



The Centre for Emotional Health



WELCOME TO THE WORLD PROGRAMME  
OUTCOME REPORT 2015

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## EXECUTIVE SUMMARY

The 'Welcome to the World' programme is an 8-week group for parents expecting a baby. Parents attend the group from approximately 22 weeks of pregnancy. Topics include empathy and loving attentiveness, infant brain development, healthy choices, managing stress, promoting self-esteem and confidence, and effective communication. The aims of the programme are to improve attunement and bonding, to improve parental wellbeing and to improve knowledge and skills in both breast-feeding and practical care of babies.

This report describes the outcomes of the Family Links 'Antenatal Nurturing Programme' called 'Welcome to the World (WTTW)' using data collected between 2014 and 2015 from 111 parents-to-be and 17 Parent Group Leaders across the UK. This report focuses on parent-to-be wellbeing and attachment, parental feedback on programme content and delivery and Parent Group Leader feedback on referral, delivery and implementation issues.

## KEY FINDINGS

### Increase in Parent-to-be Mental Wellbeing

The wellbeing of parents-to-be increased significantly during the course on average. When disaggregated for gender, both mothers-to-be and fathers-to-be experienced an increase in mental wellbeing at the end of the programme, and were considerably above the norm for adults in the UK.

### Increase in Parent-to-be Attachment

Focusing on attachment, mothers-to-be showed a significant increase in attachment scores by the end of the programme. Fathers-to-be attachment scores also increased significantly from the pre-course assessment to the post-course assessment on average.

### Parent-to-be Learning and Satisfaction

All parents-to-be who responded to the feedback questionnaire believed that they had benefited from the programme. Two key ways in which they identified they had benefited were;

- the knowledge and information that the programme provided
- meeting with other parents-to-be and building friendships.

Many parents-to-be identified that the most essential part of the programme was the information and learning about breastfeeding. Also mentioned frequently were gaining knowledge of baby development generically and, more specifically for some, knowledge of brain, emotional and intellectual development and bonding. Where possible the participation of health practitioners and the opportunity to gain practical skills in coping with a new baby were really valued by parents-to-be.

The large majority of parents-to-be enjoyed the atmosphere in the group, and expressed enjoyment of the sessions. Many parents-to-be mentioned that they felt respected and valued by the way that the group was facilitated. Slight disadvantages were felt by respondents if the group was very tired or too quiet.

However, all parents-to-be recommended the course to other parents. Typical reasons for recommending the programme to others included the usefulness of the programme and the opportunity to learn.

In terms of learning on the programme, all respondents agreed that they understood that how they responded or talked to their baby could affect positive brain development. Most parents felt that they understood the links between breastfeeding and emotional health for mother, baby and partner and also that they felt more confident in understanding their baby's communication. Similarly most said that they were now more confident in expressing their needs to their midwife and partner.

### Parent Group Leader Perspectives

Feedback showed that recruitment for the programme was mainly through midwives, which suggests that referral pathways and arrangements between PGLs and midwives are very important in establishing viable groups.

All 17 PGLs who completed the feedback form agreed that parents-to-be had benefited from the Welcome to the World programme and would recommend the programme to all other parents-to-be. Some PGLs particularly recommended this programme for first time or less confident parents-to-be, younger or vulnerable parents-to-be, including care leavers, or those who may have had previous children removed from their care.

The responses that they had received from parents suggested that parents-to-be had enjoyed it and many PGLs themselves had had pleasant experiences delivering the programme.

PGLs identified that the most vital parts of the programme were emotional health and attachment.

Some PGLs identified that parents-to-be come from a wide range of starting points and cultural backgrounds and this could raise some specific challenges and tensions for PGLs working with diverse groups.

### Areas for further development and research

A full service evaluation of the Welcome to the World Programme is now underway led by researchers from the University of Hull Department of Midwifery and Child Health. This is due to complete in October 2016 and should address the following requirements;

- the need to identify measures that can be used specifically in the ante-natal context and which work for both new mums and other parents-to-be
- identifying and exploring issues of recruitment and retention
- following up outcomes post-birth

- exploring whether the programme was helpful for the couple relationship.

Additional developments could include;

- identifying the needs of vulnerable groups of parents – in particular those who are particularly young or who are in contact with social care or child protection services;
- developing the programme and programme delivery to address the needs of diverse parents with different starting points;
- exploring more fully any remaining issues about content
- consider the future training needs of WTTW PGLs

## BACKGROUND TO THE PROJECT

### The Welcome to the World Programme Outcomes Report

The 'Welcome to the World' programme is an 8-week group for parents expecting a baby. Parents attend the group from approximately 22 weeks of pregnancy. Topics include empathy and loving attentiveness, infant brain development, healthy choices, managing stress, promoting self-esteem and confidence, and effective communication. The aims of the programme are to improve attunement and bonding, to improve parental wellbeing, and to improve knowledge and skills in both breast-feeding and practical care of babies.

In order to meet the guidelines of the CANparent Quality Mark (Awarded in August 2014) the programme should be:

- evidence based, monitored and evaluated to improve parent / child relationships and to make a positive difference,
- recommended by other parents and should be considered responsive, warm and relational,
- engaging with parents and building on these effective relationships to meet parents' needs,
- run with integrity and have the appropriate professional systems in place

This report describes the outcomes and feedback from the Family Links 'Antenatal Nurturing Programme' called 'Welcome to the World (WTTW)' using data collected between 2014 and 2015 from prospective parents and Parent Group Leaders. The data was collected by Parent Group Leaders (PGLs) across the UK who are trained to deliver the course by Family Links and focuses on both the achievement of the programme aims and the implementation and process guidelines described by the CANparent Quality Mark.

### The need for antenatal education

'A child's experience and environment – both in the womb and in early life – lay the foundation for life. Mothers and fathers are the most important influences on a child's well-being and development. Loving, caring and secure parenting, as well as good nutrition and protection from toxic substances such as tobacco, are essential for a child's growth, well-being and development. These factors have a direct and lasting impact on a child's physical development (particularly neurological development) and on his or her future health, learning and behaviour' (Department of Health, 2011).

Recent advances in neuroscience have shown links between brain development and outcomes later in life. This research highlights that the relationship between a baby and his or her primary care giver can have an impact further into the future – both into childhood and later, adulthood. Normal (or abnormal) brain development can impact in a range of ways: upon health, relationships, emotional development, educational achievement, and life chances.

