17.	the therapist will make me obey orders .	1	2	3	4	5
18.	my parents will be asked to try new things at home between sessions to help me	1	2	3	4	5
19.	if I go to therapy, then I will be in therapy the rest of my life	1	2	3	4	5
20.	therapy to help me gain a better understanding of myself and others	1	2	3	4	5

21.	to get better in a few weeks after I start therapy	1	2	3	4	5
22.	the only responsibility my parents have in therapy is to make sure I get to my appointments	1	2	3	4	5
23.	the therapist to tell me about themselves	1	2	3	4	5
24.	the therapist to write down notes during therapy sessions	1	2	3	4	5
25.	to have a say in my therapy goals	1	2	3	4	5
26.	to do things with the therapist outside of their office	1	2	3	4	5
27.	the therapist to know how I feel even when I cannot say quite what I mean	1	2	3	4	5
28.	to feel like a failure in therapy	1	2	3	4	5
29.	to feel comfortable talking with a therapist	1	2	3	4	5
30.	my therapist will tell me what to do	1	2	3	4	5

I expect...

		Not True	Some-what True	Fairly True	Very True	Definitely True
31.	if I am sad or upset after a therapy session, that shows that therapy	1	2	3	4	5

	is not working					
32.	to have assignments between sessions	1	2	3	4	5
33.	the therapist to try to manipulate or trick me	1	2	3	4	5
34.	the therapist will understand what I am feeling	1	2	3	4	5
35.	to change as a result of therapy	1	2	3	4	5
36.	to be nervous about therapy	1	2	3	4	5
37.	for therapy to be different depending on the problems I am working on	1	2	3	4	5
38.	therapy to be helpful	1	2	3	4	5
39.	my friends to think less of me if I go to therapy	1	2	3	4	5
40.	to enjoy going to therapy	1	2	3	4	5

Network of Relationship Questionnaire Manual – Social Provision Version
(NRI-SPV: Furman & Buhrmester, 1985)

Everyone has a number of people who are important in his or her life. These questions ask about your relationships with each of the following people: your mother, your father, your friend and your teacher.

The first questions ask you to identify your mother figure, your father figure, a friend and a teacher about whom you will be answering the questions.

- ✓ Circle the **mother figure** you will be describing. (If you have both, choose the one you think of as
your primary mother figure.)

A. Biological/Adopted Mother

B. Step-Mother (or Father's Significant Other)

C. Other _____

- ✓ Circle the **father figure** you will be describing. (If you have both, choose the one you think of as your primary father figure.)

A. Biological/Adopted Father

B. Step-Father (or Mother's Significant Other)

C. Other _____

- ✓ Now we would like you to choose a boy/girl friend whom you are dating or dated (If you have/had one). You may choose someone you are seeing now, or someone you went out with earlier. If you choose a past boy/girl friend, please answer the questions as you would have when you were in the relationship.

How long is/was the relationship? ____ years ____ months (*please fill in numbers*)

Are you seeing this person now? **A.** Yes **B.** No

- ✓ Please choose the most important **friend** you have. You may select someone who is your most important friend now, or who was your most important friend earlier. **Do not choose a sibling.** If you select a person with whom you are no longer friends, please answer the questions as you would have when you were in the relationship.

How long is/was the friendship? ____ years ____ months (*please fill in numbers*)

Are you close friends now?

A. Yes **B.** Friends, but not as close as before
C. No

Now we would like you to answer the following questions about the people you have selected above. Sometimes the answers for different people may be the same but sometimes they may be different.

1. How much does this person teach you how to do things that you don't know?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

2. How much do you talk about everything with this person?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

3. How much does this person like or love you?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

4. How much does this person treat you like you're admired and respected?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

5. How sure are you that this relationship will last no matter what?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

6. How much does this person help you figure out or fix things?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

7. How much do you share your secrets and private feelings with this person?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

8. How much does this person really care about you?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

9. How sure are you that your relationship will last in spite of fights?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

10. How much does this person help you when you need to get something done?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

11. How much do you talk to this person about things that you don't want others to know?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried

12. How much does this person have a strong feeling of affection (loving or liking) toward you?

	Little or None	Some what	Very Much	Extre- mely Much	The Most	Littl e or Non e	Some - what	Very Much	Extre mely Much	The Mos t	
Mother	1	2	3	4	5	1	2	3	4	5	Boy/ Girl- friend
Father	1	2	3	4	5	1	2	3	4	5	Fried



You've now done over half of the questionnaire pack!
You're doing great 😊
You and Your Friends

IPPA-R

This part asks you about your relationships with your close friends. Please read each statement and say how often each statement is true for your friends?

Circle 1 if the statement is **ALMOST NEVER OR NEVER** true for your carer.

Circle 2 if the statement is **SELDOM** true for your carer.

Circle 3 if the statement is **SOMETIMES** true for your carer.

Circle 4 if the statement is **OFTEN** true for your carer.

Circle 5 if the statement is **ALMOST ALWAYS OR ALWAYS** true for your carer.

