

Twf and onwards: Impact assessment and the way forward

Final report

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for the

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P R I F Y S G O L
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U N I V E R S I T Y



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Executive summary

Introduction

The Twf scheme was established in order to increase the numbers of bilingual families who transmit the Welsh language to their children. The focus of Twf is to highlight the value of the Welsh language and bilingualism to parents, prospective parents and the general population; and to encourage families to raise their children to be bilingual. Twf emphasises the importance of developing bilingualism from an early age and of using Welsh in the home. Twf's primary target audience is mixed language families, where only one parent is Welsh speaking.

This research was commissioned by the Welsh Language Board to provide an evaluation of the impact of the Twf scheme and identify ways of taking the scheme forward.

The research was undertaken between 1st March 2005 and 28th February 2008, and comprised of four main studies, namely: structured telephone interviews with expectant parents; face to face interviews with new parents; focus group interviews with health visitors and midwives and an ethnographic analysis of Twf activities. The original brief was to conduct the study in the counties of Ceredigion, Carmarthenshire and Pembrokeshire. However, in addition, telephone and face to face interviews were also conducted in the county of Denbighshire.

This executive summary gives a brief overview of the findings of the various elements of the research and summarises the recommendations that are tendered as a means of taking the Twf scheme forward.

Results

The research findings are categorised into three main constituents, namely home influences on Welsh language transmission; influences on Welsh language transmission at the interface between the home and the community; and community influences on Welsh language transmission. The impact of Twf is considered within each of these constituents.

Home influences

The research demonstrates that within the home, a number of factors influence language transmission. High levels of parental Welsh language fluency and confidence in using Welsh, together with positive attitudes towards bilingualism all positively influence parents' intention to transmit Welsh to their children; and a strong sense of Welsh identity has a similar affirmative influence. A high socio-economic status and greater educational attainment are also positively correlated to Welsh language transmission in the home. The language profile of the family is shown in the research to directly affect Welsh language transmission, with more parents from families where both parents speak Welsh demonstrating an intention to transmit Welsh to their children than families in which only one of the parents speak Welsh.

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The study shows that there is neither a relationship between the gender of the parent and language transmission; nor the position of the child in the family and Welsh language transmission. These findings give some direction for the Twf scheme and suggest that families with particular demographic, linguistic and personal characteristics should be targeted to receive more intensive Twf input in order to increase the likelihood of Welsh language uptake in the home. However, the research shows that Twf could improve its targeting approach, and this gives rise to a number of recommendations that point to a more strategic and systematic approach, with more emphasis on tailoring the input to influence parents' perceptions of their ability to manage language transmission in the home.

Influences at the home/community interface

Family and friends and childcare provision are shown to affect the language patterns of families with small children. The impact of these factors can be either positive or negative and therefore need to be carefully considered by the Twf scheme in order to induce a positive trend in Welsh language transmission. There is the potential for the messages disseminated by Twf; and the resources and activities that are used to convey such messages to be pivotal in increasing the level of language transmission from parents to children. The research shows that at present Twf input can have a significant impact on parents' language related decision making. However, where plans for language transmission are already established, this generally reinforces the decision to transmit Welsh. These findings generate a series of recommendations that focus on developing strategies to influence behavioural beliefs and behavioural intentions amongst parents and the people who are significant in the family's lives so that Welsh language transmission becomes a reality for families with small children.

Community influences

The language profile of a community and the status afforded to the Welsh language are both shown to be critical indicators of language transmission in the home. Where Welsh is perceived to be dominant in a community and a desirable language, parents are more likely to express intentions to transmit Welsh to their children. Health visitors and midwives are respected professionals within the community and offer the potential to become credible agents of the Twf scheme. However, although there is some commitment to disseminate Twf resources, there is a general apathy towards discussing language transmission with parents. Schools and nurseries and local employment both emerge as settings that can either facilitate or inhibit Welsh language transmission and the Twf scheme needs to pay attention to how it can encourage parents to access supportive educational and employment settings.

Moving forward

At present, the Twf scheme is charged with tackling Welsh language transmission at the individual level and therefore efforts are concentrated on conveying its message with a view to influence parent-child language use. There is a need for the Welsh Language Board to consider how it can work in partnership the Twf project contractor, and with partners such as Mudiad

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Ysgolion Meithin, Mentrau Iaith, Welsh for Adults Centres and the Board's own Language Action Plans to explore how the Twf project could engage in more community activities. This would ensure that Welsh language transmission in the home is not solely the responsibility of individual parents but is also facilitated at the structural level.

Recommendations

Fifteen main recommendations are tendered in this report and these are mainly derived from mapping the research findings against the current objectives of the Twf scheme. The recommendations are summarized here and can be found in full from pages 83-94 of the main report.

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Number	Recommendation
1	Clarify the public health role of health visitors and midwives in relation to supporting Welsh language transmission within families in Wales
2	Seek statutory directives from government and professional bodies to uphold standards for health visitors and midwives on entry to the register in relation to their role in supporting Welsh language transmission within families in Wales
3	Identify and maintain opportunities within the midwifery and health visiting curricula to deliver and enhance language awareness and the Twf scheme's training programmes
4	Establish a new role within healthcare organisations for health visitors and midwives designated to the Twf scheme
5	Establish uniform guidance for Twf officers, health visitors and midwives to develop knowledge and cues for action for their client group
6	Establish methods of working for Twf officers, health visitors and midwives to develop strategies to convert intentions into behaviours
7	Collaborate with designated health visitors and midwives to reach Welsh/English and other families based on local demographics
8	Target difficult to reach groups, such as parents from low socio economic groups, expectant fathers and other extended family members
9	Consider improving the Twf scheme's monitoring and evaluating systems in order to provide a more rigorous evaluation method
10	Develop appropriate advertising campaigns to raise awareness and improve knowledge amongst the general public concerning: <ul style="list-style-type: none"> - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education
11	Enhance ways of working with early years partners to raise awareness and improve knowledge amongst parents concerning the: <ul style="list-style-type: none"> - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education
12	Develop parents' knowledge of the benefits of using Welsh in the home
13	Develop parents' levels of confidence and competency in transmitting the Welsh language in the home
14	Work in partnership with other organisations to engage in community development activities to ensure focus of message reaches the structural level as well as the individual level
15	Enhance the capacity and operational efficiency of the Twf scheme to increase face to face contact with parents

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1 Introduction

- 1.1.1.1 This report was commissioned by the Welsh Language Board to provide an evaluation of the impact of the Twf scheme and offer some recommendations for taking the scheme forward. The purpose of the research study was to contribute towards the development of the Twf scheme in its mission to promote effective Welsh language transmission within the home.
- 1.1.1.2 The original brief noted that the study was to be conducted in the counties of Ceredigion, Carmarthenshire and Pembrokeshire. However, following the commencement of the study, the Welsh Language Board further requested that the impact of the Twf scheme should be assessed in the county of Denbighshire.
- 1.1.1.3 The study was undertaken between 1st March 2005 and 28th February 2008, and this report gives an overview of all of the findings of the various elements that contributed to the research. The recommendations for the way forward for the Twf scheme are based on these integrated study findings.
- 1.1.1.4 The production of this report is not supposed to be an academic exercise. Rather, the report is intended to reach a wide audience of individuals, groups and organisations who have an interest in language transmission in the home. With this in mind, detail of the methodological approaches used in the research are kept to a minimum. Instead, the report concentrates on the findings of the study and the consequent recommendations.

1.2 Background to Twf scheme

- 1.2.1.1 The Twf scheme was established in order to increase the numbers of bilingual families who transmit the Welsh language to their children. Since the introduction of a pilot scheme in 1998/99 the Twf scheme has been managed and funded by the Welsh Language Board, and since May 2001 cwmni Iaith Cyf, a language planning agency, has been operating the field work on behalf of the Welsh Language Board. The Welsh Language Board itself deals with all other aspects of the project.
- 1.2.1.2 The Twf scheme's strategic aim is to enhance the transmission of the Welsh language within the family, and the current objectives, established in 2007 are:

Objective 1: To collaborate with midwives and health visitors so that they convey the Twf message to the target population

Objective 2: To raise awareness among parents, prospective parents and the public in general of the value of introducing Welsh in the home, the value of bilingualism and the benefits of a Welsh

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education. Twf's main target in this respect are prospective parents and parents with babies under 6 months old.

- 1.2.1.3 The focus of Twf is to highlight the value of the Welsh language and bilingualism to parents, prospective parents and the general population; and to encourage families to raise their children to be bilingual. Twf emphasises the importance of developing bilingualism from an early age and of using Welsh in the home. Twf's primary target audience is mixed language families, where only one parent is Welsh speaking. However, in light of the fact that amongst families where both parents speak Welsh, 10% choose not to transmit the Welsh language to their children (Welsh Language Board, 2006); efforts are also made to convey the 'Twf message' to these families. Moreover, given that 28% of families across Wales have Welsh speaking children, where neither parent speaks Welsh (National Statistics, 2001), Twf has also recognised the value of transmitting its message to this particular group of families. For this reason, and in recognition of the fact that the isolation of mixed language families to receive the Twf message is seen as undesirable (Davies, 2005), Twf sets out to share the message about the value of bilingualism to as diverse a group of parents as possible.
- 1.2.1.4 Twf does not work in isolation, but rather, depends on collaboration with two main partners, these being healthcare professionals and early years organisations. Health visitors and midwives are seen to be key to the success of the Twf scheme since collectively they have contact with all prospective and new parents in Wales. They thus have the capacity to convey the Twf message to parents of all pre-school children.
- 1.2.1.5 Twf also collaborates with other agencies, particularly those whose main concern is early years provision. Early years initiatives, such as Mudiad Ysgolion Meithrin (MYM) and Wales Pre-school Playgroups Association (WPPA) offer Twf a vehicle to access the parents of pre-school children. This is achieved directly, by attending sessions such as parent and toddler groups and talking to the parents in attendance; and indirectly, by depending on the goodwill of early years workers to distribute resources to parents on Twf's behalf.
- 1.2.1.6 The Twf scheme targets prospective parents and parents of babies under 6 months old through a network of Twf field officers, who focus in the main on encouraging parents to transmit the language within the home. Although nearly every new mother in Wales receives information from the Twf scheme about raising children bilingually, through the Bounty packs, the Twf field officers are most active in the following areas: Anglesey, Gwynedd, Conwy, Denbighshire, Powys (excluding Radnorshire), Ceredigion, Pembrokeshire, Carmarthenshire, Swansea, Neath Port Talbot, Bridgend, Rhondda Cynon Taf, and Caerphilly; that is, the areas of

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Wales where there is the potential for a larger number to transmit the Welsh language within the home.

- 1.2.1.7 The Twf message is disseminated via Twf field officers or healthcare professionals who meet the parents face to face; and by means of marketing methods and resources that are produced by the Welsh Language Board. The following materials are currently produced: 6 Good Reasons (information leaflet and poster); Come to Read (information leaflet); scan card; postcard; congratulations card; car sticker; bulletins; compact disk 1; Twf calendar; Twf colouring book; and Twf bib.

2 Research study: Twf and onwards: Impact assessment and the way forward

2.1 Aims and objectives

- 2.1.1.1 The main aim of the Twf and onwards research study was to investigate the impact of the Twf scheme on decisions regarding language transmission in the family and offer ways of improving its effect. This was achieved through the following objectives:
- To track participants from Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire before, during and after the period they experience the Twf message, in order to assess and trace the impact of the Twf scheme on decisions about language choice and language use in the family.
 - To assess the impact of the Twf scheme on participants who have experienced different levels and intensity of the message about bilingualism passed on by the Twf scheme
 - To observe patterns of language use within the family
 - To undertake a detailed activity analysis of the Twf scheme across the counties of Carmarthenshire, Ceredigion and Pembrokeshire during April to December 2005

2.2 Demographic profiles of the four counties under study

- 2.2.1.1 The counties of Ceredigion, Carmarthenshire, Pembrokeshire, and Denbighshire comprise discrete geographical, demographic and linguistic profiles. Ceredigion is a predominantly rural county. The county extends from Eglwysfach in the North to Cardigan in the South and covers an area of 1783 km². The main towns of Ceredigion are Cardigan, Aberystwyth and Lampeter. The county is populated by 73,000 people, 52% of whom speak Welsh.

- 2.2.1.2 Carmarthenshire encompasses both urban and rural localities, and extends across 2,395 km², with the main county towns being

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Llanelli and Carmarthen. The total population of Carmarthenshire is 167,000 and 50% of the population speak Welsh.

2.2.1.3 Pembrokeshire is also primarily rural in nature and ranges from Cilgerran in the North to Pembroke in the South, the main towns being Haverfordwest and Milford Haven. The total population of Pembrokeshire is 110,000 and 22% of the county's population speak Welsh.

2.2.1.4 Denbighshire ranges from Rhyl in the North to Llangollen in the South, the main towns being Rhyl and Ruthin. The total population of Denbighshire is 90,000 and 26% of the county's population speak Welsh (National Statistics, 2003). The linguistic profile of the families that populate the four counties is illustrated in Table 1.