The Department of Health suggests that 'Many parents want help with the transition to parenthood, and, though there are variations between mothers and fathers and between

different groups (including parents in some minority ethnic communities – see below), there are common messages:

- The arrival of a first baby is a unique time that differs from the birth of subsequent children.
- New mothers and fathers are information hungry, but they want to feel able to access information when needed, rather than having it 'dumped' on them.
- Parents want information that is relevant to each stage of the journey, and to have the opportunity to reflect on what it means for them and their lives.
- Mothers and fathers want to receive consistent messages and information.
- Professionals in universal services have an important role to play in helping parents to learn and prepare.
- Mothers can feel pressurised to be 'natural' parents, loving their infants on sight and knowing 'what to do'.
- Fathers have important roles to play – as fathers, providers, supporters and carers; the involvement they want in pregnancy may vary.
- In some cultural groups, it is not the norm for men to be closely involved in pregnancy, but there is considerable variation – for instance, by age, time in the UK, education and degree of cultural integration.
- Word-of-mouth recommendation strongly informs what parents choose.
- NHS branding is recognised and respected.' (Department of Health, 2011)

The Family Links WTTW programme is designed to equip and empower parents-to-be with the tools needed to ensure that the impact they have on their child is positive and will lead to healthy brain development. Moreover, Family Links devised and piloted the WTTW programme to address the emotional as well as practical needs and anxieties of parents-to-be.



## DATA COLLECTION

### Objective of the current report

The WTTW programme has taken on many of the suggestions from a previous internal evaluation of the pilot. This current report's objective is to see whether mental well-being and attachment are increasing over the course of the programme and to understand through qualitative data analysis and feedback from parents and Parent Group Leaders whether (and in which ways) the experience of being on the course is beneficial. An increasing number of fathers-to-be have been taking part in the programme and for the first time there has been an opportunity to look at their wellbeing and attachment as well as that of mothers-to-be. This report should enable Family Links to gain an insight into the impact of their nurturing programme and identify future recommendations for improvement.

### Evaluation Methods

The data provided for this report is part of the routine monitoring and evaluation undertaken by Family Links to monitor programme outcomes and quality. There were four data collection tools used;

- Standardised measure on adult wellbeing (WEMWBS n=111) completed by parents-to-be at the beginning and end of the programme
- Standardised measure on attachment (MAAS/PAAS n=96) completed by parents-to-be at the beginning and end of the programme
- Parental feedback forms completed by parents-to-be (n=71) at the end of the programme on a range of programme content and delivery issues
- Parent Group Leader feedback forms (n=17) completed by group leaders at the end of the programme focusing on referral, delivery and implementation issues

All the data collected for the MAAS, PAAS and WEMWBS were quantitative. The data were analysed in SPSS for descriptive statistics (such as the mean, median, range etc.) and also for comparisons of the pre- and post-course scores. Where the data were normally distributed, it was compared with a paired sample (parametric) t-test. Where the data were not normal, it was compared using a Wilcoxon Signed-Ranks test. There were 111 valid data sets for the WEMWBS (19 male and 92 female), 75 for the MAAS and 21 for the PAAS.

The data that were collected from the 'End of Programme Parent Feedback' sheets and the feedback that was received from PGLs were treated in different ways. In questions where the responses were single words, statements or short sentences, NVivo was used to carry out thematic analysis. For questions that required a yes/no answer and then further explanation, NVivo was used again for thematic analysis. Where there were questions that required ticking a specific option, they were treated as categorical variables and a descriptive analysis was run. Data were collected from 71 parents-to-be and 17 PGLs. All provided their opinion on different aspects of the programme – both content and implementation.



It is to be noted that there were a variety of challenges with data collection. These ranged from logistical errors – such as printing the wrong forms – to PGLs already using their own antenatal tests and therefore deciding to omit those required by Family Links.

## **Recruitment of participants**

### **Settings**

Between March 2014 and June 2015, data were provided from 28 venues at which the WTTW programme was delivered. The venues were located in a variety of different counties in the United Kingdom including Durham, County Fermanagh, Hertfordshire, Kent, Londonderry, Middlesex, County Tyrone, the West Midlands and Yorkshire as well as Torfaen and Conwy in Wales. PGLs are encouraged to enlist the help of midwives, health visitors and children's centres in the recruitment of parents-to-be for a group. The ideal group size is eight to ten parents-to-be – more than this makes it hard for PGLs to meet everyone's needs and fewer makes it difficult to sustain group dynamics. It is recommended that women in their second trimester (22-30 weeks) attend the programme with their partners, if possible.

### **Procedure**

At the beginning of the first session of the WTTW programme, PGLs gave parents-to-be the option of taking part in the evaluation by providing all parents-to-be in attendance with demographic and self-evaluation forms. All parents-to-be were encouraged to complete two questionnaires but it was made clear that this was a voluntary task. Again, at the last session, PGLs provided the same forms to see if there had been any changes in the important outcomes of the programme. In the handbook, it suggests that raffle tickets should be offered for free to those who completed the forms but parents-to-be were unaware of what the prize would be and therefore the process was voluntary, but incentivised.

## PARENT-TO-BE OUTCOME DATA

### Standardised Measures

All parents-to-be were asked to score their wellbeing using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Stewart-Brown & Janmohamed, 2008). This is a fourteen-item questionnaire and each question is marked on a scale according to the answer indicated (1 = none of the time, to 5 = all of the time). The sum of scores can range from 14 to 70 with a higher score indicating a higher level of parental well-being. Overall, 111 parents-to-be provided valid WEMWBS data for analysis (92 female and 19 male). This measure has been shown to have good UK validation (Tennant et al., 2007) and has been used widely within mental well-being research. Its validity and reliability for this assessment will be discussed under 'limitations'.

Mothers-to-be and fathers-to-be completed the Maternal Antenatal Assessment Scale (MAAS) (Condon, 1993) and the Paternal Antenatal Attachment Scale (PAAS) (Condon, 1993), respectively. The MAAS is a 19 item scale with responses being scored on a one to five scale. The minimum score is 19 and the maximum is 95. The higher the score, the higher the maternal antenatal attachment. Factor analysis by Condon (1993) suggests that there are two subscales underlying the questionnaire which are 'Quality of Attachment' (maximum score is 50, minimum is 10) and 'Intensity of Preoccupation' (maximum score is 40, minimum score is 8). One item is not included on either subscale as it did not load highly enough. All 19 items contribute to the Global Maternal Attachment Score. The PAAS is a 16 item scale with responses being scored on a one to five scale. The minimum score is 16 and the maximum is 80. The higher the score, the higher the paternal antenatal attachment. These measures have been validated by many researchers (e.g. Condon & Corkindale, 1997; Hart & McMahon, 2006; van Bussel, Spitz & Demyttenaere, 2010) and are therefore seen to be reliable measures of maternal and paternal antenatal attachment. 75 mothers-to-be and 21 fathers-to-be provided valid MAAS and PAAS scores for analysis.