	NEVER TRUE	SOMETIMES TRUE	ALWAYS TRUE
1. I like to get my friends' opinions on things I'm worried about	1-----	2-----	3-----4-----5
2. My friends can tell when I'm upset about something	1-----	2-----	3-----4-----5
3. When we talk, my friends listen to my opinion	1-----	2-----	3-----4-----5
4. I feel silly or ashamed when I talk about my problems with my friends	1-----	2-----	3-----4-----5
5. I wish I had different friends	1-----	2-----	3-----4-----5
6. My friends understand me	1-----	2-----	3-----4-----5
7. My friends support me to talk about my problems	1-----	2-----	3-----4-----5

8. My friends accept me as I am 1-----2-----3-----4-----5
9. I feel the need to be around my friends 1-----2-----3-----4-----5
10. My friends don't understand my problems 1-----2-----3-----4-----5
11. I do not feel like I belong when I am with my friends 1-----2-----3-----4-----5
12. My friends listen to what I have to say 1-----2-----3-----4-----5
13. My friends are good friends 1-----2-----3-----4-----5
14. My friends are fairly easy to talk to 1-----2-----3-----4-----5
15. When I am angry about something, my friends try to understand 1-----2-----3-----4-----5
16. My friends help me to understand myself better 1-----2-----3-----4-----5
17. My friends care about how I feel 1-----2-----3-----4-----5
18. I feel angry with my friends 1-----2-----3-----4-----5
19. I can count on my friends to listen when something is bothering me 1-----2-----3-----4-----5
20. I trust my friends 1-----2-----3-----4-----5

21. My friends respect my feelings 1-----2-----3-----4-----5
22. I get upset a lot more than my friends know about 1-----2-----3-----4-----5
23. My friends get annoyed with me for no reason 1-----2-----3-----4-----5
24. I can tell my friends about my problems and troubles 1-----2-----3-----4-----5
25. If my friends know that I am upset about something, they ask me about it 1-----2-----3-----4-----5

You and Your Parent(s)

IPPA-R

Read each of the statements below. Think about your carer. How often is each statement true for your carer? If you have more than one carer and you would answer the question differently based on which carer you were thinking about, answer the question for the one you feel has most influenced you.

Circle 1 if the statement is **ALMOST NEVER OR NEVER** true for your carer.

Circle 2 if the statement is **SELDOM** true for your carer.

Circle 3 if the statement is **SOMETIMES** true for your carer.

Circle 4 if the statement is **OFTEN** true for your carer.

Circle 5 if the statement is **ALMOST ALWAYS OR ALWAYS** true for your carer.

NEVER
TRUE

SOMETIMES
TRUE

ALWAYS
TRUE

1. My parent(s) respect my feelings. 1-----2-----3-----4-----5

2. My parent(s) are good parent(s). 1-----2-----3-----4-----5

3. I wish I had a different parent(s). 1-----2-----3-----4-----5
4. My parent(s) accepts me as I am. 1-----2-----3-----4-----5
5. I can depend on my parent(s) to help me solve
a problem. 1-----2-----3-----4-----5
6. I like to get my parent's point of view on things
I'm worried about. 1-----2-----3-----4-----
-----5
7. It helps to show my feelings when I am
upset. 1-----2-----3-----4-----5
8. My parent(s) can tell when I'm upset about
something. 1-----2-----3-----4-----5
9. I feel silly or ashamed when I talk about my problems
with my parent(s). 1-----2-----3-----4-----
-5
10. My parent(s) expect too much from me.
1-----2-----3-----4-----5
11. I easily get upset at home. 1-----2-----3-----4-----5
12. I get upset a lot more than my parent(s) knows about.
1-----2-----3-----4-----5
13. When I talk about things with my parent(s) they
listen to what I think. 1-----2-----3-----4-----5
14. My parent(s) listen to my opinions.
1-----2-----3-----4-----5
15. My parent(s) have their own problems, so I
don't bother them with mine. 1-----2-----3-----4-----5
16. My parent(s) help me to understand myself better.
1-----2-----3-----4-----5
17. I tell my parent(s) about my problems and troubles.
1-----2-----3-----4-----5
18. I feel angry with my parent(s).
1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5

1-----2-----3-----4-----5



Thank you so much! We're really grateful for your help and time.

We appreciate that we have asked you a lot of questions, and although the research is not intended to be upsetting, it can bring up upsetting feelings. We will have time to speak about how you found taking part in the project but we also want to give you some contact numbers of people you might want to contact if you want to talk to someone afterwards.

Also ChildLine can be a really good place to call (0800 1111) as they give you a confidential space to talk, and they are open 24/7.

Appendix N: Ethics application approval letter (UCL)

16 May 2016

Professor Peter Fonagy
Division of Psychology and Language Sciences
UCL

Dear Professor Fonagy

Notification of Ethical Approval

Re: Ethics Application 8843/001: Epistemic trust in adolescents

Further to your satisfactory responses to the committee's comments, I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been ethically approved by the UCL REC until 16th May 2018.

Approval is subject to the following conditions.

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the

‘Amendment Approval Request Form’:
<http://ethics.grad.ucl.ac.uk/responsibilities.php>

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.
3. For non-serious adverse events the Chair or Vice-Chair of the Ethics Committee should again be notified via the Ethics Committee Administrator (ethics@ucl.ac.uk) within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

On completion of the research you must submit a brief report of your findings/concluding comments to the

Committee, which includes in particular issues relating to the ethical implications of the research.