Table 1
Linguistic profile of families in Ceredigion, Carmarthenshire, Pembrokeshire, and Denbighshire where at least one parent speaks Welsh

	Every family	2 adults who speak Welsh – in a couple	1 adult who speaks Welsh – in a couple	1 adult who speaks Welsh – single parent	Total number of families where at least one parent speaks Welsh
Ceredigion	30,972 (100%)	3919 (13%)	3125 (10%)	811 (3%)	7855 (26%)
Carmarthenshire	73,112 (100%)	8475 (12%)	8425 (12%)	2121 (3%)	19021 (27%)
Pembrokeshire	48,176 (100%)	1621 (3%)	3219 (7%)	540 (1%)	5380 (11%)
Denbighshire	39,889 (100%)	1859 (5%)	3488 (9%)	686 (2%)	6033 (16%)

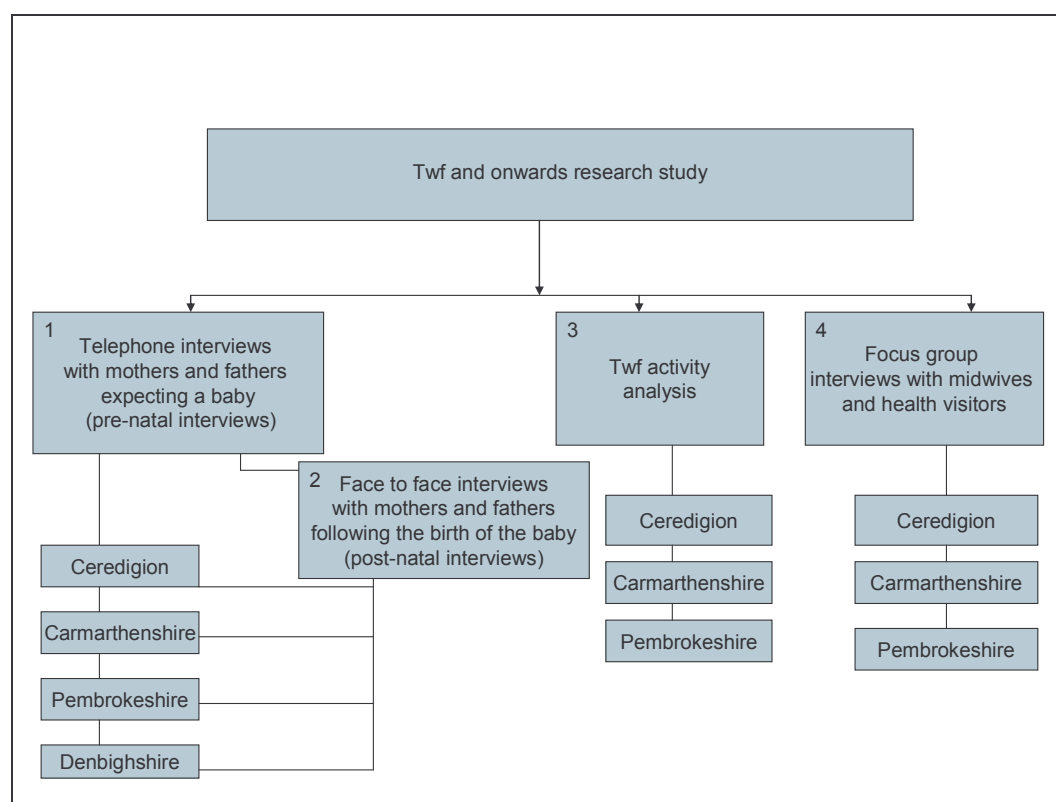
Source: National Statistics, 2003

3 Methodology

3.1 Design of study

3.1.1.1 The research study adopted a mixed methods design, combining four separate approaches. The first element comprised of pre-natal telephone interviews that used a quantitative approach to analyse data about the effectiveness of the Twf scheme in the counties of Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire. This was supplemented by a second element that used a qualitative approach to address the same research question and involved post-natal face to face interviews. Thirdly, an ethnographic analysis of Twf activities in the counties of Ceredigion, Carmarthenshire and Pembrokeshire was completed; and finally, six separate focus group interviews with midwives and health visitors in the counties of Ceredigion, Carmarthenshire, and Pembrokeshire were conducted. An overview of the Twf and Onwards research study design is shown in Figure 1 with a detailed overview of each of the four phases in Table 2.

Figure 1
Overview of the Twf and Onwards research study



3.1.2 Family language profile definition

- 3.1.2.1 For the purpose of analysis, the families in the Twf and onwards study were classified according to three distinct family language profiles, in-line with self-rated descriptions, as follows:

Welsh/Welsh (W/W) = Mother and father speak Welsh very or fairly well.

Welsh/English (W/E) = Either the mother OR father speaks Welsh very or fairly well.

English/English (E/E) = Neither the mother NOR father speaks Welsh very or fairly well.

Table 2
Detailed overview of the four phases of the Twf and Onwards research study

	Pre-natal interviews	Post-natal interviews	Twf activity analysis	Focus groups with midwives and health visitors
Population	All expectant couples in Ceredigion, Carmarthenshire and Pembrokeshire with a W/W, W/E or E/E language profile All expectant couples in Denbighshire with a W/W or W/E language profile	All parents who participated in the pre-natal interviews	All Twf officers working in the counties of Ceredigion, Carmarthenshire and Pembrokeshire and their contacts	All midwives and health visitors working in the counties of Ceredigion, Carmarthenshire, and Pembrokeshire
Inclusion criteria	Expectant couples living in Ceredigion, Carmarthenshire or Pembrokeshire with a W/W, W/E or E/E language profile Expectant couples living in Denbighshire with a W/W or W/E language profile	Expectant couples who participated in pre-natal interviews and agreed to jointly participate in a face to face interview	All Twf officers working in the counties of Ceredigion, Carmarthenshire and Pembrokeshire and their contacts	All midwives and health visitors currently employed by NHS Trusts in Ceredigion, Carmarthenshire and Pembrokeshire
Sample	A self-selecting sample of 153 families from Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire	A purposeful stratified sample of 44 families from Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire	A systematic selection of Twf activities according to an observation matrix across the counties of Ceredigion, Carmarthenshire and Pembrokeshire	A self-selecting sample of 21 midwives and health visitors from Ceredigion, Carmarthenshire, Pembrokeshire

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	Pre-natal interviews	Post-natal interviews	Twf activity analysis	Focus groups with midwives and health visitors
Method of data collection	One structured telephone interview with the expectant mother and one with the expectant father	One face to face interview and observation with the couple in their home	An ethnographic approach involving: <ul style="list-style-type: none"> • detailed observations • researcher participation in Twf settings • interviews with key informants • Documentation of events and activities 	One midwifery and one health visiting focus group conducted in Ceredigion, Carmarthenshire and Pembrokeshire
Method of data analysis	Descriptive and inferential statistics	Thematic framework analysis	Thematic framework analysis of field notes and interviews	Thematic framework analysis
Timeframe	March 2005 to December 2007	July 2006 to January 2008	April 2005 to December 2005	December 2005 to March 2006

3.1.3 Pre-natal telephone interviews

- 3.1.3.1 A self-selecting sample of 153 expectant families from Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire were recruited (through flyers, media advertising, personal networks and snowballing recruitment methods) to take part in the structured telephone interviews between March 2005 and December 2007.
- 3.1.3.2 Potential participants were offered an incentive to participate in the research. Families who took part received a £10 high street gift voucher, along with entry to a prize draw that offered the opportunity to win £1000.
- 3.1.3.3 The telephone interview schedule contained six separate sections concerning: the household; Welsh language ability; Welsh language use; perceptions on language transmission; attitudes to bilingualism; and impact of information on language transmission.
- 3.1.3.4 Separate interviews were held with both the expectant mother and expectant father from each family. These were audio recorded and the resulting quantitative and qualitative data were analysed. Table 3 shows the family profiles of those who took part in the telephone interviews from the counties of Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire.

Table 3
Family profiles - Pre-natal interviews: Ceredigion, Carmarthenshire, Pembrokeshire and Denbighshire

	Mother and father speak Welsh (W/W)	Mother or father speaks Welsh (W/E)	Neither Mother or father speak Welsh (E/E)	Total (number of families)	Percentage of the sample
Ceredigion	19	12	9	40	26%
Carmarthenshire	25	20	12	57	37%
Pembrokeshire	6	7	10	23	15%
Denbighshire	12	21	0	33	22%
Total	62	60	31	153	100%
<i>Percentage of family profiles within the sample</i>	<i>41%</i>	<i>39%</i>	<i>20%</i>	<i>100%</i>	

3.1.4 Post-natal telephone interviews

- 3.1.4.1 From the 153 families who took part in the telephone interviews, 44 families were invited to participate in a further face to face interview

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in their home when their new baby was between 1 month and 24 months old. Each of the face to face interviews were audio recorded. The interview schedule was semi-structured and contained eight separate sections that were derived from the findings of the telephone interviews.

- 3.1.4.2 Using a purposive sampling approach, the 44 invited families were chosen from the original sample on the basis of their experience of the Twf project, number of children in the family, socio economic status, and county of residence. Thirty three face to face interviews were conducted jointly with both parents in the counties of South West Wales (Ceredigion, Carmarthenshire, and Pembrokeshire) and 11 interviews were conducted in the county of Denbighshire. The interviews were completed between July 2006 and January 2008.

3.1.5 Twf activity analysis

- 3.1.5.1 A systematic selection of Twf activities were observed by two researchers in the counties of Ceredigion, Carmarthenshire and Pembrokeshire between April and December 2005. The ethnographic approach undertaken involved detailed observations; researcher participation in Twf settings; interviews with key informants; and documentary accounts of events and activities.

3.1.6 Focus groups

- 3.1.6.1 A total of 21 health visitors and midwives took part in focus group interviews, with both professions represented in each of the three counties of Ceredigion, Carmarthenshire, and Pembrokeshire. The focus groups were undertaken between December 2005 and March 2006 by two interviewers. Interviews lasted between 45 minutes and 1½ hours and were audio recorded. Four of the interviews were conducted in English and two were conducted bilingually, that is, the interviewers and respondents switched between English and Welsh during the course of the interview according to the language preference of the respondents. The focus group interview schedule contained 23 questions regarding the respondents' perceptions of the Twf scheme.

3.1.7 Ethical considerations

- 3.1.7.1 Ethical approval for the telephone interviews, face to face interviews, and Twf activity analysis was granted by the School of Healthcare Sciences, Bangor University's Ethics Committee. Written informed consent was gained from all who took part in the telephone and face to face interviews and their anonymity was assured.
- 3.1.7.2 Ethical approval for the focus group interviews was granted by the Ethics Committee of the School of Healthcare Sciences, Bangor University and the Local Research Ethics committee for South West Wales. Research governance approval was gained from Pembrokeshire & Derwen, Ceredigion & Mid Wales and Carmarthenshire NHS Trusts, in whose premises the research was conducted. Verbal consent was gained from all participants prior to commencing the focus group interviews.

3.2 *Methods of analysis*

- 3.2.1.1 A range of analytical approaches were used in order to analyse the data from the four phases of the research.
- 3.2.1.2 For the quantitative pre-natal interview data, descriptive, and inferential statistics, including correlation coefficients and analysis of variance were conducted using the SPSS statistical package (SPSS, 2005). These inferential statistics were applied to make generalizations from the sample to the total population. For the purpose of this report, and at the request of the commissioners, analysis of quantitative data is confined to data elicited from W/E and W/W families.
- 3.2.1.3 Thematic framework analysis (Ritchie & Spencer, 1994) was used for analysing the qualitative post-natal interview data and focus group data.
- 3.2.1.4 In the ethnographic study, data from the observation records, interview transcripts and documentary analysis were synthesised using a thematic framework approach.

3.3 Approach to synthesis

- 3.3.1.1 The results from the four phases of data collection were synthesised using a systematic approach. All the findings from the four phases were systematically examined and one researcher then identified the most salient findings from the quantitative study and plotted these against the themes that were uncovered during the qualitative interviews, focus group interviews and Twf activity analysis.
- 3.3.1.2 Each of the sub-themes, e.g. attitudes, was then matched up with the corresponding evidence from the:
- Literature
 - Telephone interviews with expectant parents
 - Face to face interviews with parents after the birth of their child
 - Focus group interviews with midwives and health visitors
 - Twf activity analysis
- 3.3.1.3 The data synthesis trail was independently audited by two other researchers to ensure that no omission or duplication of data occurred and that evidence and subthemes corresponded consistently.
- 3.3.1.4 The resultant data synthesis document, where all the evidence was plotted against the emerging sub-themes, served as the basis for the following results section.

3.4 *Strengths and limitations of the research study*

3.4.1.1 This section discusses the strengths and limitations of the Twf and onwards research study.

3.4.2 Strengths

- The research study was undertaken by an independent team of researchers from the Centre for Health-Related Research, School of Healthcare Sciences, Bangor University. The team comprised of experienced researchers with a sound understanding of the issues of rigour.
- The study utilised a mixed method approach to examine the impact of the Twf scheme, adopting both qualitative and quantitative approaches to data collection, thereby offering methodological triangulation.
- The study set out to obtain the views of service users and professional partners as well as Twf project staff. This also provided a means of data triangulation.

3.4.3 Limitations

- The Twf and onwards study was commissioned five years after the Twf scheme was initiated. With the exception of census data, no comparable baseline data existed to provide relative 'distance travelled' information.
- Evaluation of evolving complex community initiatives such as the Twf scheme is known to be challenging since such schemes strive to address multiple problems in shifting political environments.
- It is difficult to measure the direct impact of a project such as Twf, and isolate it's effect from other social factors that effect language choices and the behaviour of individuals.

4 Results

4.1 *Home influences on Welsh language transmission and the impact of Twf*

4.1.1 Welsh language fluency and confidence to use Welsh

- 4.1.1.1 Levels of Welsh language proficiency amongst parents and their confidence to use Welsh at home feature strongly throughout these study findings as an indicator of the intention to transmit Welsh in the family. Telephone interviews with expectant parents across the four counties confirmed that higher levels of Welsh language fluency result in greater confidence to use Welsh; more positive attitudes towards bilingualism; and stronger intentions to transmit Welsh in the home. Within this sample, 40% of the prospective parents used mostly Welsh at home, and their confidence in using Welsh was at its highest here, regardless of stated language proficiency. Nevertheless, although as many as 77% of the overall respondents reported that they felt confident in using Welsh at home, these levels of self-assurance were not borne out in the face to face interviews with parents after the birth of their baby. In contrast, in-depth discussions with parents suggested that although they may have the necessary language skills and feel motivated to transmit Welsh in the home, there is strong evidence from the face to face interviews that parents lack the confidence to use Welsh with their children. This is upheld within the focus group interviews conducted with midwives and health visitors and further supported by the findings of a previous study by Edwards and Pritchard Newcombe (2005). This gives credence to Twf's pivotal role in supporting families to translate their intentions concerning language transmission into practice through confidence building.
- 4.1.1.2 Face to face interviews conducted with a sample of parents after the birth of their baby suggested that patterns of language use amongst couples are generally fixed entities. However, there are examples of respondents making concerted efforts to learn Welsh and increase their use of Welsh in the home following the birth of their baby, whilst taking pride in their efforts. The findings shed light on patterns of language use between parents and their new baby. For example, in mixed language families, there is evidence of the application of the 'one language one person' model of language transmission (Baker, 2003) as well as a mixed language approach, whereby parents adopt rapid code-switching and interject simple Welsh words and phrases as a way of introducing the language to their new baby. This is often perceived as parent and baby learning together, as illustrated by the following extract:

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“So when X (husband) is with us, it’s half and half and, as well as teaching XX (baby), we’re teaching X (husband), you know. It’s ‘geiriau’, words, then he’s picking up words, numbers. It’s just, you know, the basics – ‘un, dau tri’ and things like that that he’s learning.”