### Parent-to-be Demographics

All parents-to-be were encouraged to complete demographic data about themselves and their families. However, due to the nature of how the data was collected, along with participation being completely voluntary, much demographic information was not captured about the parents-to-be who have been included in this report. The only data that was reliably and consistently captured was gender information. This can be seen in Table 1.

Table 1. A table to show the number of male and female participants in each of the analysed assessments.

Number of Participants			
	Male	Female	Total
WEMWBS	19	92	111
MAAS		75	75
PAAS	21		21

As can be seen from this table, the WEMWBS data is predominantly female (82.9%). This has some important implications for the outcomes which are discussed in the 'Limitations' section of this report.

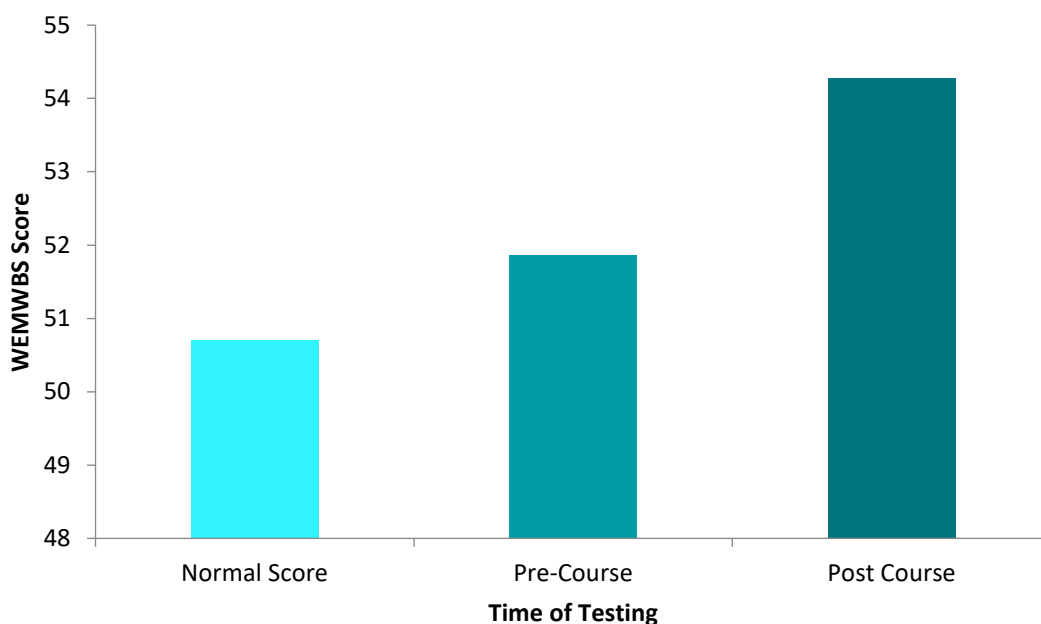
Again, there is more data provided for the MAAS assessments than the PAAS assessments. The PAAS sample size is large enough to use for statistical analysis but does have some problems in terms of reliability (see 'Limitations').

## RESULTS

The normality tests undertaken for the WEMWBS and M/PAAS can be found in appendix A.

### Improvements in Well-being Scores

The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Stewart-Brown & Janmohamed, 2008) was completed by 111 parents-to-be upon starting the WTTW course and upon completion of the course. Statistical testing showed that on average parents'-to-be mental well-being increased significantly from pre-course (Mean = 51.85) to post-course (Mean = 54.27). Full details of the statistical analysis is found in appendix B. These results can also be seen in Figure 1.



**Figure 1.** A graph to show the statistically significant increase in mental well-being score from pre-course to post-course as well as comparing these to the normal scores reported by Stewart-Brown and Janmohamed (2008).

Mothers'-to-be and fathers'-to-be WEMWBS scores were also analysed separately to see if there was a significant increase within both groups. Figure 2 shows a comparison of the mothers'-to-be ( $n = 92$ ) and fathers'-to-be ( $n = 19$ ) average well-being scores. There was a significant increase in the mental well-being score for mothers-to-be from the pre-course assessment ( $M = 51.70$ ) to the post-course assessment ( $M = 54.014$ ). A similar result was found for fathers-to-be from pre-course ( $M = 52.63$ ) to post course ( $M = 54.95$ ) mental well-being scores. Full details of the analysis is in Appendix B. These results can be seen in Figure 2 below.

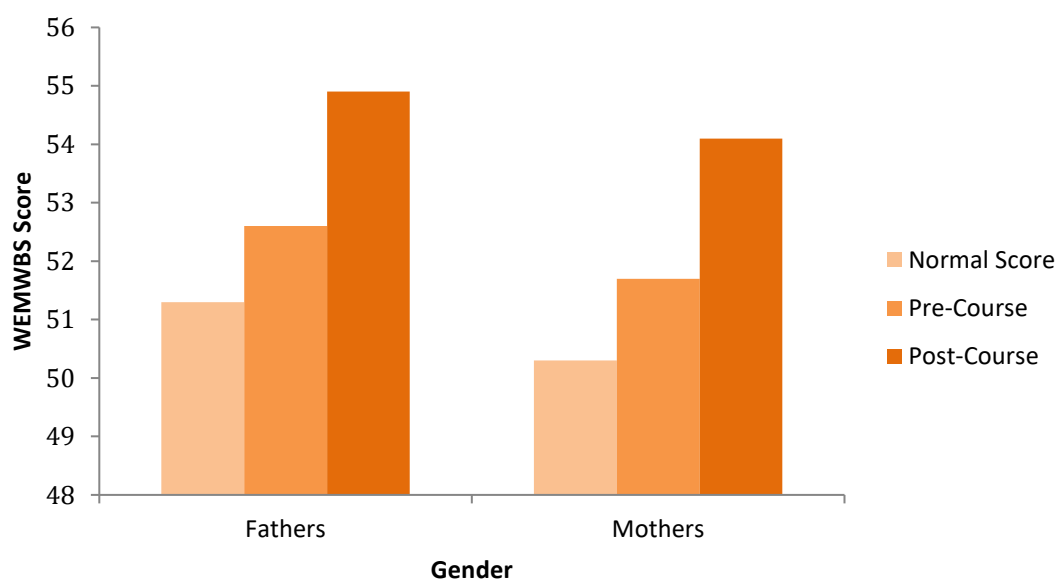


Figure 2. A graph showing the change in mental well-being score from pre-course to post-course for mothers-to-be and fathers-to-be independently. These scores are also shown in comparison to the normal scores found by Stewart-Brown and Janmohamed in 2008.