Yours sincerely



Professor John Foreman

Chair of the UCL Research Ethics Committee

Cc: Tobias Nolte, Elise Draper, Jessie Greisbach & Tal Reches, Applicants

Academic
Services, 1-19
Torrington Place
(9th Floor),
University College
London

Tel: +44 (0)20 3108 8216 Email: ethics@ucl.ac.uk <http://ethics.grad.ucl.ac.uk/>

Appendix O: Ethics application approval letter (NHS)



Health Research Authority

London - Bloomsbury Research Ethics Committee

HRA RES Centre Manchester Barlow House 3rd Floor

4 Minshull Street Manchester M1 3DZ

Telephone: 0207 104 8002

**Please note: This is the favourable
opinion of the REC only and does not allow
you to start your study at NHS
sites in England until you receive HRA Approval**

27 January 2017

Professor Peter Fonagy

Freud Memorial Professor of Psychoanalysis

University College London

Psychoanalysis Unit

Research Department of Clinical, Educational and Health Psychology

London

WC1E6BT

Dear Professor Fonagy

Study title: Exploring how trauma,
symptomatology and expectations
of helping relationships are related
to epistemic trust in adolescents.

REC reference: 16/LO/2108

IRAS project ID: 217408

Thank you for your letter of 05 January 2017, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair and Ms Gila Falkus.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to make a request to postpone publication, please contact hra.studyregistration@nhs.net outlining the reasons for your request.

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, subject to the conditions specified below.

Conditions of the favourable opinion

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

Please ensure that the PIS for the Parent/Carer states that it is information for Parent/Carer and not Young People.

You should notify the REC once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Revised documents should be submitted to the REC electronically from IRAS. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which you can make available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.

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

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk or at <http://www.rdforum.nhs.uk>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database within 6 weeks of recruitment of the first participant (for medical device studies, within the timeline determined by the current registration and publication trees).

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Approved documents

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

<i>Document</i>	<i>Version</i>	<i>Date</i>
Contract/Study Agreement [Draft Agreement]		

Contract/Study Agreement [Insurance		
Copies of advertisement materials for research participants [Guide for clinicians to share with young people (changes accepted)]	2	05 January 2017
Covering letter on headed paper [Covering	1	05 January 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only)		05 April 2016
Interview schedules or topic guides for participants [Interview schedule]	1	05 February 2016
IRAS Application Form [IRAS_Form_11112016]		11 November 2016
IRAS Application Form XML file [IRAS_Form_11112016]		11 November 2016
IRAS Checklist XML [Checklist_21112016]		21 November 2016
IRAS Checklist XML [Checklist_13012017]		13 January 2017
Letter from funder [Funding Confirmation]		08 June 2016
Letters of invitation to participant [Cover letter]	2	16 September 2016
Non-validated questionnaire [Dilemma Task]	1	05 February
Non-validated questionnaire [Computer task]	1	05 February
Other [Email confirmation re: Academic Supervisors]		20 November 2016
Other [Schedule of events]		22 November 2016
Other [Statement of activities]		22 November 2016
Participant consent form [Consent Parent/Carer]	2	16 September 2016
Participant consent form [Consent 16-18]	2	16 September

		2016
Participant consent form [Assent 12-15]	2	16 September 2016
Participant information sheet (PIS) [PIS 12-15 (changes accepted)]	3	05 January 2017
Participant information sheet (PIS) [PIS 16-18 (changes accepted)]	3	05 January 2017
Participant information sheet (PIS) [PIS Parent/Carer]	3	05 January 2017
Referee's report or other scientific critique report		28 October 2016
Referee's report or other scientific critique report		
Referee's report or other scientific critique report		
Referee's report or other scientific critique report [REC]		21 September 2016
Referee's report or other scientific critique report [REC]		05 October 2016
Referee's report or other scientific critique report [Response to REC]		15 October 2016
Research protocol or project proposal [Protocol]	2	16 September 2016
Summary CV for Chief Investigator (CI) [Summary CV Chief]		28 October 2016
Summary CV for student [Jessie Greisbach CV]		28 October 2016
Summary CV for student [Elise Draper CV]		28 October 2016
Summary CV for student [Tal Reches CV]		28 October 2016
Summary CV for supervisor (student research) [Tobias Nolte]		28 October 2016
Validated questionnaire [BPFSC]		28 October 2016
Validated questionnaire [CTES]		28 October 2016
Validated questionnaire [CTQ]		28 October 2016
Validated questionnaire [APPA-R]		28 October 2016
Validated questionnaire [NRI-SPV]		
Validated questionnaire [NRI-SPV (short version)]		28 October 2016
Validated questionnaire [PEPI]		28 October 2016
Validated questionnaire [RFQY]		28 October 2016
Validated questionnaire [SDQ]		28 October 2016

Statement of compliance

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

After ethical review

Reporting requirements

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

Adding new sites and investigators

Notification of serious breaches of the protocol

Progress and safety reports

Notifying the end of the study

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

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website:

<http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/>

HRA Training

We are pleased to welcome researchers and R&D staff at our training days – see details at <http://www.hra.nhs.uk/hra-training/>