- 4.1.1.3 The Twf activity analysis revealed that Twf officers attempt to supplement such parental efforts by promoting strategies to ensure that children from mixed language backgrounds hear Welsh and English equally in the home. This is often addressed by drawing on the work of Baker (1988, 1992 & 2003) and ‘6 Good Reasons’ (Twf leaflet) to promote the one language, one partner model and to enlist the help of Welsh speaking grandparents, siblings and friends.
- 4.1.1.4 It appears from the telephone interviews that expectant parents have an equal chance of experiencing the same level of Twf message regardless of their Welsh language proficiency or confidence to use Welsh at home. Twf’s challenge in interacting with their target group concurs with the findings of the post-natal interviews where Twf’s presence ranges from negligible (Twf resources only) to significant (talk with a Twf officer and a healthcare professional regarding Welsh language transmission within the home).
- 4.1.1.5 In an attempt to enhance Welsh language fluency amongst parents, an early venture established by Twf focussed on teaching simple vocabulary, such as colours, numbers and simple phrases to E/E parents as a means of introducing Welsh to their children at a young age. The Twf activity analysis revealed that this initiative, entitled ‘Cymraeg i Rieni’ (Welsh for Parents) received mixed appraisals. For example, some concerns were expressed by other early years organisations about whether this initiative was an appropriate element of the Twf portfolio, as it removed Twf officers from their central activities and was a role that would be better adopted by the many other organisations involved in providing Welsh for adults. Furthermore, although the initiative was perceived by some as satisfying an unmet need, early attrition rates led to concerns about the cost-effectiveness of such courses. In view of these reservations, it appears that ‘Cymraeg i Rieni’ is an element of Twf’s work that is worth continuing but with the caveat that careful attention needs to be given to the planning of this work in collaboration with other organisations (e.g. Cymraeg i Oedolion (Welsh for Adults); Acen), to ensure maximum impact.
- 4.1.1.6 A more recent Twf initiative, entitled ‘Mae dy Gymraeg di’n grêt – *Your Welsh is great*’, which came into being after the Twf activity analysis was completed focuses on providing support to a different target audience, namely Welsh speaking parents who chose not to

use Welsh on a day to day basis in their community. This work has been piloted in 8 target areas within Carmarthenshire with 61 parents by the Welsh Language Board in conjunction with the Twf scheme. Although it is premature to draw any firm conclusions from the evaluation of these pilot sessions, it appears that this venture may provide a timely way forward in inspiring confidence amongst those Welsh speakers who would not routinely transmit Welsh to their children.

Welsh language fluency and confidence to use Welsh summary

- The higher the levels of Welsh language fluency amongst parents and the greater their confidence in speaking Welsh, the greater the intention to transmit Welsh in the home.
- 40% of the sample used mostly Welsh in their home, with confidence in using the language at its highest in this setting regardless of language proficiency.
- Although parents may have the necessary language skills and feel motivated to transmit Welsh in the home, a number still lack the confidence to use Welsh with their children.
- Twf officers support parental efforts to transmit Welsh in the family through disseminating resources and giving advice.
- Nevertheless, prospective parents tend to receive the same level of Twf experience whatever their Welsh language proficiency and confidence to use the language.
- Twf training ventures to enhance the Welsh language skills of parents and improve their confidence in using Welsh at home may prove beneficial in increasing levels of Welsh language transmission in the family.

4.1.2 Welsh identity and language transmission

- 4.1.2.1 The significance of language as a means of expressing cultural identity is well recognised in the literature and the role of the Welsh language in shaping Welsh identity is no exception (Welsh Assembly Government, 2003). Recent surveys conducted across Wales conclude that Welsh identity in many respects is buoyant and widespread (Coupland et al., 2006) and the current perception of Welsh as ‘cool’ has influenced the general awareness of the language and made it fashionable to speak Welsh (McAllister & Thomas, 2005).
- 4.1.2.2 These trends are reflected in this research study, whereby telephone interviews with expectant parents across the four counties demonstrated that those who feel strongly about their child’s future national identity are more inclined to transmit Welsh to their new baby. Indeed, as many as 66% of the sample believed that their child’s national identity had an influence on their decision regarding language transmission in the home. For example, one respondent explained thus:

“I want ... him or her to be part of the community and be part of, you know, understand their identity.”

This finding is in keeping with previous work reported by Gathercole et al., (2006), where issues of identity were associated with language. These are seen to be significant factors that enhance the use of Welsh in the family.

- 4.1.2.3 Face to face post-natal interviews with parents revealed their aspirations to instil a sense of belonging and Welsh identity amongst their children through using Welsh at home. A salient feature of these interviews was the strong resolve of parents to act in the best interest of their child in terms of their linguistic development and integration into the community. Whilst this is often a natural and passive transition amongst W/W families, the drive for E/E families, particularly in-migrants, to assimilate and identify with the local community can be seen to translate into a conscious decision to introduce Welsh in the home, as described by the following mother from an E/E background before the birth of her child:

“Well, I mean I find it a bit difficult to explain, but um, there's a sense of being living in this land... where Welsh is part of living in this land and it goes back a long, long way. It's a very old language, and um, you know, it has been oppressed and I think, on that basis, you know, I want him to have an experience of it. Just, you know, the same as me. That's why I'm learning it, partly, because it's something that represents the land itself really and also because I have a few friends who have a really profound love of the language.”

Welsh identity summary

- The literature suggests that the Welsh language has gained greater visibility and broader acceptance over recent years; and speaking Welsh affords stronger Welsh identity.
- Parents who feel strongly about their child's future national identity are more inclined to transmit Welsh to their new baby.
- E/E parents make efforts to assimilate with the local community by introducing Welsh to their children.
- There is potential for Twf, in collaboration with other agencies to promote Welsh language transmission in the home through enhancing parents' feelings of Welsh identity.

4.1.3 Socio-economic status

4.1.3.1 Higgs et al., (2004) identify that social class variations relating to the Welsh language exist. To exemplify this position, they draw on the work of Drinkwater and O’Leary (1997), which shows that Welsh speakers in South Wales are over represented in higher status professions compared to non Welsh speaking individuals. However, Higgs et al., (2004) acknowledge that the issue of social class and language is not clear cut and they demonstrate that there are variations in the associations between the two variables across the different counties of Wales. In other words, in some counties, Welsh is used more frequently amongst the higher socio economic groups, whilst in others, it is more evident amongst people from lower socio economic groups. Nevertheless, evidence derived from the most recent census leads Aitchison and Carter (2004) to assert that “the de-industrialization of Wales has been accompanied by a marked switch from jobs in manufacturing to professional and administrative posts where those who can offer a facility in Welsh have some advantage. Thus the ability to speak Welsh has become associated with higher status positions” (p.91).

4.1.3.2 This research study also demonstrates social class variations and in general, these also suggest a positive affiliation between socio economic status and the Welsh language. For example, at the pre-natal stage, it is evident that the higher the socio economic status of parents the greater their intention to transmit Welsh to their child. Furthermore parents from higher socio economic groups report significantly greater confidence in speaking Welsh in the home than their counterparts from lower socio economic groups; as illustrated by the following account from a mother from a lower socio economic group:

“No (wouldn’t start a conversation in a local shop in Welsh) probably now. I mean, if somebody said, you know, “diolch”, I’d probably say “diolch” back, but not, I wouldn’t start a conversation in Welsh probably, and I’m hoping that the more she’s learning, the more I can gain in confidence then, and just feel more able to use it.”

4.1.3.3 Edwards and Pritchard Newcombe (2005) contend that efforts to promote bilingualism have largely appealed to middle class parents. If this is the case, it is likely to increase the social differences associated with the Welsh language. Similar to the Inverse Care Law (Tudor Hart, 1971) in relation to healthcare, parents in greatest need, that is those from the lower socio economic groups, enjoy less access to facilities than those from higher socio economic groups. The consequence of this phenomenon is a greater uptake of advice regarding bilingualism by parents from higher socio-

economic groups and ultimately, an increase in the Welsh language differences between the two groups.

- 4.1.3.4 From the activity analysis it was evident that the Twf scheme recognises the importance of conveying its message to families from lower socio economic groups. The Twf officers were mindful of the need to tailor the message to meet the needs of specific groups. They recognised that people from lower socio economic groups are 'hard to reach' and the activity analysis demonstrated that the Twf scheme has varied success in reaching these groups. However, in some areas Twf officers appear to be making promising inroads in their attempts to reach mothers from lower socio economic groups by working alongside initiatives such as Sure Start. However, whilst the activity analysis elicited some positive examples of good practice, the quantitative data generated in the telephone interviews demonstrated that, there is potential to improve on this position since there is no relationship between the extent of Twf experience and socio-economic status. Therefore expectant parents have an equal chance of experiencing the same level of Twf intervention regardless of their socio economic status. This is unsurprising since in various community initiatives, professional healthcare workers have difficulty accessing people from lower socio-economic groups (Benedict, 2007).

Socio-economic status summary

- The literature demonstrates that there is a relationship between Welsh language proficiency and socio economic status.
- Our study suggests that parents from lower socio economic groups are less confident in using Welsh in the home than parents from higher socio economic groups.
- People from lower socio economic groups demonstrate less intention to transmit Welsh to their new baby than their counterparts in higher socio economic groups.
- The Twf scheme has some success in accessing parents from lower socio economic groups.
- Parents have an equal chance of experiencing the same level of Twf intervention regardless of their socio economic status.

4.1.4 Gender

- 4.1.4.1 Although the 1991 census data suggests that Welsh-speaking mothers are more likely to pass on the language to their children than Welsh-speaking fathers, recent studies show inconsistencies in this respect. For example, Jones and Morris' (2007) ethnographic study of 12 mixed language families in Wales concluded that Welsh-speaking mothers play a more significant role in the early Welsh-language socialization of their children than Welsh speaking fathers. Gathercole et al's., (2006) mixed methods study of over 300 parents across Wales disputed this finding, maintaining that the gender of the parent does not influence language transmission in bilingual families. In other words, contrary to previous reports (e.g. Lyon, 1991) mothers and fathers play an equal role in making decisions about language use in the home. This finding has particular implications for the Twf scheme, especially with regard to the way in which prospective parents are targeted to receive the Twf message.
- 4.1.4.2 Statistical analysis of the data collated from our telephone interviews with expectant parents support Gathercole et al's., (2006) findings and suggest that there is no difference between expectant mothers and fathers with regard to their intention to transmit Welsh with their new baby. Nevertheless, their individual experience of the Twf scheme was significantly different, with expectant mothers receiving considerably greater input than their male counterparts. This finding is hardly surprising, given that expectant women and mothers are the main users of midwifery and health visiting services, that is, Twf's main partners; and fathers are often considered to be hard to access and engage in this respect (Wiggins et al., 2005).
- 4.1.4.3 Face to face interviews with new parents supported this finding and accounted for some of the deficits in reaching fathers directly, as illustrated below:
- “(The Twf lady) she hands out leaflets about raising children bilingually and she has goody bags with CDs and other things and she sits and talks to the mothers.”
- 4.1.4.4 Although families were selected for interview on the basis of having received a Twf input, it was evident that individuals did not always share this information with their partner. This is illustrated by the fact that a number of parents, particularly fathers, had no experience of Twf and were not aware of its existence, as demonstrated in the following extracts from two fathers:

“Never heard of it, no, who are they?”

“So’ni wedi siarad i neb. (Mother). O na! Dim o Twf (Father).”
(We haven’t spoken to anybody (Mother). Oh no! Not from Twf (Father).

- 4.1.4.5 Despite these shortfalls, the Twf activity analysis demonstrated that Twf officers were mindful of the need to tailor their message to meet the requirements of groups to which access is challenging. In particular, they categorise fathers and people from the lower socio-economic groups as ‘hard to reach’ and the activity analysis demonstrated that Twf has varied success in reaching these groups. For example, our observations confirmed that fathers were generally under-represented at Twf presentations, and at clinics where Twf had a presence. However, there were exceptions to this pattern and when Twf officers did encounter fathers they appeared to be skilled in conveying their message to appeal to a male audience.
- 4.1.4.6 Further analysis of the telephone interview data highlighted a general passiveness amongst couples to discuss issues regarding language transmission in the family and to share information concerning the Twf message. For example, 53% of the telephone respondents never entered into a discussion with their partner about language transmission with their new baby, either before or during the pregnancy. Furthermore, regardless of whether or not they had discussed the issues, there was no difference in the level of Twf experience received by parents. Moreover many who had received the highest level of Twf experience (described as a Twf resource, discussion with Twf officer and discussion with a health professional) had not talked about language transmission with their partner.
- 4.1.4.7 These findings suggest that, although mothers are well placed to receive the Twf message from a variety of sources, they often fail to discuss the message with their partner. Given that fathers play an equal role in making decisions about language transmission in the home, there is scope for Twf to overcome its current challenges in reaching fathers and transmitting the message to a wider target audience.