### WEMWBS Findings Summary

- On average, parents mental well-being scores increased by 2.42 points. This increase is statistically significant. See Figure 1.
- Mothers' mental well-being scores increased, on average, by 2.44 points. This increase is statistically significant. See Figure 2.
- Fathers' mental well-being scores increased, on average, by 2.31 points. This increase is statistically significant. See Figure 2.

### Parental Attachment Scores using the MAAS and PAAS

Statistical testing showed that the global attachment scores on the MAAS post-course (Mdn = 83.00) showed a significant increase in attachment score from the pre-course score (Mdn = 81.00). Full details of these scores is found in appendix B.

Mothers-to-be intensity of preoccupation increased significantly from the pre-course assessment to the post-course assessment. (Full discussion in appendix B). These results can be seen in Figure 3.

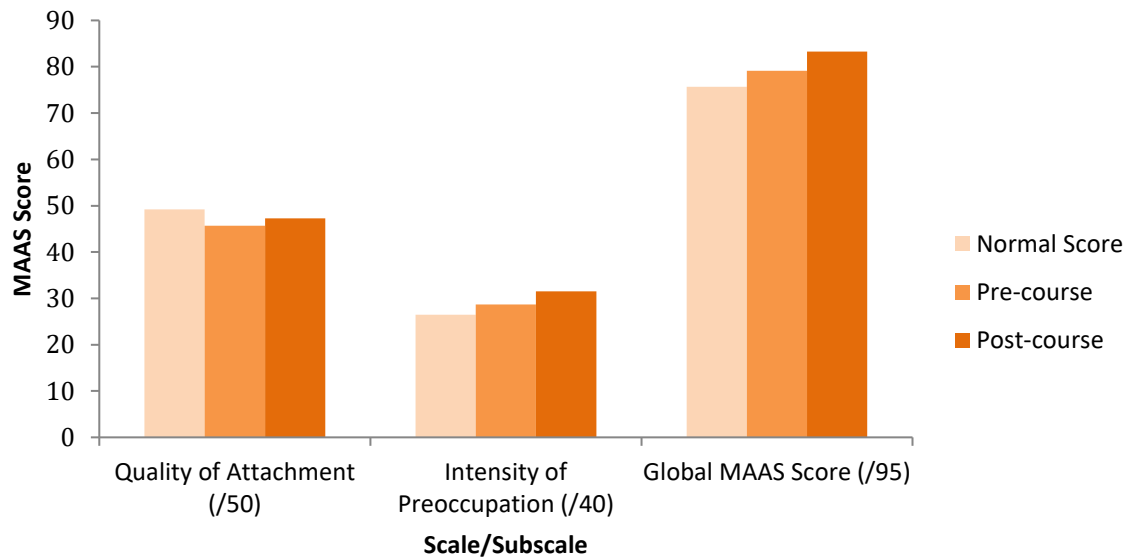


Figure 3. A graph to show the significant increases between pre-course and post-course MAAS scores globally and for both subscales. The results are also compared to the normal scores found by Condon in 1993.

### Paternal Antenatal Attachment Scale (PAAS) Scores

Statistical testing on the PAAS data showed that on average, fathers'-to-be attachment scores increased significantly from the pre-course assessment ( $M = 61.50$ ) to the post-course assessment ( $M = 66.52$ ). Full details of these scores is found in appendix B.

Figure 4. Shows the increase in PAAS scores from pre-course to post-course.

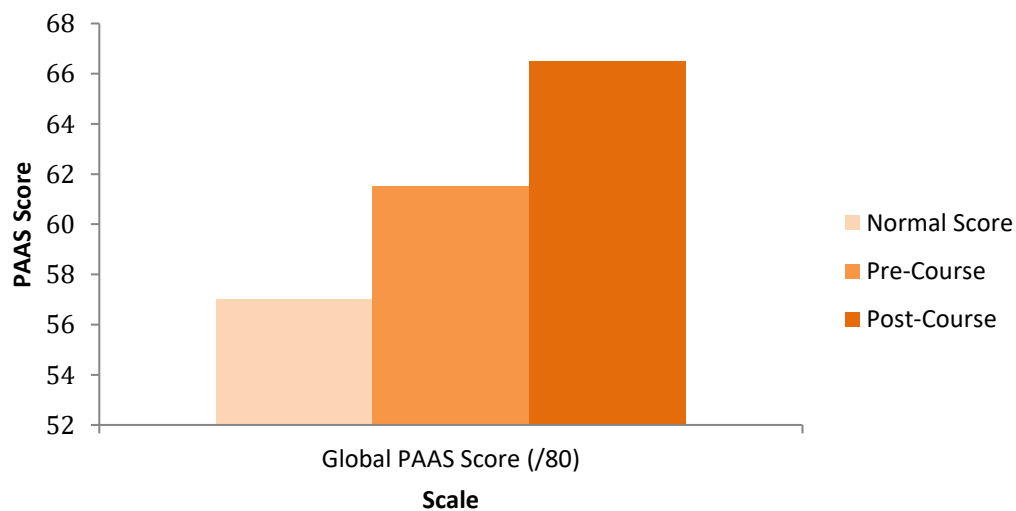


Figure 4. Graph to show the significant increase of fathers'-to-be PAAS scores from pre-course to post-course. The normal score found by Condon (1993) is also shown.

### MAAS and PAAS Findings Summary

- On average, mothers' global attachment scores increased by 4.22 points. This result is statistically significant. See Figure 3.
- On average, mothers' quality of attachment scores increased by 1.60 points. This result is statistically significant. See Figure 3.
- On average, mothers' intensity of preoccupation scores increased by 2.77 points. This result is statistically significant. See Figure 3.
- On average, fathers' global attachment scores increased by 5.02 points. This result is statistically significant. See Figure 4.



## PARENT-TO-BE FEEDBACK

During the period of study 71 parents-to-be who attended groups in Bradford in West Yorkshire, Cottingham and Bridlington in East Yorkshire, and Cookstown and Derry in Northern Ireland provided their opinion on different aspects of the programme content and delivery through routine feedback forms. The feedback forms include open statement questions, yes-or-no questions, and a 13-item scale measuring parents' attitudes with scores ranging from -2 (disagree) to 2 (agree). Statements were analysed using thematic analysis.

Confidence in the programme was assessed through a separate questionnaire and is based on 50 completed forms. Descriptive analysis was performed for categorical variables.

### How Parents-to-be benefited from the programme

All parents-to-be who responded to the feedback questionnaire believed that they had benefited from the programme.