16/LO/2108

Please quote this number on all correspondence

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

project. Yours sincerely



Reverend Jim Linthicum

Chair

Email: nrescommittee.london-bloomsbury@nhs.net

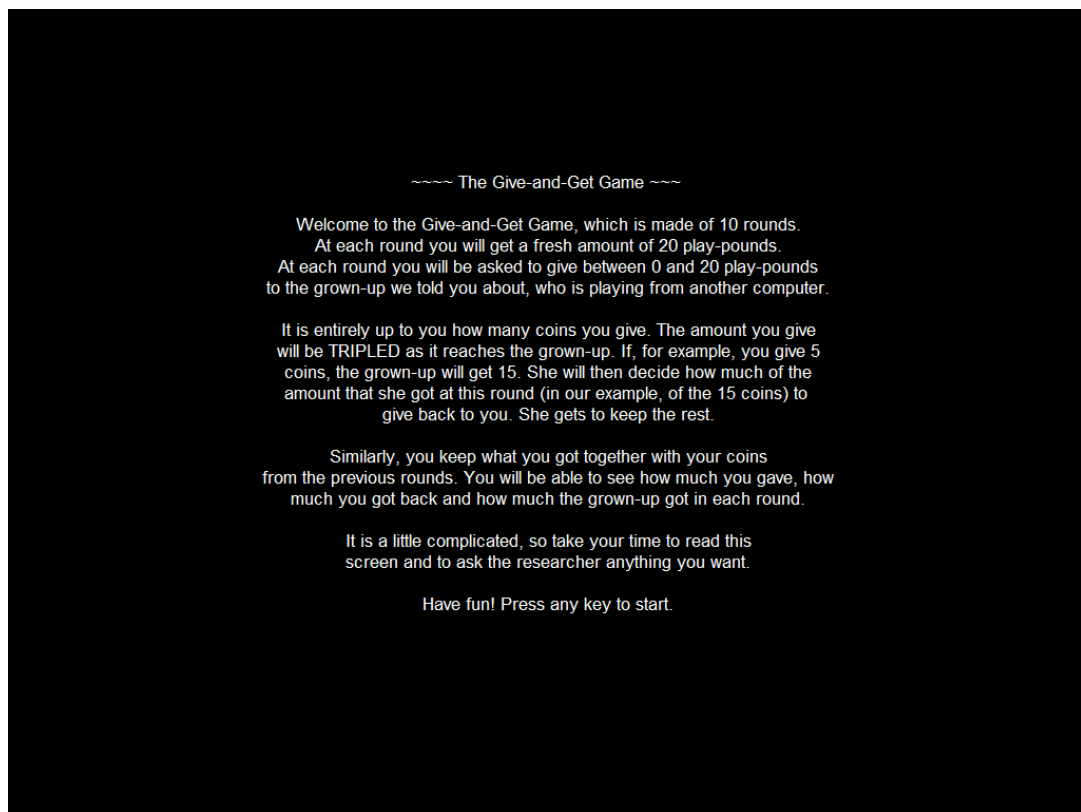
Enclosures: “After ethical review – guidance for researchers”

Copy to: Ms Tania West

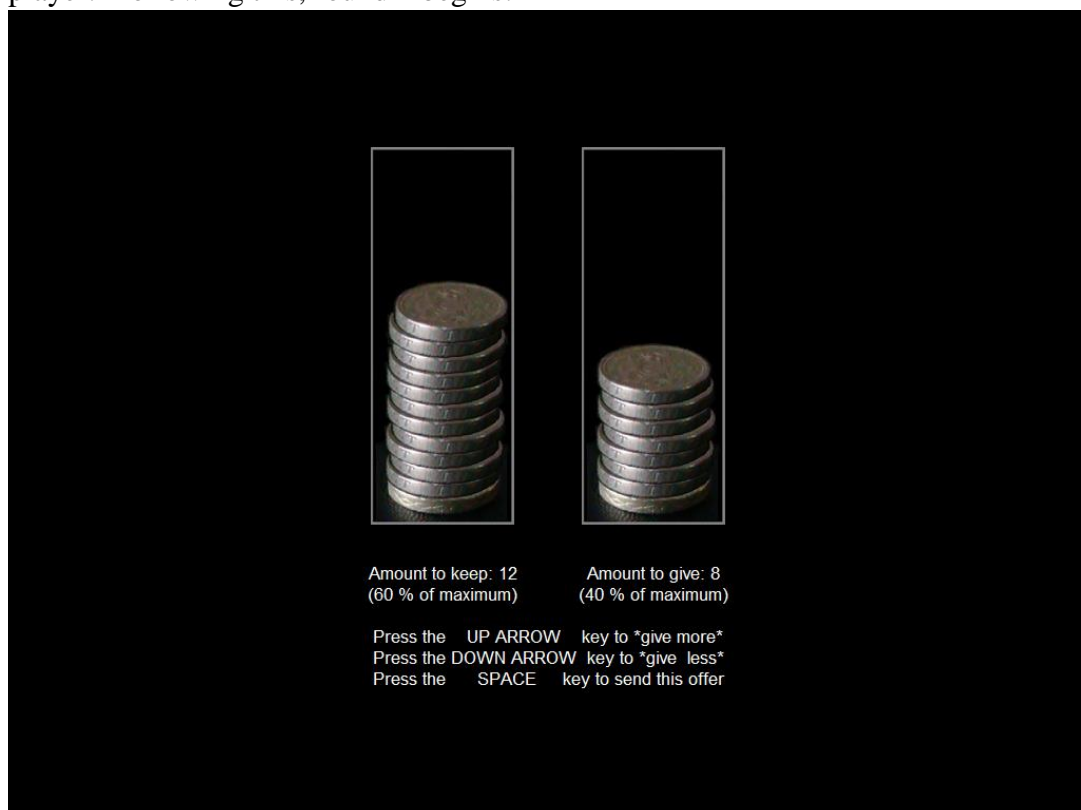
Ms. Fiona Horton, North East London NHS Foundation Trust