Gender summary

- The literature is inconsistent in reporting gender differences in influencing language transmission in bilingual families.
- In our study there are no differences in the intention to transmit Welsh in the home between expectant mothers and fathers.
- Nevertheless, expectant mothers receive considerably greater input from the Twf scheme than their male counterparts.
- Fathers are generally under-represented at Twf presentations and at clinics where Twf has a presence.
- Although men are considered by the Twf scheme as a 'hard to reach' group, when Twf officers encounter fathers they generally appear to be skilled in conveying their message to appeal to a male audience.
- There is a general indifference amongst couples to discuss issues regarding language transmission in the family and to share information concerning the Twf message.
- Transmitting the Twf message to one partner does not necessarily prompt a discussion on language transmission in the home with the other partner.

4.1.5 Educational attainment

- 4.1.5.1 The literature suggests that the Welsh have traditionally placed a high value on education and qualifications (e.g. Reynolds et al., 1998). Moreover, there is evidence to show that a greater percentage of Welsh speakers have higher qualifications, such as degrees, professional and vocational qualifications, compared with non-Welsh speakers (Drinkwater & O'Leary, 1997).
- 4.1.5.2 These observations are reflected in our study, where telephone interviews with expectant parents demonstrated that the higher the educational attainment of parents, the more fluent their Welsh language skills and the stronger their intention to transmit Welsh. Moreover, as many as 85% of the sample held their child's future education in high esteem, claiming that it was an influential factor in their decision concerning language transmission in the home. Both of these findings have particular resonance for Twf in their attempts to enhance Welsh language transmission in the family and triangulation of the data provides opportunities to inform and guide the Twf scheme towards this goal.
- 4.1.5.3 Further probing during the telephone interviews offered explanations for the relationship between the intention to transmit Welsh at home and the child's prospective education and schooling. Given the marked and widespread increase in Welsh-medium and bilingual provision in education in Wales over recent years, growing numbers of parents are choosing this form of education for their children (Reynolds et al., 1998). Their motives in this respect are seen to be driven by tradition, convenience, community integration and positive academic outcomes (Packer & Campbell, 1996), all of which are

illustrated in our study. For better educated parents, their ambition to secure Welsh-medium education for their children translates into a positive commitment to transmit Welsh in the home and a desire to extend the child's knowledge and understanding, as illustrated in the following extract:

“Dwi'n meddwl hefyd, y ffaith fydden nhw'n siarad Cymraeg a Saesneg o oedran ifanc iawn, a falle fydden nhw'n gallu pigo ieithoedd eraill lan yn eithaf cloi, amser fydde nhw yn yr ysgol neu bach yn henach.”

(I also think, the fact that they will speak Welsh and English from a very young age, and maybe they'll be able to pick up other languages quite fast, when they'll be in school, or a little bit older)

- 4.1.5.4 For others who may be less informed about the benefits of early bilingualism, parents relinquish responsibility to the school for the transmission of Welsh, as illustrated by the following quote from a telephone respondent:

“And once he starts school now, like after Christmas he's going part time, and even though, it's an English school, Welsh is the second language, the nursery teachers are Welsh speaking, and they have said that they will speak Welsh to him especially”.

As a consequence there are missed opportunities to facilitate the child's development as a confident bilingual speaker.

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- 4.1.5.5 Further discussions with parents, facilitated through the face to face interviews in the post-natal period, support these initial findings, whereby parents overwhelmingly favoured a Welsh-medium or bilingual school for their child but their justification for this preference differed. Some parents choose a Welsh medium school because of the value that they place on ensuring that their child is bilingual. Whilst for others, bilingualism is perceived as a secondary benefit, since the main drive for securing a place in a Welsh-medium school is the perception that such schools offer a better educational experience for their child, or provide a channel to access a wide range of extra curricular activities.
- 4.1.5.6 Regardless of their intention to access Welsh medium education, the data from the face to face interviews demonstrate that some E/E parents have concerns about their ability to adequately support their child through their Welsh-medium studies. These concerns are recognised by Twf and some parents acknowledged the efforts made by Twf to lessen these uncertainties.
- 4.1.5.7 Focus group interviews with midwives and health visitors gave testimony to the fact that, in the case of E/E families with high levels of educational attainment, parents make special efforts to learn Welsh as a way of supporting their child's bilingual development and helping with homework, as depicted by the following midwife:
- “So, I think adults who've got probably higher education would go along and learn Welsh for themselves with a view to particularly supporting their child, even if they didn't want to actually use it at work or anything like that.”
- 4.1.5.8 The Twf activity analysis demonstrated that Twf officers were conscious of parental concerns regarding the quality of their child's educational experience. Twf officers were observed to make use of targeted literature that emphasises the cognitive benefits of bilingual education; whilst disseminating information about local provision within schools and offering strategies to support learning in the home. The following quote from a telephone interview is testimony to Twf officers' potential in transmitting the positive implications of bilingualism to expectant parents:
- “Some of the argument put forward by, I think it's Twf, how having a second language at an early age can improve or just give children another way of analysing things and making sense of the world, if they are not limited to just one language - so there's a sort of a development of their powers of reasoning, I think really, which is where you get the benefit from having that second language at the outset, and that's certainly something that I've, you

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know, that's now quite a strong influence in my decision. Although at the start, I wasn't aware of that, I hadn't really considered the argument."

- 4.1.5.9 As with many public campaigns of this nature (Letourneau et al., 2007), there is little doubt from the analysis of the data that Twf's message is more likely to reach parents with greater levels of educational attainment. Moreover, our research demonstrates that parents with greater levels of educational attainment are more likely to transmit Welsh in the home. Therefore it appears that Twf would benefit from targeting those who are less informed about the benefits of establishing early bilingualism in order to support them to make informed decisions in this respect.

Educational attainment summary

- The literature suggests that traditionally in Wales, great value has been placed on education and training.
- Moreover, Welsh speakers demonstrate higher levels of qualifications than their non-Welsh speaking counterparts.
- In this study, 85% of expectant parents claimed that their child's future education was an influential factor in their decision concerning language transmission in the home.
- The higher the educational attainment of parents, the more fluent their Welsh language skills and the stronger their intention to transmit Welsh.
- Well educated parents aspire towards Welsh-medium education for their children and endeavour to support their development through transmitting Welsh in the home.
- Some parents relinquish responsibility to the school for the transmission of Welsh, thus jeopardising opportunities for the child's development as a confident bilingual speaker.
- Twf officers tailor their resources and strategies to support Welsh language learning in the home.
- Twf's message is more likely to reach parents with greater levels of educational attainment.

4.1.6 Attitudes towards bilingualism

4.1.6.1 According to McAllister and Thomas (2005), Welsh speakers aged between 22 and 45 years of age perceive the Welsh language to have a more positive image and to be in a stronger position now than ever before. This positive attitude is further reflected in Gathercole et al's., (2006) study of language transmission in bilingual families, where almost all parents expressed positive attitudes towards Welsh, both in general, and in relation to their own children's upbringing.

4.1.6.2 In our study, attitudes towards bilingualism amongst expectant parents were found to echo the positive feelings captured in the literature. These views were further illustrated with comments, such as:

“It's a beautiful language. Because I learnt it as a young child I found it very easy to learn and I think if you start young it's just going to be simple. So there's no threats, there's no difficulties. It's just something that should be very natural.”

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4.1.6.3 Statistical analysis of the telephone interviews confirmed that the higher the levels of Welsh language fluency the more positive the attitudes and the more likely the intention to transmit Welsh in the family. This phenomenon is also reported by Jones and Morris (2007) in their ethnographic study of Welsh language socialization in the family.

4.1.6.4 Face to face interviews with parents after the birth of their child uncovered a range of linguistic experiences within their own upbringing. These were often reported as having a pivotal role in establishing language profiles in adulthood; and sealing parental attitudes towards bilingualism and thoughts on decision making regarding language transmission in the home. Regardless of whether language choice was made consciously or on a more intuitive basis, decisions to transmit Welsh are generally driven by positive attitudes and a high level of commitment, as illustrated in the following extract:

“(I want to speak Welsh to my new baby...) Just because I think, you know, that erm, they always say that it’s the best time for them to learn – when they are really young, and the easiest time for her to learn. And then I know, when I was young, I didn’t really see the benefits of it, but, obviously now that I’m still living in Wales and working within a Welsh community – erm, it really has benefited me, so I can’t see any. It can be more harm....it can be more beneficial to her than not really.”

4.1.6.5 In stark contrast, other parents demonstrated a casual attitude to language transmission, whereby the process was left largely to chance, as demonstrated in the ensuing comment by a new parent from Denbighshire:

“For me I wouldn’t even have thought about it (language transmission) or discussed anything if we hadn’t seen the (research project) flyer...otherwise it would probably have been what ever happens.”

4.1.6.6 Focus group interviews with midwives and health visitors gave strength to these findings and provided further insight concerning the way in which language attitudes influence parents’ decisions to transmit Welsh to their children. Health professionals claimed that when they raise the issue of bilingualism with their clients, they report that they normally receive either indifferent responses, where parents fail to give bilingualism a priority in their busy lives; or positive responses where parents demonstrate an interest in the issue. The consensus is illustrated by the following remark:

“I haven’t had one negative – I mean I’ve had some fairly passive ones, but not one reaction where you can see by body language ‘we don’t want to know’”.

- 4.1.6.7 Our study has demonstrated that stronger positive attitudes towards bilingualism lead to a greater intention to transmit Welsh. The Twf scheme targets individuals in order to try and influence attitudes, beliefs and ultimately behaviours and centres its message on raising awareness amongst parents and prospective parents of the value of bilingualism and introducing Welsh in the home.
- 4.1.6.8 The themes that emerged from the activity analysis offer some understanding of Twf officers’ work and highlight areas of good practice, such as tailoring the message to a diverse audience and areas that could be improved, such as strengthening collaboration with health service partners. Despite these efforts, our findings from the telephone interviews indicate that, at the ante-natal period, a significant number of parents receive a low level of input from Twf, which equates to either the receipt of Twf material resources, such as a leaflet or CD (47%), or no input at all (40%). Given that face to face discussions have been shown to be more effective than information leaflets in influencing attitudes (Murphy & Smith, 1992; 1993), there is further potential for Twf advancements at this individual level.

Attitudes towards bilingualism summary

- The literature suggests that attitudes towards the Welsh language amongst adults aged between 22 and 45 years are stronger than ever.
- Our study concurs with previous findings and demonstrates that the higher the levels of Welsh language fluency the more positive the attitudes and the more likely the intention to transmit Welsh in the family.
- These findings are supported by face to face interviews with new parents and focus group discussions with midwives and health visitors.
- The Twf scheme targets individuals in order to try and influence their attitudes, beliefs and ultimately behaviours concerning Welsh language transmission in the home.
- Observations of Twf officers in their daily work highlight areas of good practice in influencing attitudes and areas that could be improved.
- Given that face to face discussions have been shown to be more effective than information leaflets in influencing attitudes, there is scope for Twf advancements at this individual level.

4.1.7 Family language profile

- 4.1.7.1 Welsh language transmission in the family is vital to the future of the language since languages fail to survive without being spoken in the home (Fishman, 1991). According to the 2004 Welsh Language Board survey on Welsh language use (Welsh Language Board, 2006) there is a 90% chance that children will speak the language if both parents are able to speak Welsh fluently. However, if only one parent speaks Welsh, this percentage drops to around 59%.
- 4.1.7.2 Our study findings reflect these disparities, whereby telephone interviews with expectant parents across the four counties revealed a significant relationship between their intention to transmit Welsh in the home and their family language profile. In other words, W/W families were considerably more likely to demonstrate an intention to transmit Welsh in the family than their W/E family counterparts. This may be partly explained by the fact that W/W families were also significantly more likely to have positive attitudes towards bilingualism and greater confidence in using Welsh at home than W/E families.
- 4.1.7.3 Analysis of the pre-natal telephone interviews confirmed that there was no significant difference between the language profile of families and the level of their Twf experience. In other words, prospective parents from W/W families were just as likely to receive the Twf message as parents from W/E families. This suggests that the Twf scheme is adopting a broad approach. However, there appears to be limitations to this method of working since it is striking that 40% of parents (mothers and fathers) who took part in the telephone interviews did not receive any Twf input whatsoever.
- 4.1.7.4 In the face to face interviews with parents in the post-natal period a number of parents did not identify themselves as the prime target for Twf's message, regardless of their family language profile, as the following excerpts illustrate:

“I'm not their target – so it's wasting their time.”
(mother from a W/E family).

“I dunno, it's just I, think, personally, the end target audience is more sort of both parents speaking English.” (mother from a W/E family).

“Oedd hi (y swyddog Twf) ddim yn siarad 'da fi, ond dwi'n meddwl achos bod fi'n Cymry Cymraeg. Oedd hi'n gybod hynny.”

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*“She (the Twf officer) didn’t speak to me, I think because I’m Welsh speaking. She knew that.”
(Mother from W/W family)*

Nevertheless, there was consensus amongst respondents’ perceptions about the nature of the Twf message, with parents from E/E, W/E and W/W families suggesting that essentially the Twf message is about promoting bilingualism in the family.

- 4.1.7.5 The focus group interviews with midwives and health visitors gave support to these general findings whereby respondents expressed clear views about the role of the family in enhancing bilingualism in children. Many felt that family background strongly influences decision making in this context. For example, Welsh speakers, particularly females, were perceived to be more likely to transmit the Welsh language to their children, since this was considered ‘a natural thing to do’, whilst mixed language families were thought to be more likely to make a conscious decision, as illustrated in the following extract from the data:

“I don’t think so much of a conscious decision if they are a traditional Welsh family but I think if there’s, if there’s mixed languages there, then they sometimes do make a conscious decision.”

- 4.1.7.6 Although the participants were unclear about which families typically represent Twf’s main target audience, some were able to make an informed assumption about who these might be; as the following passage illustrates:

“... if you look at the percentage figures, there’s still (a) significant number there where one parent speaks Welsh, where the children aren’t brought up bilingually. So I presume that’s their target audience.”