The most frequently mentioned reason is the knowledge and information that the programme provided (n = 39). Some parents-to-be stated that it had improved their knowledge about parenting:

*It provided me with a wide range of knowledge*

*I have become a lot more educated*

The second most frequently mentioned reason was meeting with others and building friendships:

*[It provides] an opportunity to meet other parents-to-be*

*To meet people in the same position*

Other reasons the parents-to-be mentioned included the helpfulness and usefulness of the programme and the opportunity to ask questions and seek advice. Some parents-to-be commented that it brought up new ideas, facilitated family bonding, and was enjoyable with a good atmosphere. It also afforded the opportunity to connect locally and find out about good practice which was valued by some.

### The most essential part of the programme

Parents were asked an open question about the most essential parts of the programme. Many parents identified that the most essential part of the programme was breastfeeding (18). Also mentioned frequently were gaining knowledge of baby development generically and, more specifically for some, knowledge of brain, emotional and intellectual development (14) and bonding (14):

*Bonding with the baby effectively to understand the baby's needs*

The participation of health practitioners and the practical skills and knowledge gained were also highlighted (14):

*I especially enjoyed practical sessions where midwife or health visitor was present*

Other opinions about the most essential part of the programme were sessions on self-nurturing, bathing the baby, and pregnancy. Practical sessions on soothing a crying baby, feeding, safe sleeping, empathy and networking were valued but mentioned less frequently. Beyond the sessions, parents-to-be stated that practical advice, expectations and the responsiveness of the trainers were all important factors.

### Handouts

Most parents-to-be stated that the handouts were very useful. Comments about the handouts suggested that parents-to-be would find them useful for later reference and that they were informative. The most useful handouts were identified as those on breastfeeding, sleeping babies and having a healthy pregnancy.

*Yes I think the breastfeeding one and the book about positive discipline...was really good*

However, one parent-to-be stated that the handouts were only “fairly useful”:

*Some were very common sense*

Another stated that they would rather have electronic copies.

### Atmosphere in the group

Parents-to-be were asked an open question about how they found the atmosphere in the group. Most parents-to-be found the atmosphere of the programme was good. 30 parents-to-be stated that the atmosphere was peaceful, calm and relaxing:

*I always felt at ease with the group and I feel like I could be myself*

*It was good and nice and relaxed. Very welcoming and accepting*

Some parents-to-be stated that it was open and engaging and that everyone was listened to with respect:

*I did feel respected in the group and valued*

*(the Group Leaders) really made us feel welcome and respected*

Other parents-to-be stated that it was enjoyable, helpful and one mentioned that they found it supportive. However, two parents-to-be commented on the quietness of the group they were in and believed that size of group and tiredness were important factors:

*we sometimes were a bit quiet, because we were often quite tired*

*[the] group was quiet at times, [this] may improve as [the] programme grows and larger groups may encourage more co-operation*

### Recommending this programme to others

All parents-to-be who responded to the questionnaire wanted to recommend this programme to others. Typical reasons included the usefulness of the programme and the opportunity to learn:

*Because you learn a lot about family life and breastfeeding.*

*You will still learn new things after having other children. I've learned so much even after having four children*

*It has been helpful in a practical way and has made us think about bringing up children*

It was also recommended for new parents:

*...as a first time parent I have gained a lot of useful information*

Parents-to-be also recommended it as an opportunity to meet other parents-to-be in “*similar circumstances*”.

Other recommendations included that it was fun and engaging, led to good discussion and communication and was in depth.

### Techniques and Attitudes

With regard to the measurement of parents'-to-be techniques and attitudes to various aspects of transition to parenting that the programme covered, most parents gave positive ratings. This is based on a sample of 50 respondents at the end of the programme (excluding missing values).

All 50 respondents agreed that how they responded or talked to their baby could affect positive brain development. Very high numbers (48) agreed that they felt confident to set boundaries and be consistent and also that they understood the changes pregnancy makes to physical, social and emotional wellbeing. The same number agreed that they understood the links between breastfeeding and emotional health for mother, baby, and partner and also that they felt more confident in understanding their baby's communication. Almost all (46) agreed that they were now more confident in expressing their needs to their partner/midwife, and a similar number agreed that they now felt able to actively listen to their partner and other adults and that they understood the importance of having time for themselves.

Many parents-to-be (41) agreed that they understood how their family culture and history impacted on the way they saw the role of a parent. Those respondents who did not fully agree selected “somewhat agree” and no respondents disagreed with the above items.

28 respondents agreed with the item “I am now planning to breast feed my baby”, with 16 selecting “somewhat agree” and one “disagree”. It’s not clear if there were gender differences in the response to this question as parents-to-be were not asked about gender on this questionnaire, and the wording may have been particularly unhelpful for fathers-to-be.

For another item “I understand how daily baby care giving links to emotional health for mother, baby and partner”, 34 respondents agreed and 15 respondents somewhat agreeing. It would require further questions to understand the reasons for less certainty on this topic and it may be that this aspect of the programme may need further explanation for some parents-to-be.

For the remaining two items, 42 respondents agreed that they now felt more confident about signs of labour and more (46) agreed that they were now able to make healthy eating choices that were good for themselves, their baby and their family. However one respondent felt that they “somewhat disagree[d]” with both these items. Again it is unclear whether the respondent was indicating a lack in the programme, whether they had missed the relevant session, or whether they found the question difficult to answer for some other reason. As before, it is not possible to ascertain the gender of the respondent.

### Final Comments about the Programme

Parents-to-be were asked an open question about any final comments about the Antenatal Programme. The responses included many positive comments about how good the programme was and how helpful the PGLs had been.

*Just that (the Parent Group Leaders) are really good and they make you feel really welcome*

Some parents-to-be mentioned that they had enjoyed it a lot and two commented that it was well organised.

Some parents-to-be pointed out aspects of the programme that they felt needed improvement and provided suggestions for future programmes. Four parents-to-be commented on the pace of the delivery of the programme, including one respondent who commented that while some of the programme material was rushed through other parts were repeated unnecessarily:

*Sometimes we had to skip parts or rush them, while a few aspects were repeated (through error but also for reinforcement.) The same points were made when I think we had already understood...*

And made suggestions for how to shorten some sessions:

*Maybe recap of the previous class and the icebreaker could have been shorter?*

Another respondent would have liked the opportunity to cover more content with the midwife:

*Would be useful to combine with midwife and include labour and breastfeeding*

One respondent would have liked the opportunity to work with their own partner more during the sessions and suggested that they would have found this more beneficial:

*For the next group: think about allowing couples to sit together to complete some activities as it will allow them to chat and discuss stuff as a couple – rather than discuss things with someone else's other half!*

Additionally, two parents-to-be pointed out they sit for a time that they deem to be too long and one suggested more active sessions would be welcome:

*More moving around! After about 30 minutes would be perfect.*

Two parents-to-be stated that they found some of the introductory activities a little unnecessary but one recognised there may be some benefits to this after a working day:

*Similarly the icebreaker maybe a bit redundant, though I suppose they occur as a form of relaxation at the beginning after a long day at work*

Two parents-to-be pointed out that they found the weekly feedback was unnecessary and reduced the time for covering the next session:

*The weekly repetition of the previous week's feedback is unnecessary and time-consuming given that you are already struggling to fit everything you want to cover in*

Another respondent found the number of evaluation and feedback forms off-putting and would have liked to see them spread out more over the programme.