Appendix P: The Trust Game

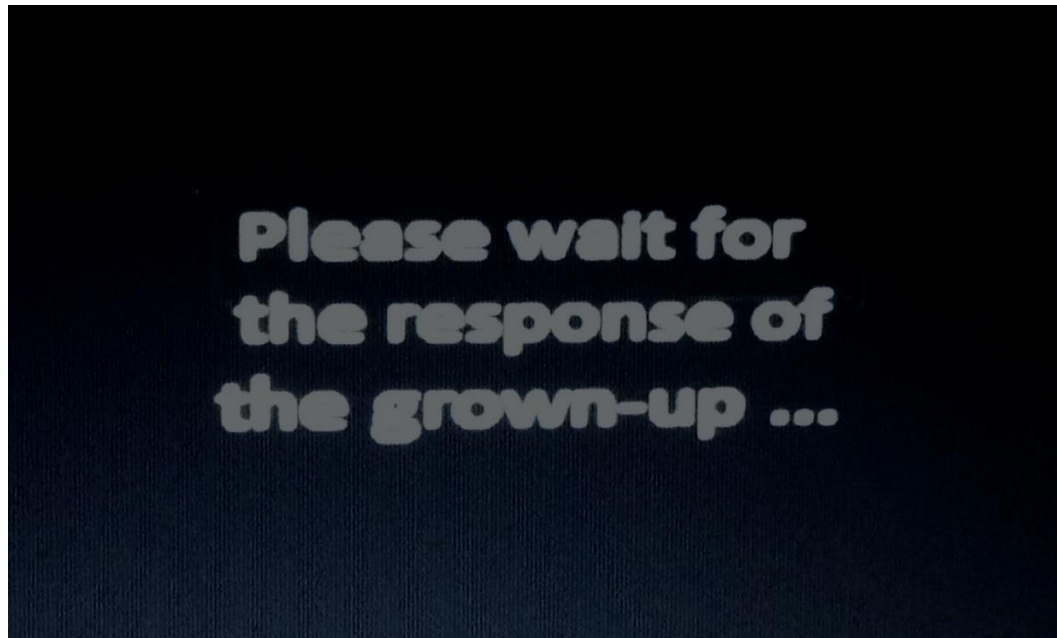
Instructions:



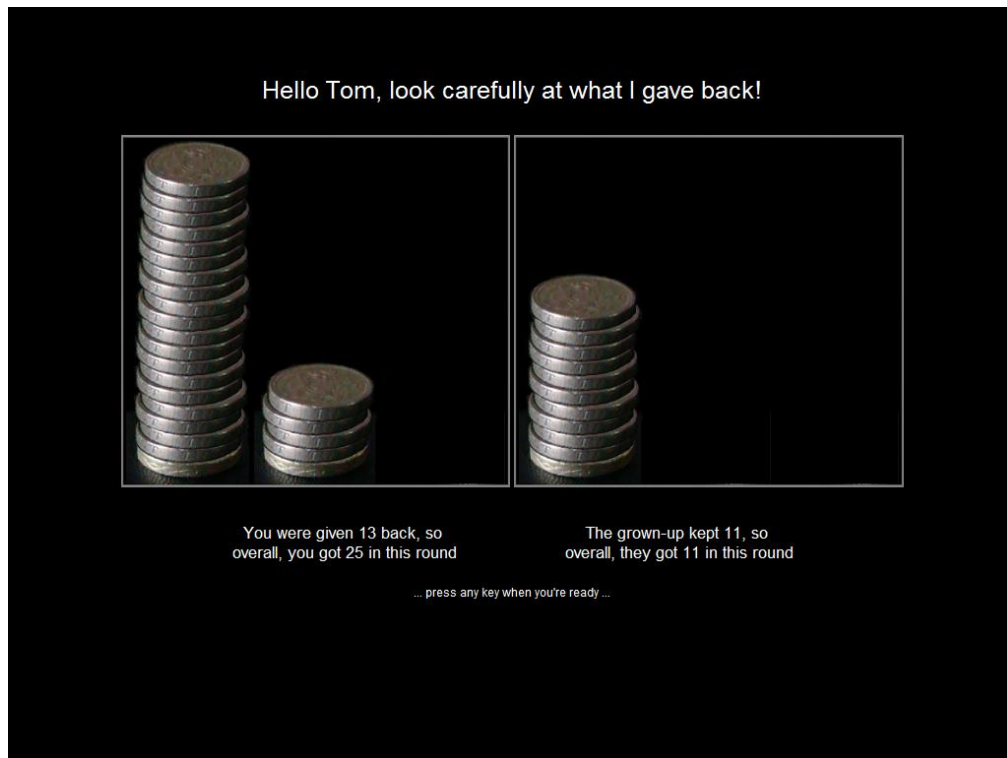
The participant is asked to practice using the arrow keys in order to make sure they learn how to manipulate the amount of coins they would like to send to the other player. Following this, round 1 begins:



Once the participant chooses the amount that they want to give away, they confirm their choice by pressing the space bar. The participant then has to wait for the response of the “grown-up”.



Next, the participant receives a feedback from the “grown-up”:



This process is repeated until ten rounds have been completed.

Appendix Q: ETI measure

Instructions

The purpose of this task is to look at how people make decisions in a dilemma situation. There will be 20 questions containing a mixture of moral and amoral situations.

Although you will have your own opinions about what you think is right and wrong in these moral dilemma questions, you must ignore your own opinions and assume that you are a blank slate with no clue about what is considered right and wrong by society.

There are four rules for the dilemma task:

1. Put aside your own opinions of what you think the answer should be. Imagine that you are very naïve and have no clue about what is right and wrong.
2. Ask yourself, what would the “professional” (e.g., masseuse, butcher, etc.) know about this situation, given the stereotypical information you know about their job.
3. Ask yourself, what would YOUR own mother know about this situation, given the stereotypical information you know about her job.
4. If neither person (i.e., professional or your mother) would know anything about the situation from their jobs (and jobs alone), ask yourself, which of these two people am I most likely to trust or to take advice from in a general situation, independent of the this dilemma task.