- 4.1.7.7 Nevertheless, it is evident that health visitors and midwives believe that a predominantly Welsh family profile does not always mean a higher likelihood of transmitting the Welsh language, as illustrated in the following extract:

“Mae’r rhan fwyaf sydd yn yr ardal – mae nhw’n deall yr iaith – mae nhw’n deall yn iawn, ond ‘dy nhw ddim yn dewis siarad a mae lot o hynna. Mae nhw’n deall – dwi’n gweud wrtho nhw – allen i ‘weud rhywbeth a mae nhw’n deall yn iawn, ydyn, ydyn.”

(Most people in this area - they understand the language – they understand well, but they don’t choose to speak it, and there’s a lot of that. They

understand - I tell them I could say anything and they understand well, yes, yes."

This suggests that Twf's efforts to encourage the transmission of the Welsh language should not be directed away from W/W families.

- 4.1.7.8 E/E families are not a prime target for the Twf scheme since Welsh language transmission in the home, is beyond the reach of those parents who lack Welsh language fluency. Nevertheless, in this case, Twf officers were observed to give advice on the advantages of bilingualism, such as the ease of learning two languages at an early age and on the use of opportunities such as Welsh nursery schools, and Welsh language resources to enable non-Welsh children to come into contact with the Welsh language inside and outside the home. These findings are supported by Edwards and Pritchard Newcombe (2003) who identified similar examples of good practice in their study. However, whereas Edwards and Pritchard Newcombe (2003) only refer to positive examples, the activity analysis reveals situations where such favourable avenues were not always pursued.

Family language profile summary

- The literature suggests that Welsh language transmission is particularly vulnerable amongst W/E families where only 59% are likely to bring up their children bilingually, compared with 90% of W/W families.
- Telephone interviews with expectant parents reflect these disparities, whereby W/W families were considerably more likely to demonstrate an intention to transmit Welsh in the family than their W/E family counterparts.
- W/W families are also significantly more likely to have positive attitudes towards bilingualism and greater confidence in using Welsh at home than their W/E family counterparts.
- The Twf scheme acknowledges the importance of adopting a broad marketing approach in order to reach families with a range of language profiles.
- Prospective parents from W/W families are just as likely to receive a Twf experience as parents from W/E families. However, this equates with a relatively low level of Twf input, where the most they receive are Twf materials.
- There is no consensus amongst parents, midwives and health visitors regarding Twf's primary target group.
- Whilst recent survey data highlight the need to target W/E families with the Twf message, there is potential to enhance Welsh language transmission through adopting a broader marketing strategy inclusive of W/W families.

4.1.8 Position of the child in the family

4.1.8.1 The literature generally pays little heed to the position of the child in the family as a determinant of language transmission in the home. Nevertheless, it is clear that, in most cases, parents begin speaking in a certain way to their children and they appear to maintain that language choice across time (Gathercole et al., 2006). In other words, having established the language of the home with the first child, this pattern is likely to be maintained with subsequent children.

4.1.8.2 In our study, 41% of the sample who took part in the telephone interviews were expecting their first baby and 59% were expecting their second or subsequent child. Closer examination of the data revealed that three quarters of the respondents who had other children believed that their views regarding language transmission had not changed since the birth of their previous child. Nevertheless, the remaining quarter of these parents reported a change in their outlook that may prompt a behavioural shift in terms of using more or less Welsh with their expectant child. This suggests that there is potential for Twf to work with such parents to ensure that their behavioural shift proceeds towards a greater intention to transmit Welsh to the new baby.

4.1.8.3 During the telephone interviews, parents who had a positive experience of transmitting the Welsh language in the home proudly reflected on the benefits of their endeavours in terms of enhancing the child's language development and vocabulary, demonstrating how this had given them greater confidence and determination to use more Welsh with their new baby, as illustrated in the following data extract:

“Well, I suppose I became more determined to have them speaking Welsh - because of the effect on their speech development and their word usage; and their ability to sort of switch between from one language to another. It's lovely to see them do that and to know the difference between the two languages and, you know, know the different words in English and Welsh.”

4.1.8.4 In contrast, parents with less confidence who had struggled to introduce Welsh in the home on previous occasions were less inclined to use Welsh with their new baby and this is captured in the following quote:

“Yes, I thought I would use Welsh much more than I do (with the other child); and I find, I sort of talk to her all the time really and I don't have to think

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about it too much when I'm speaking English, whereas it's a big effort to try and use Welsh. So it just feels rather unnatural somehow, so I have to make a real effort and I tend to only do it if I'm sort of feeling inspired, if I've come back from a Welsh lesson or we've been to Cylch Meithrin or something and then we can use a few phrases. But it doesn't come naturally most of the time."

4.1.8.5 Statistical analysis of the data confirmed that there is no significant difference between those expecting their first baby and those expecting their second or subsequent child, with regard to their intention to transmit Welsh in the family. Nevertheless, the findings of the telephone interviews suggest that their experience of the Twf scheme is significantly different. Indeed, the analysis confirms that if families already have a child, they are more likely to be exposed to a higher level of Twf experience, including a face to face discussion with a Twf officer or health professional. In our study, for example, only 7% of families expecting their first child had experienced this level of input from the Twf scheme. This compares with a figure of 18% amongst families who already had children.

4.1.8.6 The face to face interviews with parents after the birth of their child explained these anomalies and provided further depth and meaning to the data. For parents of a second or subsequent child, the presence of other siblings was an emerging feature of the discussions and a key factor that appeared to influence language transmission in the family. Inspired by the achievements of their older children, new parents revealed their aspirations for their new baby and for siblings to converse together in Welsh at home. This position is conveyed in the ensuing quote from a W/E family respondent:

"I've caught X (eldest child) speaking English to XX (baby). But I've also caught him speaking Welsh to him as well, more recently – probably because he knows that I speak Welsh to XX (baby). I don't know, I will be happy when they both converse in Welsh with each other but they will speak English to each other as well."

4.1.8.7 A number of respondents claimed success in raising their children bilingually through making concerted efforts at home and accessing local Welsh-medium playgroups, nurseries and schools. Their increasing social networks associated with early years provision may account for their enhanced exposure to the Twf experience, in comparison with families expecting their first child.

4.1.8.8 Early years agencies that cooperate with Twf include Mudiad Ysgol Meithrin (MYM), the Welsh pre-school organisation and the Wales

Pre-school Playgroups Association, (WPPA) which offers English pre-school provision, the National Childminders Association and private nurseries. Of these agencies, Twf reports that it cooperates with Mudiad Ysgiolion Meithrin on a greater scale than the other organisations. The Twf activity analysis revealed that Twf officers visit nursery groups, support them in their use of the Welsh language with pre-school children, advise them on appropriate resources, such as Welsh and bilingual books, and use these visits as an opportunity to speak with parents. They also distribute resources or ask the playgroup leaders to do this on their behalf.

- 4.1.8.9 As families grow, their ties with these early years organisations are likely to strengthen, whereby parents find themselves increasingly reliant on the expert support and resources on offer. Given that Twf works alongside many of these associations, it is likely that parents will be more exposed to the Twf message as their family numbers increase. Nevertheless, in view of the way in which language patterns in the home are often set with the first child, there is a strong argument for Twf to focus its efforts at an earlier stage in the family's development.

Position of the child in the family summary

- Having established the language of the home with the first child, the literature suggests that this pattern is likely to be maintained with subsequent children.
- Parents' views about language transmission can change over time and this may prompt a behavioural shift in terms of using more or less Welsh with a new baby.
- A shift towards using more Welsh may be triggered by increasing parental confidence in using Welsh, positive past experiences and recognition of the benefits for the child in terms of enhanced language development.
- Our study indicates that there is no difference between those expecting their first baby and those expecting their second or subsequent child with regard to their intention to transmit Welsh in the family.
- Nevertheless, if families already have a child, they are more likely to be exposed to a higher level of Twf experience including a face to face discussion with a Twf officer or health professional.
- Even parents with low levels of Welsh language proficiency are often committed towards introducing at least some level of Welsh to their new baby, by encouraging older siblings to speak Welsh to the baby.
- Increasing social networks associated with early years provision may account for the enhanced exposure of parents with children to the Twf experience, in comparison with families expecting their first child.
- In our study, only 7% of families expecting their first child received the higher levels of Twf experience. This compares with a figure of 18% amongst families who already had children.

4.2 Influences on Welsh language transmission at the home/community interface and the impact of Twf

4.2.1 Extended family and friends

4.2.1.1 Many young children spend a substantial proportion of their time, not only with their immediate family, but also with friends and extended family members, such as grandparents, who often play a significant role in the care and upbringing of the child, particularly in close knit communities (Edwards & Pritchard Newcombe, 2003). It is hardly surprising, therefore, that, in their study of language transmission in bilingual families, Gathercole et al., (2006) found that if a parent is influenced at all by someone else in decisions about language transmission, it is most likely to be their partner or parent, or someone else with whom they are intimately related. Moreover, Jones and Morris (2007) concluded that grandparents particularly the maternal grandparents and especially the maternal grandmother, have a significant effect on the language socialization of the child.

4.2.1.2 These findings are reflected in our study, where telephone interviews with expectant parents indicated that after partners, the child's maternal grandparents were considered to have the greatest influence on decisions about language transmission in the home. Indeed, as many as 45% of the respondents claimed that maternal grandparents significantly influenced their decision in this respect. This has particular resonance for Twf in their attempts to raise awareness amongst families of the value of introducing Welsh in the home.

4.2.1.3 In face to face interviews after the birth of their child, parents talked at length about the views of their extended family, particularly grandparents, with regard to raising children bilingually. A variety of responses were captured, including sheer intolerance; worry and anxiety; indifference, and enduring support. Guided by these reactions, determined parents demonstrated their skills in reducing family tensions and actively seeking out family members who will speak Welsh to their new baby. To illustrate, one mother stated:

“I always say to them now, you know, “X (daughter), ti'n gallu siarad Cymraeg i Wncl XX a ti'n gallu siarad Cymraeg i Anti XXX”. And I sort of, if I meet anyone whose is (Welsh) first language, I always say to my daughter so THEY know... so that they know that I want them to do it to her... establish the way it would go, isn't it?”

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4.2.1.4 As well as gaining support from the family, parents also outlined the role of friends and colleagues in enhancing Welsh language use in the home. The data suggest that parents who are most enthusiastic about raising children bilingually are often attracted to those who share the same views and re-affirm their decisions. In contrast, parents recognised the failings of some of their friends to support them in their mission. This was summed up by one parent who stated:

“Quite often it’s Welsh people who don’t speak Welsh who are the worse. I’ve got one or two friends who are a bit lazy in that department.”

4.2.1.5 The Twf activity analysis revealed that Twf officers were conscious of the role of grandparents in supporting childcare for many families and their pivotal position in influencing Welsh language use within the family. Evidence was found during the Twf activity analysis of Twf officers skilfully delivering appropriate messages to extended family members and significant others, such as grandparents, aunts, older siblings and childminders. For example, an encounter was reported between a prospective non-Welsh-speaking grandmother of a mixed language family where the Twf officer gave advice and resources to help the grandmother communicate with her new grandchild without compromising the family’s plans to restrict the baby’s exposure to the English language in its early years. Moreover, there were examples across all three counties, of Twf officers advising parents from W/E and E/E families to ask Welsh grandparents to establish Welsh as the language of use with their children.

4.2.1.6 Despite such efforts, there was no evidence of Twf targeting grandparents directly through their own agency networks, such as ‘Merched y Wawr’ and ‘Round Table’, thus limiting the potential to disseminate the Twf message across this wider group. Moreover, no further evidence was forthcoming from the focus group interviews with midwives and health visitors concerning Twf’s engagement with extended family members.

4.2.1.7 Notwithstanding Twf’s attempts to enlist the help of Welsh speaking family members, such as grandparents and aunts and uncles, the social composition of the four counties varies and consideration needs to be taken of the regional differences in the demographic profile of each county when giving such advice. For example, in Carmarthenshire, the evidence from the 2001 Census suggests that the level of migration into and out of the county is low. Only 3% of households in Carmarthenshire claim to have lived elsewhere one year ago (from date of census i.e. 29 April 2001), and these are defined in the Census as ‘inflow’. Furthermore, the ‘outflow’, that is households who moved out of the county within the year, account

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for 2.5% of the population of Carmarthenshire. This limited migration increases the likelihood of parents living close to their extended families (Morris, 1989) and therefore it is reasonable for Twf officers to assume that they will be able to draw on the resources offered to them by their extended family.

- 4.2.1.8 Having moved to a new area, there is an increased possibility that in migrants do not live near their extended family and thus they do not benefit from the day to day support of their kin in their efforts to advance their children's use of the Welsh language. Clearly, in this case, establishing Welsh language social networks beyond the family becomes a priority for parents who are committed to raising their children bilingually (McAllister & Thomas 2005) and this was seen to be endorsed by Twf. For example, in the Twf activity analysis, officers were seen to advise E/E parents to facilitate friendships with Welsh speaking children in an effort to expose their children to the Welsh language.

Extended family and friends summary

- The literature demonstrated that the extended family had a significant effect on language transmission in the home, particularly the maternal grandparents and especially the maternal grandmother.
- 45% of expectant parents in the telephone interviews claimed that maternal grandparents significantly influenced their decision about language transmission in the home.
- Thus maternal grandparents should be a prime target in order to disseminate the Twf message.
- Grandparents displayed a variety of responses with regard to raising children bilingually, from sheer intolerance to enduring support.
- Twf officers are conscious of the role of grandparents in supporting childcare for many families and of their pivotal position in influencing Welsh language use within the family.
- Nevertheless, there was no evidence of Twf targeting grandparents directly through their own agency networks.
- Establishing Welsh language social networks beyond the family is a priority for parents who are committed to raising their children bilingually, particularly those from W/E and E/E families.
- Twf makes some attempt to facilitate the development of these networks.
- Regional differences in the demographic profile of counties need to be considered when giving advice to the family.