### Summary of Feedback from Parents-to-be

Overall, there were many positive responses from parents-to-be regarding the whole programme, impact, handouts, PGLs, content and atmosphere. All parents-to-be agreed that they would highly recommend this programme to others. The overall impression is that parents-to-be have learned from the programme content and have found the course to be relevant, informative and enjoyable – with positive comments about course delivery and PGLs. There has been a tension for some participants in terms of time pressures to get through the programme, while still allowing time for reflection and feedback and this has led to some comments about pacing, and some couples may appreciate more opportunity to work with their partners if this was offered.

## PARENT GROUP LEADER FEEDBACK

Parent Group Leader feedback came from 17 PGLs facilitating WTTW groups in Irvinestown, Derry and Cookstown in Northern Ireland, Torfaen and Conwy in Wales, Caterham in Surrey and Cottingham in East Yorkshire.

Through PGL feedback forms, Parent Group Leaders were asked to comment on recruitment into the programme, the relevance and appropriateness of the course for participants, course materials and recommendations for the future development of the programme.

### Recruitment on to the programme

Through feedback from PGLs it was established that recruitment for the antenatal programme was mainly through midwives (n = 12). Others recruited from Sure Start's Antenatal registration list, health visitors, or GP surgery. Some of them also contacted people who were booked into a local pregnancy club, or sent emails and placed notices on a website for parents-to-be to contact. A few PGLs used Facebook and posters in public places to facilitate parents'-to-be participation.

Most parents-to-be were recruited between the 20th and 32nd week of pregnancy. A few parents-to-be were recruited between the 12th week and the 16th week or any time after having an appointment with a midwife. A further six were referred by the health sector, such as by a midwife or GP and another three parents-to-be were referred by social care. 13 PGLs selected "other" methods of referral, but no further information was obtained.

### Suitability of WTTW programme for parents-to-be

All PGLs agreed that parents-to-be in this cohort had benefited from the WTTW programme. Seven PGLs stated that the programme was suitable for all parents-to-be and another two PGLs particularly recommended this programme for first time parents-to-be. Other PGLs believed they would refer parents-to-be who were less confident, younger, from vulnerable groups, or involved with social care and who may have had previous children removed from their care.

All PGLs would recommend the programme to other parents-to-be. Some commented that:

*all the parents (-to-be) absolutely loved it*

*lovely way for parents who engage in the programme to get together and progress together to other antenatal and postnatal programmes*

PGLs also had pleasant experiences delivering the programme and they could see the difference it was making:

*I'm very pleased that I was able to deliver this programme and feel it has made a big impact on the parents that have participated*

*[this is a] fantastic programme, [I] enjoyed delivering it... Can't wait to deliver [it] again*

Five PGLs stated that it was an enjoyable course.

Many PGLs signposted parents-to-be to other services during the programme: twelve referred parents-to-be to the midwifery team, eight recommended health visitor involvement, nine signposted to GPs, six had directed parents-to-be towards children's services, and six had signposted to the voluntary sector.

When PGLs were asked how the parents-to-be responded to completing pre- and post-course measures and feedback, it was met with mixed responses. Some mentioned that explaining the reasons for evaluation helped parents-to-be to take part in spite of the negatives.

*...time consuming however when benefits were explained [parents-to-be] were willing*

Not all parents-to-be accepted willingly however with some “not keen to engage” and others were more vocal in their objections:

*...they mentioned they thought there was too much paperwork*

Even when parents-to-be did agree to participate it could be particularly difficult at the start of the programme, before working relationships were fully established:

*It did take some time and could impact on quality of first session particularly*

### **PGL comments on programme content**

All PGLs believed the content of the programme was appropriate for the groups they had run. Some PGLs stated:

*The parents liked all areas of the programme. Practically and emotionally*

However there were a few criticisms including about the way the sessions are organised and also about one or two specific sessions:

*some content can be merged, some repeated*

*more practical exercises may have been beneficial*

These comments may reflect the learning needs of a particular cohort. Moreover, some PGLs named specific aspects that were not appropriate:

*Most [content was suitable] though some parents struggled with labelling session*

And for some midwife involvement was deemed crucial:

*we didn't feel comfortable demonstrating how to bath/hold baby while bathing and left this to the midwife*



Additionally some of the content may have been considered too easy for some parents who were particularly well researched:

*Most parents were in their late 20s and 30s, working, and some had already done a lot of research. Mentioned 'common sense' often in their feedback*

The most essential parts of the programme as noted by PGLs were emotional health (n = 13) and attachment (n = 13). Ten stated relationships was the most important, while six PGLs selected physical care as the most important part. This feedback from PGLs highlights their rating of the significance of the psychological and emotional benefits of the programme over and above the physical and practical aspects of baby care and preparation for birth.

### **PGL feedback on the new handbook and course materials**

With reference to the new handbook, 15 PGLs agreed it provided clear, logical and achievable learning outcomes. For example, some said:

*[it was] bright, colourful and easy to read*

Fourteen PGLs agreed that the new handbook had sufficient, accurate and current theory included to support confident delivery.

### **Challenges with delivering the content of the programme**

However, two PGLs mentioned particular challenges with weeks 5 and 6 of the programme.

*Found week 5 and 6 challenging to deliver in terms of content not always flowing logically with enough antenatal theory*

And some local practices differed from the advice given:

*There were certain things we left out on advice from the midwife as they are not practiced here in Northern Ireland.*

It suggests that more in-depth feedback from PGLs may be required to fully understand the particular difficulties that were encountered in these specific situations.

### **How PGLs organised the delivery of the programme**

PGLs were asked for their recommendations for their own personal organisation in order to help them with the delivery of the programme. Some mentioned the need for increased emphasis on the practical side of looking after a new baby:

*More detailed information for parents on how to bath a baby, make up a bottle, change nappy"*

Other PGLs would have appreciated more time to prepare and debrief. For some the input of health professionals was particularly welcome, noting that:

*it is good practice but not essential to co-facilitate with someone with health background alongside the parenting team*

The pace of the programme and making sure the sessions weren't too crammed with new information was also felt to be important. Some felt that the exercise debunking the myths about breast-feeding was too strongly worded and deemed it harsh. One PGL identified the need to work more closely with the midwives to improve referral rates.