Instrument Items

Item 1

While on vacation, a couple of tourists select out a small speedboat from a variety of options. An hour after they set off, a sales assistant in the rental shop says that there is a chance that the boat they are in is prone to mild leaking. Alternatively, there is a chance that they are in a different boat that does not leak. The owners are unsure whether to spend a lot of money sending out a search team or not.

A butcher advises that they should not send out a search team because in his opinion, the boat may hold together until they get back.

Your mother advises that they should send out a search team because in her opinion, the boat may not hold together until they get back.

Which advice do you trust in this situation?

Butcher

Mother

|-----|-----|
MildlyTrust StronglyTrust MildlyTrust StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|
Very Unlikely Very Likely

Item 2

Mrs Bennett has cancer. She asks the cashier working in the pharmacy to give her more painkillers than her prescription states. No harm will come to Mrs Bennett if she takes this additional medication and it would help to ease her pain. There is a chance that the cashier will get away with giving the additional medication. Alternatively, there is a chance that he will get caught.

A plumber advises that he should not give the additional medication because in his opinion it is probably noticeable when medication goes missing in a pharmacy.

Your mother advises that he should give the additional medication because in her opinion it is probably not noticeable when medication goes missing in a pharmacy.

Which advice do you trust in this situation?

Plumber

Mother

|-----|-----|
MildlyTrust StronglyTrust MildlyTrust StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|
Very Unlikely Very Likely

Item 3

Sherry is certain that her ruthless boss Bryan overheard her criticise his unethical management practices. There is a chance that she will keep her job if she apologises. Alternatively, there is a chance that he will not accept her apology and that she could lose her job for criticising his practices. If Sherry decides not to apologise to Bryan she is unsure what will happen.

A painter advises that she should not apologise because it is possible that he may have forgotten about it.

Your mother advises that she should apologise because it is possible that he won't have forgotten about it.

Which advice do you trust in this situation?

Mother		Painter	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

Very Unlikely	Very Likely

Item 4

Una is walking down a street when she comes across a wallet on the ground. She opens the wallet and finds that it contains several hundred pounds in cash but no identification. There is a chance that Una will not be seen taking the wallet and will get to keep the money. There is also a chance that someone will witness her taking the wallet and she will be reported to the police.

A postman advises that she should not take it because from his experience the police usually take these types of thefts very seriously.

Your mother advises that she should take it because from her experience the police do not usually take these types of thefts very seriously.

The diagram shows a horizontal line representing a 100% Likert scale. Above the line, 'Postman' is centered on the left and 'Mother' is centered on the right. Below the line, there are four labels: 'MildlyTrust' on the far left, 'StronglyTrust' in the middle-left, 'MildlyTrust' in the middle-right, and 'StronglyTrust' on the far right. The line has vertical tick marks at the ends and a central point.

Very Unlikely Very Likely

Laura has signed a contract with a sales company stating that she will not work any other jobs while employed with them. She currently has an evening job in a restaurant from which she gets paid cash-in-hand. If Laura gets caught she will lose her job with the company. There is a chance that a co-worker will come into the restaurant, see Laura working, and tell her boss. Alternatively, there is a chance that no one from work will ever come into the restaurant and see her.

Your mother advises that she should keep working in the restaurant because she knows from experience that many people working in sales have two jobs.

Figure 1 shows a horizontal line with a central tick mark. Above the line, the word "Electrician" is positioned on the left and "Mother" on the right. Below the line, the words "MildlyTrust" and "StronglyTrust" are positioned on the left and right respectively. The line is divided into four segments by the central tick mark and two additional tick marks near the ends.

241

-----|-----|

Very Unlikely Very Likely

Item 6

Jim, an owner of a small business, is struggling to make ends meet. It occurs to him that he could lower his taxes by pretending that some of his personal expenses are business expenses. There is a chance that Jim will get away with this and save money. Alternatively, there is a chance that he will get caught and receive a fine.

Your mother advises that he should not lie about his expenses because she knows from experience that there are not many small businesses that generally get away with this.

A lifeguard advises that he should lie about his expenses because he knows from experience that there are many small businesses that generally get away with this.

Which advice do you trust in this situation?

Mother	Lifeguard
----- -----	
MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

-----|-----|

Very Unlikely Very Likely

Item 7

Tom goes to the pharmacy with the intention of buying a particular brand name medicine. When he gets there, he discovers that the pharmacy is out of the brand that he is looking for. Tom is unsure whether a cheaper similar medicine will be as effective as the brand name for his complaint.

A bartender advises that he should not get the cheaper one because in his opinion there is a difference between the effectiveness of this medicine and the brand name one.

Your mother advises that he should get the cheaper one because in her opinion there is no difference between the effectiveness of this medicine and the brand name one.

Which advice do you trust in this situation?

Mother	Bartender
----- -----	
MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

----- -----	
Very Unlikely	Very Likely

Item 8

There is a runaway trolley quickly approaching a fork in the tracks. On the tracks extending to the left is a group of workmen. The tracks extending to the right are clear. It is not known which path the trolley will take on its own. If an eyewitness pulls a lever there is a chance that the trolley will go right and avoid the workmen. Alternatively, there is a chance that the trolley will go left and kill the workmen. The eyewitness can do nothing or pull the lever.