4.2.2 Childcare

4.2.2.1 There has been considerable expansion of childcare in recent years, with the number of registered childcare places for children under eight years old in Wales increasing by nearly 18,500 between 1999 and 2005. Out of school hours childcare provision has also expanded with more than 24,000 places created between 1999 and 2002. Moreover, the Welsh Assembly Government has also delivered on its commitment to a free half time term time education place for all three year olds (National Assembly for Wales, Learning Wales, 2005).

4.2.2.2 Childcare can take the form of state provision; private provision or voluntary commitment. It is not surprising, therefore, that Edwards and Pritchard Newcombe (2003) suggest that the notion of the family needs to be extended to include grandparents, childminders and other carers, with whom many children spend a substantial proportion of their time. This has consequences for the Twf scheme, since the literature suggests that even a modest amount of home language support in child day care can promote minority language transmission (Siren, 1995). Moreover, in the Welsh context, there is evidence that childminding and childcare provision affect a child's Welsh language socialisation (Jones & Morris, 2007).

4.2.2.3 In our study, telephone interviews with expectant parents revealed that, for parents expecting their second or subsequent child, childminders have a significant influence over decisions regarding language transmission in the home, instilling confidence and determination, as illustrated below:

“The childminder that we use two days a week (has influenced our decision about language use with our new baby) because she's a Welsh speaker and therefore she speaks Welsh to the children all the time.”

4.2.2.4 This theme was expanded in the face to face interviews with parents after the birth of their child, where childcare provision was seen to impact on family discourse. Although grandparents were identified as a source of a large share of childcare for many families, parents also talked of organising their work patterns to share child minding responsibilities between parents and accessing more formal provision, such as child minders and nurseries. As a consequence of the diverse range of childcare models, the impact on family language was positioned along a clear dimensional continuum. Some parents believed that their babies are exposed to more Welsh than would have been possible within the nuclear family, whilst others expressed some concern that their childcare arrangements might result in some dilution of Welsh language use in the family.

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This was exemplified by one mother from Carmarthenshire and her descriptions of the nursery staff.

“Mae yna dwy o’r merched yn siarad Cymraeg ond mae e’n tueddu i fod yn fwy Saesneigaidd na Cymraeg, ond siarad Cymraeg mae nhw pan fi’n troi lan!”

- 4.2.2.5 Since Gathercole et al., (2006) confirm that one of the important factors influencing parents’ language use with their child is the presence of a language support system or ‘constellation of speakers’, a Welsh speaking childminder can have a dramatic impact on Welsh language development amongst young children, particularly those who have limited access to Welsh in the home.
- 4.2.2.6 The Twf scheme recognises its potential in promoting positive messages about the value of Welsh medium childcare provision. This is endorsed as a way of supporting the use of the natural home language for children from Welsh-speaking families and introducing bilingualism to children from E/E backgrounds.

Childcare summary

- Childcare in Wales has expanded significantly in recent years.
- This has consequences for the Twf scheme, since the literature suggests that language support in child care can enhance language transmission within the home.
- Childminders influence decisions regarding language transmission in the home, particularly amongst parents expecting their second or subsequent child.
- Childcare arrangements have a positive and negative effect on enhancing bilingualism in the home, depending on the language medium of provision.
- The Twf scheme recognises its potential in promoting positive messages about bilingualism through working with early years partners.

4.2.3 Twf message

- 4.2.3.1 A key determinant of language transmission within bilingual families in Wales is their access to a language support system that facilitates and guides their use of Welsh in the home. This is usually available for Welsh speaking families through their network of family and friends. However, for mixed language families and Welsh learners, the accessibility of such support to improve their Welsh language skills and sustain their efforts to transmit Welsh in the home may be more limiting.
- 4.2.3.2 Mindful of this shortcoming, the Twf scheme focuses on sharing robust information with parents which empowers them to make informed choices. Messages are tailored to meet the needs of families of different language profiles. The message centres on

highlighting the value of the Welsh language and bilingualism to parents, prospective parents and the general population; and encouraging families to bring up their children to speak Welsh. The Twf scheme emphasises the importance of developing bilingualism from an early age and of using Welsh in the home and uses the '6 Good Reasons' information leaflet as a basis for this message.

- 4.2.3.3 Our study set out to assess the extent to which the Twf message reaches its target audience and its impact on participants. Telephone interviews with prospective parents across the four counties revealed that whilst 56% of the sample had received Twf information leaflets and 29% had received a Twf CD; only 14% of the sample had spoken to a Twf officer; 19% had discussions about language transmission with a midwife; and 11% had discussions about language transmission with a health visitor. In relation to receiving the Twf message, data analysis at the county level demonstrated that Denbighshire residents receive more Twf input than their counterparts in the other three counties. However, the findings suggest that, overall, prospective parents can expect to receive a relatively low level of Twf experience during the ante-natal period. Given that family and individual language practices are established early, and are very hard to change (Jones & Morris, 2007), this has important implications for the Twf scheme. Moreover, it highlights the need to supplement the targeting of expectant parents with other broader approaches that relay positive messages about raising children bilingually.
- 4.2.3.4 Face to face interviews with parents after the birth of their child give explanation of their perceptions and receipt of the Twf message. The findings confirm that Twf's presence in parents' lives varies considerably, so that a clear dimensional continuum emerged. A small number of parents related their experience of a significant Twf presence, encountering the Twf message in various arenas, such as healthcare settings, nurseries and schools and community events; and through different media, including face to face encounters with Twf officers and the receipt of Twf material, as illustrated in the ensuing account from a mother in Carmarthenshire:

“And once or twice when we've been to clinic, she (the Twf officer) hands out leaflets about raising children bilingually - and she has goody bags with CDs and other things and she sits and she talks to the mothers. She's very good.”

In contrast, some parents' discourse was of a nominal Twf presence, having briefly encountered Twf through, for example, the receipt of Twf resources or their subtle presence at a children's entertainment event. Indeed, a number of parents who were unaware of the Twf scheme's remit indicated that they would appreciate some input of the nature that Twf already provides, such

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as offering material resources or attending playgroups to convey a message which promotes bilingualism in the home.

- 4.2.3.5 There was some consensus amongst respondents' about the nature of the Twf message, with parents from all family language backgrounds suggesting that, essentially, the Twf message is about promoting bilingualism in the family, as the following mother from a Welsh speaking family in Denbighshire articulates:

“They (Twf) are promoting (parents) to speak both languages at home.”

It appears therefore, that having received the Twf message, parents have a clear understanding of its focus and implications; and interpret it as Twf intended.

- 4.2.3.6 Focus group interviews with midwives and health visitors provided further testimony to the nature and dissemination of the Twf message. Some health visitors reported that they were often called upon to recommend schools to new parents and one, in particular, was making use of resources supplied by the Twf scheme to disseminate positive messages about bilingual schooling, as described here:

“She (Twf officer) brought those (information leaflets) last week because it's something that we're asked so often, if we could recommend a school. So we can give the information and the parents could choose – so we'll have that which is useful.”

- 4.2.3.7 The effect of the Twf message is a pervasive theme that is interwoven amongst the findings of the face to face interviews with new parents. Teasing out this feature gives an overall impression of the effect of the Twf scheme, as perceived by parents. A cluster of responses conveyed a position where Twf has little impact on parents' decisions. This was attributed to two main explanations. Either, one, because individual parents had not heard of Twf and were not aware of the support it offered or, two, because parents already hold strong opinions about the language they will use with their child. Thus, in the latter case, rather than helping to form an opinion, any Twf input has assisted in confirming a decision and supported pre-conceived plans, as illustrated in the following quote from a father in Ceredigion:

“Ym, wel wnaeth e ddim rili newid dim byd achos o'n i'n mynd i wneud (siarad a'r babi) drwy'r Gymraeg anyway.”

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“Um, wel, it didn’t really change anything because I was going to (speak to the baby) through Welsh anyway”).

- 4.2.3.8 However, this is not to negate the effect of the Twf scheme since, for those parents who were unsure of how to proceed with raising their child bilingually, Twf was seen as a resource to address concerns and provide information, as expressed by a mother from Carmarthenshire:

“Um, I think it gave us a bit of support didn’t it? And then they (Twf) had things in black and white to show you that, no, it should be encouraged and ... speaking to the child in one language with one parent and another language with another parent isn’t going to confuse the child and it’s going to help the child.”

- 4.2.3.9 The impact of these activities was also considered by the healthcare professionals respondents and here the perceptions of health visitors and midwives featured on a dimensional continuum, from positive to negative regard, thus:

“I think certainly, making information available, and I think that’s the difference they’ve made - they’ve made available choices for people isn’t it?”

“Dwi’n meddwl bod ‘na le i Twf - i allu wneud gwahaniaeth - ond dwi ddim yn meddwl fod e’n gwneud gwahaniaeth ar hyn o bryd.”
(I think there is scope for Twf - to make a difference – but I don’t think it makes a difference at the moment)

Twf message summary

- The literature suggests that language transmission within bilingual families may be enhanced by their access to a language support system, such as that provided by family and friends but access to such support may be limited for mixed language parents and Welsh learners.
- The Twf scheme focuses on sharing robust information with parents which empowers them to make informed choices.
- The Twf message highlights the value of the Welsh language and bilingualism to parents, prospective parents and the general population; and encourages families to bring up their children to be bilingual.
- Whilst 56% of our study sample had received the Twf message through information leaflets and 29% had received a Twf CD; only 14% of the sample had spoken to a Twf officer; 19% had discussions about language transmission with a midwife, and 11% had discussions about language transmission with a health visitor.
- Twf's impact on parents' decisions about language transmission in the home varies from nominal to significant. This is reported by parents and healthcare professionals alike.
- Where Twf has little impact, parents have either not heard of Twf and are not aware of the support it offers or already hold strong opinions about the language they will use with their child.
- For parents who are unsure about how to proceed to raise their children bilingually, the Twf scheme is perceived as a source of information and a resource to address concerns.

4.2.4 Twf activities

- 4.2.4.1 Morris and Jones' (2002) independent evaluation of the Twf scheme at an early stage in its development reviewed its marketing materials and concluded that, whilst they were deemed important to the scheme's work, they are 'only an adjunct to discussion with the field workers and health professionals' and 'excessive emphasis should not, therefore, be placed on materials at the expense of other aspects of the scheme.' (page 36).
- 4.2.4.2 Despite this recommendation, our findings from telephone interviews with prospective parents revealed a marked difference between the level of resources and face to face discussions received by parents, as previously reported. The data confirmed that, during the ante-natal period, parents are four times more likely to receive Twf information leaflets than a discussion with a Twf officer about language transmission in the home. There are two explanations for this anomaly. Firstly, the part-time nature of many of the Twf officers work suggests a lack of capacity to reach all prospective parents through a face to face encounter. Secondly, the data from the activity analysis revealed that on occasions there was a lack of operational stringency in managing the Twf activities, which might have led to a limited emphasis on face to face contact with parents.
- 4.2.4.3 Face to face interviews with parents after the birth of their child gave credence to these findings since a consistent theme to emerge from the data, even in the post-natal period, was a lack of awareness of the activities provided by the Twf scheme. The fact that several respondents proposed activities from which they would benefit that, in reality, are already run by Twf, is testimony to this lack of awareness.
- 4.2.4.4 Nevertheless, a small number of respondents recounted their participation in activities organised by Twf. Mainly these took place in local and national events, such as shows and eisteddfodau. Here it seems that they were able to offer some respite to parents and children during a busy day and, whilst in most cases, Twf's efforts at these events appear to have had a limited impact on parents' decisions about transmitting the Welsh language to their children, one mother from a Welsh speaking family did identify the opportunity that such events could offer:

“Yn Eisteddfod yr Urdd eleni, nhw (Twf) oedd efo'r lle gorau i fwydo achos oedd e'n le bach neis a dwi'n meddwl bod nhw'n hybu eu hunain wrth wneud y petha' yma.”

(At the Urdd Eisteddfod this year, they (Twf) had the best place to feed, because it was a nice little

place, and I think that they promote themselves by doing these things.)

- 4.2.4.5 Some respondents had attended a talk at an antenatal class or postnatal clinic and these were generally well received, since they were seen to be offered at a crucial time to influence decisions and respond to individual parents' concerns, as outlined below:

“Also I think if you start it antenatally, you know where to go to start learning Welsh. By the time the child goes to school at four, they will have a good grasp of Welsh, even if they can't write it – they'd understand.”

- 4.2.4.6 Midwives and health visitors, in their focus group interviews, identified a number of activities that were assumed by Twf, ranging from talking to parents at various public events; early years groups and maternity and child health clinics; offering Welsh language lessons; working in collaboration with other organisations, such as Menter Iaith; and training other professionals.
- 4.2.4.7 The activity analysis confirmed that the Twf scheme uses a number of routes to convey its message, from organised national events to informal opportunistic interchange. In terms of national events, Twf has a presence at the National Eisteddfod, the National Urdd Eisteddfod and the Royal Welsh Show, all of which are held annually over a number of days. Normally a main exhibition stand is hired at these events and this is positioned adjacent to other organisations that have an interest in the Welsh language. Twf officers from across the regions normally 'man' the stand in pairs or threes. They either approach adults as they pass the stand or talk to parents whose children are attracted to the stall by the activities provided. They then pass on the Twf message verbally to the adults and support this by handing out resources, such as leaflets and newsletters, for future reference.
- 4.2.4.8 Twf officers employ a similar pattern at local events, such as agricultural shows. Data generated from the activity analysis provided numerous examples of the Twf message being enthusiastically delivered and eagerly received. However, the analysis also elicited data that highlighted negative aspects of the events, such as poor forward planning in terms of staffing and a lack of alignment with partner organisations. Attending to these shortfalls may help the Twf scheme to improve its future campaigns.