### Suggestions for future programmes

For future programmes, some PGLs pointed out a need for adequate relaxation and work breaks during the session. The need to adapt the programme to accommodate a range of cultural beliefs and to tailor the activities to the groups was emphasised, and perhaps reflects the differing needs and starting point for individual members of the group.

These tensions may be reflected in one comment made by one PGL who felt that some of the activities were childish. More in-depth feedback about the specifics of this context and the needs of a range of parents-to-be from the Welcome to the World Group would be very useful when further developing or adapting the programme.

### Summary of PGL Feedback

To summarise, data from Parent Group Leaders suggests that recruitment can work well when midwives and PGLs are more closely linked. All PGLs spoke highly generally about the programme and felt that it was appropriate and enjoyable for parents-to-be and were willing to recommend it to other parents-to-be. PGLs identified that the most vital parts of the programme were emotional health and attachment.

Some responses from PGLs suggest that the programme is delivered to a wide range of parents-to-be including some younger and less experienced new parents-to-be, as well as some who are motivated and well-read. Furthermore, parents-to-be who already have older children and who are not new to parenting, and parents from a range of cultural backgrounds are participating on the course. There are clearly a wide range of starting points for parents-to-be on the course and this perhaps raises some specific challenges and tensions for PGLs in those areas. Learning from each other about those experiences could be very helpful for all PGLs delivering the programme.

There were some specific aspects or sessions of the programme that a few PGLs had difficulty delivering and while it is unclear about why this was the case, it suggests that programme content needs to be kept under review and that PGLs who regularly deliver the course need to be fully involved to contribute to that process and any future developments in order to have full confidence in the content.

## LIMITATIONS OF THE DATA

The findings presented in this report must be considered with some important limitations in mind.

Firstly, even though it is evident that Family Links intended to use data collected for the purpose of monitoring and evaluation, it is not a carefully planned study. It is rather the result of available data collected at antenatal group meetings. As the questionnaires were completed on a voluntary basis, valid data were only collected from a potentially small sample of parents-to-be who had participated in the WTTW programme. Qualitative data was only valid if there was a pre-course and post-course assessment completed and feedback from parents was sought at the end of the programme and therefore the results are likely to be biased in favour of those who enjoyed the programme, saw it through to completion and then chose to report their results. As the data collection system improves (as Family Links are planning), it will be possible to account for this bias. Family Links will be able to see how many parents-to-be, out of the total enrolled, are providing data and there will, hopefully, be a more complete set of results without any data missing.

Secondly, none of the evidence provided in this report allows for an estimate of changes occurring naturally – there is no control group – especially as it is recognised that antenatal attachment naturally increases over pregnancy without intervention. However, it is noted that a control group in this kind of study would be challenging to implement. Both measures (WEMWBS and M/PAAS) only examine the immediate effects of the programme upon its completion. Follow up post-birth would see whether the improvements found here are long-lasting and would also reduce the likelihood that factors other than attending the programme could explain the changes in parental antenatal attachment and mental well-being. Moreover, there is no measure of how many sessions the parents-to-be attended, whether they took on board the skills and advice given or the extent to which the PGLs followed the Family Links guidelines. These are important factors in determining whether it is the content of the sessions that leads to the outcomes recorded or whether it is simply being motivated to attend a programme and see it through to completion. Thirdly, there is the question of the validity of the WEMWBS for assessing the mental well-being of mothers-to-be. The normal scores that have been reported here are for non-pregnant participants and therefore it must be questioned whether or not they can apply to mothers-to-be. Though it cannot be forgotten that this evaluation did find a statistically significant increase across all of the parents-to-be that took these tests. Further work is needed to determine its suitability as a reporting tool for this programme or to identify more suitable alternatives.

Finally, it should be noted that the data provided for the paternal WEMWBS and the PAAS is small in size, which makes the outcomes less reliable than they could be. Further data collections should focus on getting valid data from fathers-to-be to corroborate the outcomes that have been found in this report.

### Recommendations for improvements to current data collection and measures

Moreover, ways to reduce the paperwork and evaluation forms for participants need to be considered. The authors suggest that it would be helpful to add a question to the feedback form in order to ask respondents whether they are a mother-to-be or other parent-to-be which would enhance our understanding about attitudes and intentions to breastfeeding for example. More in-depth research would help to gain full information about where parents are referred from.

For future research, it is also suggested to evaluate parents-to-be at an additional time point namely after their babies are born to examine whether there are any differences from the results summarised in this report.

It is important to undertake more work to refine the key outcomes now that the programme has become more widespread and find measures that are more specifically tailored to the antenatal setting and experience of parents, which at the same time are acceptable to use and easy to administer.

## FUTURE RESEARCH AND EVALUATION OF THE WTTW PROGRAMME

To follow on from this report, Family Links have planned a full service evaluation with improved data collection techniques and a mixed methodology to strengthen the reliability of the data. This piece of research will take place between October 2015 and October 2016 and will be led by researchers from the University of Hull Department of Midwifery. The purpose of the planned evaluation is to find out whether attending the WTTW programme improves outcomes for parents-to-be during the transition to parenthood and will evaluate the following:

- Is the WTTW programme effective in preparing parents-to-be for parenthood? (Specifically around improvements in four key areas: attunement and bonding; parental well-being; breastfeeding; practical care).
- To what extent are programme outcomes being achieved?
- What factors affect the successful implementation of the programme?

The study will look at quantitative measures of maternal and paternal attachment, emotional well-being, attitudes towards breastfeeding and parenting self-efficacy. The quantitative data will be collected across three time points – week one and week eight of the antenatal nurturing programme and between three to four months after the birth of the baby. Qualitatively, there will be two to three focus group discussions upon completion of the programme and then again at approximately two to four months after the birth of their baby. There will also be approximately ten semi-structured telephone interviews with PGLs. Focus groups will be run using topic guides. The interviews and topic guides have been developed in partnership with the project advisory group.

Overall, this new piece of research aims to evaluate the efficacy of “Welcome to the World” in achieving its programme aims. The results will, hopefully, illuminate further the achievement of outcomes and provide clear direction for the future development of the programme.

## RECOMMENDATIONS AND CONCLUSIONS

### Recommendations for the programme

The parents-to-be findings suggest areas for further research particularly into how time is spent in the group, and the role of health experts. For example, according to comments from parents-to-be, it is suggested to reduce the time of “icebreaker” activities, and to try to increase the participation of midwives and health visitors for a wider range of content. It is recommended that this is further explored through future research before changes are made.