Your mother advises that they should not pull the lever because in her opinion it may not turn the trolley to the right, killing the workmen.

A shop assistant advises that they should pull the lever because in her opinion it may turn the trolley to the right, saving the workmen.

Which advice do you trust in this situation?

Mother	Shop Assistant
----- -----	
MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 9

Helen forgot to submit an essay for her French elective. However, when she checked the results online there was a grade beside her name. Helen is not sure whether the professors in her university will ever notice this error. If Helen remains quiet, she will have a great grade but if she gets caught there are serious consequences for indirectly cheating.

A janitor advises that she should not remain quiet because in his opinion it likely that student's grades will be reassessed once they are posted online.

Your mother advises that she should remain quiet because in her opinion it is unlikely that student's grades will be reassessed once they are posted online.

Which advice do you trust in this situation?

Mother

Janitor

|-----|-----|

MildlyTrust

StronglyTrust MildlyTrust

StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 10

A health care agency is deciding whether to promote the use of a newly developed vaccine designed to permanently cure a deadly disease that is quickly spreading around the country.

There is a chance that those who take the vaccine will develop immunity to the deadly disease forever. Alternatively, there is a chance that those who take the vaccine will contract the disease instead.

A computer technician advises that they should not promote the vaccine because in his opinion it may not help to prevent death or cure people.

Your mother advises that they should promote the vaccine because in her opinion it may help to prevent death and cure people.

Which advice do you trust in this situation?

Computer technician		Mother	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

-----		-----	
Very Unlikely			Very Likely

Item 11

Jane received an email from a close colleague at work. The email asked her to make an anonymous online donation for him to partake in a charity sky dive. Jane does not want to give a lot of money but she does not want her colleague to find out that she gave a very very small donation. Jane is unsure whether it is truly anonymous or not.

Your mother advises that she should not give a very small donation because she knows from experience that there is often ways of detecting who sent an anonymous donation online.

A waitress advises that they should give a very small donation because she knows from experience that there is often no way of detecting who sent an anonymous donation online.

Which advice do you trust in this situation?

Mother		Waitress	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 12

Mr. Johnson is a young man in hospital with a chronic disease. There is a chance that administering a particular drug could cure him of his illness forever. Alternatively, there is a chance that it could end his life faster.

Your mother advises that the drug should not be administered because in her opinion it does not work out safe when doctors take these types of risks.

A farmer advises that the drug should be administered because in his opinion it works out safe when doctors take these types of risks.

Which advice do you trust in this situation?

Mother

Farmer

|-----|-----|

MildlyTrust

StronglyTrust MildlyTrust

StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 13

Paula has decided to make a batch of brownies for herself. The recipe calls for a measure of chopped walnuts. A bag of walnuts on her shelf has exceeded their expiration date. There is a chance that these walnuts will make Paula very ill if she consumes them. Alternatively, there is a chance that she will feel fine.

A construction worker advises that she should not use the walnuts because in his

opinion they usually do not last beyond their expiration date so they may not be safe to consume.

Your mother advises that she should use the walnuts because in her opinion they usually last beyond their expiration date so they may be safe to consume.

Which advice do you trust in this situation?

Construction worker		Mother	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust

How likely are you to change your mind regarding this decision?

-----		-----	
Very Unlikely			Very Likely

Item 14

David is a lawyer working on a big case. The judge presiding over the trial happens to be someone he knew from law school. If David were to talk to him over lunch it would be very good for his work on the case. If they meet for lunch, there is a chance that someone will find out and it may slightly impede the case. Alternatively, there is a chance that no one will find out and it could help David to win his case.

Your mother advises that they should not meet for lunch because she knows from experience that there are not many judges and lawyers who socialise when working on the same case.

A hairdresser advises that they should meet for lunch because she knows from experience that there are many there are many judges and lawyers who socialise when working on the same case.

Which advice do you trust in this situation?

Mother		Hairdresser	
-----		-----	

MildlyTrust

StronglyTrust MildlyTrust

StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 15

There is a fire in the building next door and deadly fumes are rising up through the ventilation system. There is a dog trapped in an office. An eyewitness can do something. By saving the dog there is a chance that the eyewitness could get injured. Alternatively, there is a chance that the eyewitness will not get injured.

A cleaner advises they should not save the dog because in her opinion the fire looks dangerous.

Your mother advises that they should save the dog because in her opinion, the fire does not look dangerous.

Which advice do you trust in this situation?

Cleaner

Mother

|-----|-----|

MildlyTrust

StronglyTrust MildlyTrust

StronglyTrust

How likely are you to change your mind regarding this decision?

|-----|-----|

Very Unlikely

Very Likely

Item 16

There is a famine and Mustaq's family is unsure whether they will have enough food to survive the winter. There is a chance that stealing food from a neighbour in the village will provide him with enough food to save his family's life. There is also a chance that if he is caught stealing the neighbour may take matters into his own hands.

A hotel receptionist advises he should not steal the food because in her opinion the

neighbour will probably notice the missing food.

Your mother advises that he should steal the food because in her opinion the neighbour will probably not notice the missing food.

Which advice do you trust in this situation?

Hotel receptionist		Mother	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust
How likely are you to change your mind regarding this decision?			
-----		-----	
Very Unlikely		Very Likely	

Item 17

A lifeboat is sitting dangerously low in the water. If the weight is not reduced the boat will sink and there is a chance that the people on board will all drown. If someone volunteers to jump into the sea to reduce the weight, there is a chance that this person will be saved by the rescue boat. Alternatively, there is a chance that this person will drown before the rescue boat reaches them.