Twf activities summary

- Previous research has identified the value of the Twf scheme's activities as a way of emphasizing the importance of developing bilingualism in the home.
- Telephone interviews with expectant parents confirmed that, during the ante-natal period, parents are four times more likely to receive Twf information leaflets than a discussion with a Twf officer about language transmission in the home.
- This suggests that there is a lack of capacity of Twf officers to reach their niche audience and at times a lack of operational stringency in managing the Twf activities.
- Even in the post-natal period, parents demonstrate a lack of awareness of the activities of the Twf scheme.
- Twf's efforts to influence parents' decisions about language transmission in the home may have a greater impact when delivered at maternity and child health clinics rather than local and national events.
- Improvements in the forward planning of Twf events may enhance its future campaigns.

4.2.5 Twf resources

4.2.5.1 In an attempt to effectively disseminate its message about promoting bilingualism in the home, the Twf scheme has established a range of high quality branded materials in order to market the advantages of raising children bilingually. Twf's key message is encapsulated in the leaflet '6 Good Reasons', which reflects key research findings regarding the cognitive, cultural and curricular advantages of bilingualism. The leaflet is included in the 'Bounty pack' of free samples and advertising literature distributed to every woman giving birth in Wales. At the time of our study, other Twf materials included:

- The 6 Good Reasons poster
- The 6 Good Reasons leaflet
- Twf scan card
- Twf postcard
- Twf congratulations card
- Twf car sticker
- Twf bulletins
- Twf CD1&2
- Twf colouring books
- Twf calendar
- Twf bib

4.2.5.2 The vast majority of the interviews with expectant parents elicited comments on the Twf resources since most parents had received materials of some kind. These were acquired mainly through a third party, for example, in Bounty packs, from healthcare professionals, nurseries and schools. Although the resources were largely

appreciated by parents, their effect appears limited. This is not surprising since, in the context of health promotion Murphy and Smith (1993); and Davey et al., (1998) confirm that face to face discussions are significantly more effective in changing attitudes than written information. Our data suggest that, at the most, the materials help to support parents' decision to transmit Welsh to their babies. However, in general, they were seen as a useful resource to entertain their children:

“Yeah, (play the Twf CD in the car) or even here (in the home). When he goes to crèche and it's just us, I Hoover along and sing! Sing along!”

The Twf resources were also seen as a passing distraction in parents' busy lives, as articulated by a Welsh speaking father from a W/E family:

“I've seen the CD lying around the house but that's as far as it goes!”

4.2.5.3 Focus group interviews with midwives and health visitors suggested that healthcare professionals consider the identity of Twf as a positive aspect of the initiative, since the distinctiveness of the Twf 'product' helps to open a dialogue on bilingualism and gives credence to the discussions. On this basis, they proposed that Twf should pay more regard to publicising its success in order to exploit this achievement.

4.2.5.4 Whilst these resources gained very positive evaluations in an independent review of their presentation and content (Edwards & Pritchard Newcombe, 2007), Morris and Jones (2002) advised that the supply of the stock of Twf materials should be improved. The Twf activity analysis revealed that anomalies prevailed regarding the stock supply at the time of our study some 3 years later. For example, one Twf officer stated that she had no difficulties obtaining resources and that she was eager to raise the profile of Twf by distributing resource packs. However, another Twf officer stated that she had difficulties accessing adequate supplies of resources from the agent and she was observed to withhold resources when she was presented with opportunities to distribute material to the public. These anomalies require further investigation to establish the reason for such diverse opinions and practices.

Twf resources summary

- The Twf scheme has established a range of high quality branded materials in order to market the advantages of raising children bilingually.
- These resources are appreciated amongst parents.
- Nevertheless, according to literature findings from the field of health promotion, resources alone are unlikely to affect changes in attitude or behaviour.
- Our data suggest that, Twf resources can help to support parents' decisions to transmit Welsh to their children.
- Anomalies prevail regarding the stock supply of Twf resources and these warrant further investigation.

4.3 Community influences on Welsh language transmission and the impact of Twf

4.3.1 Community language profile and status

4.3.1.1 The community is an element that features prominently in the literature on language transmission in bilingual families (e.g. Siren, 1995) and this study is no exception. Respondents were forthcoming in expressing their perceptions of the language profile and status of their communities. Moreover, this was found to impact on their decisions about transmitting Welsh in the home as well as having a bearing on the planning and execution of Twf activities.

4.3.1.2 In the course of face to face interviews with new parents, a number acknowledged that the Welsh language has significant status within their community. Despite the perceived dominance of English as a spoken language, Welsh is often seen to be a desirable language and one which a number of parents strive to establish for their children. This position is illustrated by a mother who stated:

“It’s (the Welsh language) quite fashionable. If you lived in Cardiff now, it’s quite fashionable now to send your children to Welsh school. I think if you go to a Welsh school it’s middle class isn’t it?”

4.3.1.3 Despite such reports, the extent of such positive parental perceptions about the status of the Welsh language remains questionable since focus group discussions with midwives and health visitors alluded that English is still perceived as the prestigious language amongst many.

4.3.1.4 Nevertheless, given that as many as 64% of the respondents from the telephone interview sample believed that their child’s future social / cultural life was influential in their decisions about language transmission in the home, parents’ perceptions about Welsh as a community language and their normative beliefs about bilingualism are likely to be critical indicators of their intention to use Welsh at home. This is indicative even amongst non-Welsh speakers who reported that their discomfort with compelling Welsh speakers to switch to English was often a catalyst to learning Welsh and transmitting a level of Welsh in the family.

4.3.1.5 The diversity in community language profiles brings different emphases and challenges to the work of Twf and this is reflected in the planning and organisation of its activities. For example, in Pembrokeshire, where the majority of families are E/E, the focus of Twf’s work is often on raising awareness of the Welsh language, offering Welsh language classes through Cymraeg i Rieni and

advising Welsh learners how best to transmit their limited Welsh to their children.

- 4.3.1.6 However, the emphasis of Twf's work in Ceredigion differs to that of Pembrokeshire and focuses on strategies to promote bilingualism in mixed language homes; drawing on the positive features offered by Welsh speaking grandparents, siblings and friends; and offering resources to support families who have already established the transmission of Welsh language in the home.

Community language profile and status summary

- The language profile of communities and perceived status of the Welsh language therein impacts on parents' decisions about transmitting Welsh in the home.
- 64% of the telephone interview sample believed that their child's future social / cultural life was influential in their decisions about language transmission in the home.
- Raising parents' perceptions about Welsh as a community language may therefore influence their decision making in this respect.
- The diversity of community language profiles has a bearing on the planning and execution of Twf activities and these are taken into account at an organisational level in terms of strategic planning and staffing.

4.3.2 Employment

- 4.3.2.1 In their enquiry into parental motivation in the choice of Welsh-medium schooling, Packer and Campbell (1996) found that parents often identified the Welsh language as a career asset as well as a cultural enrichment. This was particularly noticeable amongst parents who did not speak Welsh, where Welsh language fluency was recognised as a valuable advantage when seeking employment in Wales.
- 4.3.2.2 In light of the literature outlining the advantages of bilingualism in the workplace (e.g. Aitchison & Carter, 2004), this message has been adopted by the Twf scheme whereby, through its branded materials, it identifies enhanced employment opportunities as one of the six good reasons for ensuring that children can speak Welsh.
- 4.3.2.3 The parental convictions reported by Packer and Campbell (1996) are strengthened by our study findings about parents' perceptions concerning the value of Welsh language skills for employment. The telephone interview data revealed that the value placed on Welsh for future employment by parents has an impact on their intentions to transmit Welsh in the home.
- 4.3.2.4 In our telephone interview study of expectant parents, as many as 94% of the sample were in employment. The respondents were thus in a prime position to comment on the way in which their

experiences influenced their decisions about language transmission in the home and their aspirations for their children's' future careers. The data shows that 74% of the respondents believed that their child's future career had an influence on their decisions regarding Welsh language transmission. This is exemplified by the following quote:

“It's for job opportunities as well isn't it? You know, for the future isn't it? I wish somebody in my family had given me the option of speaking Welsh, the amount of jobs and other various things that I've missed out on because I don't speak Welsh, I don't want them to go through the same.”

- 4.3.2.5 Moreover, for those who had learnt Welsh, their determination to raise their children bilingually was often prompted by their own failure to achieve complete fluency and resultant lack of choice in employment opportunities, as highlighted by the following expectant mother:

“Although I did it (Welsh) in school and I did really well in my (Welsh) exam, I forgot a lot of it and I just feel that I wouldn't want them to go the same way, because ... things that I've wanted to go for – it was Welsh needed as well and ... I don't want them to feel that they can't do what they want to do because of that barrier.”

- 4.3.2.6 Face to face interviews with parents after the birth of their child echoed these findings. Many respondents felt that having two languages is an advantage both in finding a job, in the first instance, and then being able to speak to others within their employment and the wider community. Moreover, the data showed that the language environment of the workplace can have a positive influence on parents' language skills and confidence, a situation which is outlined in the following quotes:

“Welsh is probably more my first language in work and because I am speaking it more, I've gained the confidence to speak it.”

“Um, I learnt it at primary school, and carried on in high school, then I lost it a bit when I went to college, but then I started working for a solicitor in the town, and she does work in Welsh, so I have to go back to using Welsh on the phone, when people make appointments and things like that in Welsh.”

- 4.3.2.7 Clearly, these opportunities are more likely to occur within those regions with the greatest density of Welsh speakers. Nevertheless,

as Jones and Morris (2007) indicate, whilst in Carmarthenshire and Denbighshire Welsh speakers represent 50% and 26% of the population respectively, within these larger counties there are communities where the density of Welsh speakers can reach as high as 70%. Thus, there should be opportunities for enhancing bilingualism in the workplace and raising the Welsh language skills of the workforce even within counties with relatively low proportions of Welsh speakers.

- 4.3.2.8 Focus group interviews with midwives and health visitors offered further insight about the motives of parents to raise their children bilingually, giving strength to the previous findings. Health professionals reported that parents are often driven by the need for community integration and enhanced work opportunities for their children. These influences are particularly evident amongst parents who were themselves denied opportunities to develop bilingualism at an early age, as illustrated by the following health visitor:

“I went to a family the other day, which has an older child, which is interesting, and Mum said that she wants him to learn Welsh because, if they are going to stay here, most of the jobs now are advertising that Welsh was desirable... so it would be easier for him when he comes to get a job if he could speak both languages....”

Employment summary

- Previous research has shown that Welsh language fluency is a valuable advantage when seeking employment in Wales.
- This message is disseminated by the Twf scheme in its branded materials which identify enhanced employment opportunities as one of the six good reasons for ensuring that children can speak Welsh.
- Our data shows that 74% of expectant parents believed that their child’s future career has an influence on their decisions regarding Welsh language transmission in the home.
- Given the strength of feeling amongst parents, there is scope for the Twf scheme to place more emphasis on this message as a way of enhancing Welsh language transmission in the home.
- For those who have learnt Welsh, their motivation to raise their children bilingually is often prompted by their own failure to achieve complete fluency and resultant lack of choice in employment opportunities.
- The language environment of the workplace can have a positive influence on parents’ language skills and confidence.

4.3.3 Schools and nurseries

- 4.3.3.1 Baker (2003) suggests that the spread of bilingual education at primary and secondary level, together with the establishment of Welsh as a compulsory subject in the National Curriculum, have

been major contributory factors in reversing the decline of the Welsh language in Wales. Nevertheless, there is evidence to suggest that many children who receive a bilingual education switch to use English when they leave school (Gruffudd, 2000). Thus, in view of the dangers of over-reliance on education as a way of securing the future of the Welsh language, acquisition planning in Wales has also focussed on family intergenerational transmission, through projects such as the Twf scheme.

- 4.3.3.2 Twf capitalises on the research evidence that confirms the cognitive advantages of bilingualism (Bialystok, 2001). Moreover its message encourages the use of Welsh in the home in preparation for bilingual education.
- 4.3.3.3 Telephone interviews with expectant parents across the four counties showed that many as 93% of the sample believed that their child's future education had an influence on their decision regarding language transmission in the home. This is illustrated by the following mother from Carmarthenshire.

“Yr unig ffactorau sydd wedi dylanwadu ni yw ydy bod ni yn byw yn XXX, chi'n gwybod. Mae e'n ardal Gymreigaidd iawn. Mae ysgolion o gwmpas ni i gyd, chi'n gwybod. Ysgolion Cymraeg ydy nhw, so mae'n bwysig bod XXXX yn dysgu (mewn) ysgol yn siarad yr iaith Gymraeg – yn deall beth mae pawb o'i chwmpas yn siarad am – neu fydd hi ar goll.”
(The only factor that has influenced us is that we live in XXX, you know. It's a very Welsh area. There are schools all around us, you know. They're Welsh schools, so it's important that XXXX learns at school speaking Welsh – understanding what everyone around her is talking about – or she will be lost.)

The mother in this case was keen to transmit Welsh to her child in preparation for Welsh medium education and as a way of ensuring that the child assimilated into the local community.

- 4.3.3.4 This theme is further identified in face to face interviews with parents after the birth of their child, reflecting the significance of language transmission in relation to the child's education. The findings confirm that, at the nursery level, most parents, regardless of their family background, valued the opportunity for their child to develop a level of bilingualism. This thinking is reflected in the words of one Carmarthenshire father from a E/E family to justify choosing a Welsh medium nursery thus:

“I wanted him to have the basics in it (Welsh) as well, because, like I said, if they can speak both

languages in this kind of area, I think it's beneficial for them anyway."

- 4.3.3.5 At the level of primary education, parents appear to invest significant faith in the schools, often viewing these as a principal means of transmitting Welsh to their children; and fostering their confidence in using Welsh. Indeed, in some cases, parents relinquish responsibility to the school for the transmission of the Welsh language to their children. To illustrate, one father from a W/W family stated:

"So I think that's where she'll (baby) really pick it up is in the primary school."