Although PGLs agreed that the WTTW programme was very successful, it was suggested that there is a need to further examine the content and any challenges with adapting activities for the diverse range of parents who are accessing it. This can be done through Refresher Days or local PGL peer support groups where PGLs can share experiences of delivering the programme to parents with a range of presenting needs.

### Conclusions

Overall, this evaluation shows really promising results for the WTTW antenatal programme. Parents-to-be who attended the programme reported that their mental well-being significantly improved upon their participation in the programme and in addition, both expectant mothers to-be and fathers-to-be reported that their antenatal attachment to the foetus significantly increased by the end of the programme.

Suggestions for improvement are offered. One such suggestion is the implementation of a more robust form of data collection to ensure the reliability of the sample and outcomes. Another is to further look into the tools that are used to assess the outcomes at the end of the course to ensure that they are the most suitable.

Recommendations for improving the programme further have been suggested from qualitative and quantitative analysis of parent-to-be and PGL feedback.

Finally, from the results obtained in this report, it provides promising evidence that the Welcome to the World programme is meeting its objective of ‘addressing the emotional as well as physical needs and anxieties of parents-to-be’ and addressing the needs of parents identified by CANparent.

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## APPENDIX A

### Normality Tests on WEMWBS, M/PAAS data

Firstly, Shapiro-Wilk tests (Shapiro & Wilk, 1965) for normality were carried out on all of the data (WEMWBS, MAAS and PAAS) to see whether or not a parametric paired samples (dependent) t-test could be run to compare the data. Where it was found that the data were not normally distributed, the non-parametric equivalent, a Wilcoxon Signed-Ranks test (Wilcoxon, 1945) was carried out. Table 2 on the next page shows the result of these normality tests. All the significance values ( $p$ ) reported from here onwards are two-tailed. A result is taken to be statistically significant if  $p < .05$ . This means that the probability that the effect is caused by chance is less than 5%.

**Table 2.** A table to show the results of tests for normality that were run on the data. Where the provided data are normal, a parametric paired samples (dependent) t-test has been used for comparison. Where the data provided are not normal (shown in **bold**), a non-parametric Wilcoxon Signed-Ranks test has been used for comparison. Data is not normally distributed if  $p < .05$  – the distribution is significantly different from normal.

Test		Test Statistic	Probability/ Significance	Normally distributed?
<u>WEMWBS</u>				
All participants	Pre-course	$W = .99$	$p = .255$	Yes
	Post-course	$W = .98$	$p = .078$	Yes
Mothers-to-be	Pre-course	$W = .98$	$p = .272$	Yes
	Post-course	$W = .98$	$p = .151$	Yes
Fathers-to-be	Pre-course	$W = .98$	$p = .867$	Yes
	Post-course	$W = .91$	$p = .082$	Yes
<u>MAAS</u>				
Global Score	Pre-course	$W = .94$	$p = .001$	No
	Post-course	$W = .98$	$p = .196$	Yes
Quality Subscale	Pre-course	$W = .83$	$p < .001$	No
	Post-course	$W = .80$	$p < .001$	No
Preoccupation Subscale	Pre-course	$W = .98$	$p = .157$	Yes
	Post-course	$W = .98$	$p = .248$	Yes
<u>PAAS</u>				
Global Score	Pre-course	$W = .95$	$p = .284$	Yes
	Post-course	$W = .97$	$p = .620$	Yes

## APPENDIX B

### Statistical Analysis of the WEMWBS and M/PAAS Scores

#### *Improvements in Wellbeing Scores*

The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Stewart-Brown & Janmohamed, 2008) was completed by both mothers-to-be and fathers-to-be ( $n = 111$ ) upon starting the WTTW course and upon completion of the course. Statistical testing showed that on average parents'-to-be mental well-being increased significantly from pre-course (Mean = 51.85, Standard Error = 0.74) to post-course (Mean = 54.27). Using a paired samples (dependent) t-test, it was found that, on average, parents'-to-be mental well-being increased significantly from pre-course (Mean = 51.85, Standard Error = 0.74) to post-course (Mean = 54.27, Standard Error = 0.79),  $t(110) = 3.36$ ,  $p = .001$ . These results can also be seen in Figure 1.

Mothers'-to-be and fathers'-to-be WEMWBS scores were also analysed separately to see if there was a significant increase within both groups. Figure 2. shows a comparison of the mothers'-to-be ( $n = 92$ ) and fathers'-to-be ( $n = 19$ ) average well-being scores. A paired sample (dependent) t-test showed that there was a significant increase in the mental well-being score for mothers-to-be from the pre-course assessment ( $M = 51.70$ ,  $SE = 0.86$ ) to the post-course assessment ( $M = 54.04$ ,  $SE = 0.92$ ),  $t(91) = 2.88$ ,  $p = .005$ . A similar result was found for fathers-to-be. A paired samples (dependent) t-test found that there was a significant increase from pre-course ( $M = 52.63$ ,  $SE = 1.27$ ) to post course ( $M = 54.95$ ,  $SE = 1.23$ ) mental well-being scores,  $t(18) = 2.43$ ,  $p = 0.026$ . These results can be seen in Figure 2.

#### *Improvements in Attachment Scores*

A Wilcoxon Signed-Ranks test showed that the global attachment scores on the MAAS post-course ( $Mdn = 83.00$ ) showed a significant increase in attachment score from the pre-course score ( $Mdn = 81.00$ ),  $z = -5.02$ ,  $p < .001$ .

As there was agreement in the literature about the factor loadings onto the subscales for the items in the MAAS, it was possible to draw statistical comparisons between the subscales of 'Quality of Attachment' and 'Intensity of Preoccupation'. A Wilcoxon Signed-Ranks test was used to compare the 'Quality of Attachment'. This showed that there was a significant increase in quality of attachment from pre-course ( $Mdn = 47.00$ ) to post-course ( $Mdn = 48.00$ ),  $z = -4.02$ ,  $p < .001$ . A paired samples (dependent) t-test was used to compare the results collected for the 'Intensity of Preoccupation' subscale. On average, mothers'-to-be intensity of preoccupation increased significantly from the pre-course assessment ( $M = 28.68$ ,  $SE = 0.51$ ) to the post-course assessment ( $M = 31.45$ ,  $SE = .46$ ),  $t(74) = 6.44$ ,  $p < .001$ .

A paired sample (dependent) t-test was carried out on the PAAS data and found that, on average, fathers'-to-be attachment scores increased significantly from the pre-course assessment ( $M = 61.50$ ,  $SE = 1.36$ ) to the post-course assessment ( $M = 66.52$ ,  $SE = 1.47$ ),  $t(20) = 4.56$ ,  $p < .001$ . As there is some disagreement about factor loadings and which items should be excluded from subscales in the PAAS, it was not possible to compare these subscales.