Your mother advises someone should not jump out of the boat because in her opinion it will not be possible for the volunteer to tread water until the rescue-boat arrives.

A tile-layer advises that someone should jump out of the boat because in his opinion it will be possible for the volunteer to tread water until the rescue-boat arrives.

Which advice do you trust in this situation?

Mother		Tile-layer	
-----		-----	
MildlyTrust	StronglyTrust	MildlyTrust	StronglyTrust
How likely are you to change your mind regarding this decision?			
-----		-----	
Very Unlikely		Very Likely	

Item 18

Harry is driving when he sees an injured man thumbing a lift at the side of the road. He has never picked up a hitchhiker before and he does not know whether it is safe to do so, but this man needs medical attention. Harry could take a chance that it is safe and allow him into the car, or he could drive past him.

Your mother advises he should not give the man a lift because she knows from experience that it is generally not safe to pick up hitchhikers.

A florist advises that he should give the man a lift because she knows from experience that it is generally safe to pick up hitchhikers.

Which advice do you trust in this situation?

Mother		Florist	
-----		-----	
Mildly Trust	Strongly Trust	Mildly Trust	Strongly Trust

How likely are you to change your mind regarding this decision?

Very Unlikely	Very Likely

Item 19

There is a chance that a new environmental policy could save many animal species. There is also a chance that it could backfire and put one specific category of species in danger. Someone must make a decision on whether to sign the policy or not.

A babysitter advises that this policy should not be signed because in her opinion this one specific category of species concerned is very important for the ecology.

Your mother advises that this policy should be signed because in her opinion this one specific category of species concerned is not very important for the ecology.

Which advice do you trust in this situation?

Babysitter	Mother
------------	--------

Appendix R: Regression Analysis

Bootstrapping Regression Results

			Bootstrap	
	B	Std.	P	95% Confidence Interval
<i>Model 1; Dependent Variable: NRI IA.</i>				
Constant	.63	.07	.38	-.67 - 2.15
Age	-.009	.03	.76	-.072 - .04
Peer Attachment	.01	.003	.002	.005- .01
Parent Attachment	.01	.003	.001	.009- .02
<i>Model 2; Dependent Variable: NRI ID.</i>				
Constant	-.92	.09	.32	-2.58 - 1.1
Age	.06	.03	.11	-.023 - .13
Peer Attachment	.01	.005	.001	.005 - .02
Parent Attachment	.01	.004	.001	.006 - .02
<i>Model 3; Dependent Variable: PEPI Negative.</i>				
Constant	4.95	.92	.001	3.23 - 6.83
Age	-.09	.03	.008	-.15 - .03

Peer Attachment	-.01	.005	.04	-.02 - -.002
Parent Attachment	-.006	.004	.13	-.014 -.003

***Model 4; Dependent
Variable: PEPI Positive.***

Constant	.86	.87	.33	-.79 -2.63
Age	.01	.03	.73	-.06 -.09
Peer Attachment	.005	.004	.19	-.002 -.01
Parent Attachment	.01	.004	.003	.004 -.02

- NRI IA = Network of Relationships Instrumental Aid; NRI ID = Network of Relationships Intimate Disclosure; PEPI Negative = Psychotherapy Expectations and Perceptions Inventory, Negative Expectations and Perceptions; PEPI Positive = Psychotherapy Expectations and Perceptions Inventory Positive Therapeutic Relationship

Appendix S: Correlation matrixes

Correlation matrix (Predictors and mediators variables)

Variables	Predictors		Mediators	
	Parents Attachment	Friends Attachment	TB	MET
Predictors				
Parental Attachment	-----			
Friends Attachment	.42**	-----		
Mediators				
TB	.19	.17	-----	
MET	.23*	.12	.12	-----

TB = Trust Behaviour, MET = Maternal Epistemic Trust

Correlation matrix (Mediators and Outcome Variables)

Variables	Mediators		Outcomes							
	TB	MET	PEPI Positive	PEPI Negative	PEPI Outcome	NRI IA	NRI AF	NRI ID	NRI Parents	NRI Friends
Mediators										
TB	-----									
MET	.12	-----								
Outcomes										
PEPI Positive	.15	.03	-.19	-----						
PEPI Negative	-.14	.06	.5**	-.18	-----					
PEPI Outcome	.08	.00	.35**	-.03	.37**	-----				
NRI IA	.16	.31**	.1	-.09	.07	.22*	-----			
NRI AF	.21	.21	.35**	-.19	.19	.69**	.03	-----		
NRI ID	.21	.2	.14	-.11	.004	.15	.72**	.04	-----	
NRI Parents	.11	.12	.03	-.11	.02	.13	.45**	-.01	.09	-----
NRI Friends	-.01	.01								

- TB = Trust Behaviour, MET = Maternal Epistemic Trust; PEPI Positive = Psychotherapy Expectations and Perceptions Inventory Positive Therapeutic Relationship; PEPI Negative = Psychotherapy Expectations and Perceptions Inventory, Negative Expectations and Perceptions; PEPI Outcome = Psychotherapy Expectations and Perceptions Inventory, Therapeutic Process and Outcome; NRI IA = Network of Relationships

Instrumental Aid, NRI AF = Network of Relationships Affection; NRI ID = Network of Relationships Intimate Disclosure, NRI Parents = Network of Relationships Parents; NRI Friends = Network of Relationships Friends.