- 4.3.3.6 Focus group interviews with midwives and health visitors gave credence to these findings, supporting the claim that schooling extends a major influence on language development in childhood. Respondents suggested that parents feel very proud of their children's achievements in developing bilingualism, particularly at an early age. Choosing a school was thus viewed as a crucial first step on the road towards bilingualism.
- 4.3.3.7 Interviews with parents showed that they make decisions about their child's schooling according to three main criteria, that is, convenience, language medium and reputation. Focus group interviews with midwives and health visitors suggested that these criteria also include social class, personal preference; community integration and life opportunities; school transition; and health visitor advice.
- 4.3.3.8 Busy parents often consider issues such as geographical location or financial implications when selecting a school or nursery for their child, making observations that are typified by the following extract:

"Mae'n 'neud fwy o sens hefyd dodi fe (y plentyn) fewn fanna achos dim ond rownd y gornel yw e (yr ysgol)."
(It makes more sense too, to put him (the child) in there because it's only around the corner (the school)).

The availability of Welsh medium schools and nurseries varies within and across counties and this is instrumental in forging parental decisions about language transmission.

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- 4.3.3.9 For some parents, when making choices about educational provision for their child, the language medium of the nursery or school is of prime importance, in some cases taking precedence over convenience, as illustrated by a mother with a W/E family profile:

“But, we send XXX (son) to the Welsh school in XXX (town) which is in the next village down, because there wasn’t much Welsh in the local school.”

- 4.3.3.10 Overwhelmingly, parents favour a Welsh medium school, particularly at nursery and primary level. However, their justification for this preference differs. Some parents choose this option because of the value that they place on ensuring that their child is bilingual, whilst for others, bilingualism is perceived as a secondary benefit. The main drive for securing a place in a Welsh medium school is the perception that such schools offer a better educational experience for their child, or provides a channel to access a wider range of extra curricular activities, such as competing in Eisteddfodau and joining the Urdd.
- 4.3.3.11 Respondents described how parental choices regarding schooling can be a matter of convenience, where, for example, wider community factors such as the availability of after-school clubs and peer pressure take precedence.
- 4.3.3.12 Although parents recognised the advantages of sending their children to a Welsh medium school, some also envisaged drawbacks, which may influence their choice of school. For example, the interview data demonstrated that some non-Welsh speaking parents have concerns about their ability to adequately support their child through their studies, as the words of a mother from a E/E family illustrates:

“I mean, I do have reservations I suppose about secondary school and Welsh I suppose, because we’d be able to help even less, and then, because it’s his second language - I don’t know about doing things in Welsh - science for one - history - doing it in a second language - lots of extra demand.”

- 4.3.3.13 The concern that parents express about their child studying through the medium of Welsh is recognised by the Twf scheme; and some parents acknowledged the efforts made by Twf to lessen these uncertainties.

Schools and nurseries summary

- The literature demonstrates that language acquisition planning in Wales centres on bilingual education, and family intergenerational transmission through projects such as the Twf scheme.
- Twf capitalises on the research evidence that confirms the cognitive advantages of bilingualism. Moreover its message encourages the use of Welsh in the home in preparation for bilingual education.
- 93% of the sample of expectant parents believed that their child's future education had an influence on their decision regarding language transmission in the home.
- At the nursery level, most parents, regardless of their family background, value the opportunity for their child to develop a level of bilingualism.
- Parents appear to make decisions about their child's schooling according to the following criteria: convenience; language medium; reputation; social class; personal preference; community integration and life opportunities; school transition; and health visitor advice.
- Some parents relinquish responsibility to the school for the transmission of the Welsh language to their children.
- Some E/E parents have concerns about their ability to adequately support their child through their studies in the Welsh medium.

4.3.4 Healthcare professionals

- 4.3.4.1 The Twf scheme has made a strategic decision to work closely with midwives and health visitors. Indeed, the first of the scheme's two objectives is:

'to collaborate with midwives and health visitors so that they convey the Twf message to the target audience.'

- 4.3.4.2 The Twf scheme has identified these professionals as key partners because they have contact with all prospective and new parents and can facilitate Twf officers' access to these parents; and transmit the message directly to parents on Twf's behalf. Edwards and Pritchard Newcombe (2005) consider this to be a judicious approach since they assert that midwives and health visitors usually enjoy warm and trusting relationships with mothers. Thus Twf is able to reach all prospective parents and parents of preschool children in Wales by working with these respected professionals.
- 4.3.4.3 When examining the data that emerges from telephone interviews with W/W and W/E expectant families however, this strategy seems to be rather overrated by Edwards and Pritchard Newcombe (2005). Of the 243 respondents in this sample, 91% stated that midwives were either not relevant or not at all influential in their decision making regarding use of language with their new baby. Despite the fact that the work of health visitors is viewed as particularly important to the Twf project because of the centrality of child

development to their interests, their level of influence on parents remained extremely low, with again 91% of parents stating that health visitors were either not relevant or not at all influential in their decision making regarding use of language with their new baby.

- 4.3.4.4 This disappointing finding may not be surprising when parents' level of experience with health care professionals is considered. Although 146 (60%) of the 243 W/W or W/E respondents in the telephone interviews said that they had gained some exposure to the Twf message, only 19% (n=45) of the 243 respondents had discussed language transmission with a midwife, and 11% (n=27) with a health visitor. These findings are endorsed by data extracted from the face to face interviews with new parents, which confirmed that although midwives or health visitors had given out written information about language transmission, few had discussed the issue with parents, as illustrated by the following quote:

“Yeah, she (midwife) did. It wasn't anything much was it?.... I really don't think she said much! (about Twf) Did she? I don't. I think. No. I really don't think she did talk about language it was more just erm, about you know, usual ante-natal things.”

- 4.3.4.5 The data elicited from the activity analysis adds further weight to these findings, uncovering a situation where the health visitors and midwives who work with Twf are sometimes prepared to distribute resources but expect the Twf officers to convey the Twf message to prospective and new parents. For example, one health visitor asserted that it was not her responsibility to speak to parents about language transmission since this was 'down to the Twf officer'.
- 4.3.4.6 Although this situation is not ideal, it does mean that prospective and new parents will have some exposure to the Twf message. However, this was one of the more positive examples of collaborative working between health professionals and Twf officers revealed in the activity analysis. Tensions between Twf and health professionals were also uncovered, with some Twf officers experiencing difficulties in accessing health visitors and midwives whilst others, for various reasons, were totally excluded from working with health professionals.
- 4.3.4.7 The focus group interviews with midwives and health visitors offer some explanations for the challenges to the Twf scheme associated with meeting their primary target of developing partnerships with health professionals. Midwives and health visitors expressed clear views about their position in enhancing bilingualism in children. They generally saw their professional role in promoting bilingualism as minimal, often centring on distributing resources or responding to parents' questions. Indeed, many respondents justified this limited involvement by either entrusting the role to another professional

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group, or to individuals whom they perceived to be proficient in the use of the Welsh language. The following extracts give a flavour of this position:

“I think it’s (talking about language) probably more a health visitors’ role.”

“I think it’s quite difficult if you... don’t speak any Welsh - I think possibly Welsh speaking health visitors more (important role in promoting bilingualism) ... I don’t think I would say that is part of my remit.”

4.3.4.8 Health professionals explained a number of factors that influence their involvement in promoting bilingualism, including the individual language profile of the health visitors or midwife and their perceived level of contact with expectant and new parents. The health visitors and midwives who fulfilled a role in promoting bilingualism talked of the importance of tailoring the message to meet the needs of the families that they served and indicated that they take into account the language profile of the families, the age of the baby and the perceived receptiveness of the families to the message.

4.3.4.9 Part of the message tailoring was tied in with the distribution of resources and there appeared to be a hierarchy of resource distribution which was governed by timing, the perceived value of resources and the availability of resources, as illustrated in the ensuing extract:

“Ond, os nag yw nhw (swyddogion Twf) yn dod a nhw (adnoddau) i ni, elen i ni ddim i edrych amdanyh nhw, achos mae shwt gymaint o waith ‘da ni...”

(But, unless they (Twf officers) bring them (resources) to us, we would not look for them, because we have such a lot of work.)

4.3.4.10 The public health role is clearly an important aspect of the work of health visitors and midwives and in the focus group interviews, a number of respondents made comments about the relationship between public health and the promotion of bilingualism. These ranged from recognition to refutation of a relationship, as illustrated in the following account:

“I wouldn’t say that discussing language transmission is part of the public health role.”

4.3.4.11 Edwards and Pritchard Newcombe (2005) point out, the Twf message is in competition with many other demands on health visitors and midwives time. Therefore, it would be prudent to

take measures to ensure that the Twf message does not become an additional burden but rather is seen as integral to their every day work. The evident mixed understanding of the relationship between public health and bilingualism offers an opportunity for the Twf scheme to integrate it's message into health visitors and midwives everyday role, by demonstrating how language transmission and bilingualism are related to public health. This could be addressed through training events.

- 4.3.4.12 The Twf scheme has targeted its efforts to harness the support of health visitors and midwives through the staging of training events for qualified professionals and by contributing to the teaching on educational programmes for students pursuing an educational programme in health visiting or midwifery. Data from the activity analysis demonstrate that when training is offered to such groups it is well received. However, at the time of the study, no effort was made to discuss the theoretical base of language transmission within the context of the health professionals' work. For example, given their interest in public health, it is noteworthy that the relationship between bilingualism and public health was not made explicit to the participants in training events.

Healthcare professionals summary

- Twf has made collaboration with midwives and health visitors so that they convey the Twf message to the target audience a primary objective of the scheme.
- 91% of telephone interview respondents stated that midwives and health visitors were either not relevant or not at all influential in their decision making regarding use of language with their new baby.
- Only 19% (n=45) of the 243 respondents had discussed language transmission with a midwife, and 11% (n=27) with a health visitor.
- Data from face to face interviews confirm that few midwives or health visitors discuss the issue of language transmission with new parents.
- Health visitors and midwives expect Twf officers to convey the Twf message to prospective and new parents
- Tensions between the Twf scheme and health professionals exist whereby Twf officers experience difficulties in accessing health visitors and midwives; or are totally excluded from working with these health professionals.
- Health visitors and midwives generally perceive their professional role in promoting bilingualism to be minimal and essentially confined to distributing resources or responding to parents' questions
- The public health role is an important aspect of the work of health visitors and midwives which could be harnessed through training to make the transmission of the Twf message an integral, rather than an additional element of the health professionals' role.

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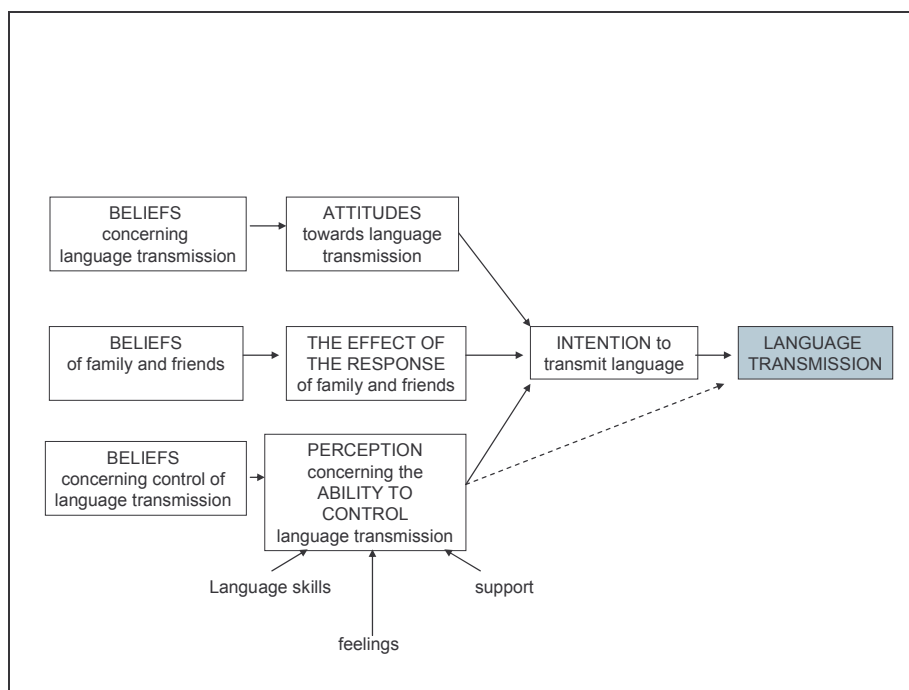
- 4.3.4.13 The results overall indicate that the Twf scheme could be enhanced through strengthening its theoretical underpinnings in order to shed light on the relationship between parents' beliefs and attitudes about language transmission and their intention to transmit Welsh in the home. The Theory of Planned Behaviour proposed by Ajzen (1991) suggests that people's beliefs related to their social world and the expectations of significant others will affect their behaviour. This model offers a framework for the Twf scheme and is presented in the next section.

5 Theory of Planned Behaviour (Ajzen, 1991)

- 5.1.1.1 The Theory of Planned Behaviour seeks to explain how individuals decide to participate in a specific activity or behave in a certain way. Such understanding can be of great benefit in the area of health promotion, particularly for designing programmes where either the uptake of a healthy lifestyle or cessation of an unhealthy behaviour is involved, such as smoking, healthy eating and so on.
- 5.1.1.2 Ajzen's Theory of Planned Behaviour (1991) outlines how people tend to behave according to their intention. The theory highlights the fact that the relationship between intention and behaviour is more complex than expected, and that is because people are more likely to participate in activities which are under their control. The theory underlines the fact that people's behaviour depends not only on their normative beliefs and intentions but also on their perception of how much control they will have in respect of that behaviour.
- 5.1.1.3 Behavioural intention rests on three factors, namely:
- Attitudes towards behaviour
 - Subjective norms (the individual's beliefs about how people they care about will view the behaviour in question)
 - Perceived behavioural control (perception of how much control the individual can exercise over the behaviour)
- 5.1.1.4 These factors in turn depend on individuals' beliefs or those of the community in which they live, for example:
- Attitudes depend on personal behavioural beliefs
 - The response of the family and friends are heavily influenced by society's beliefs
 - The perception of the extent of control that can be exercised over the behaviour involved is influenced by personal beliefs, skills, feelings and available support
- 5.1.1.5 People who perceive that they have access to the necessary resources and opportunities to perform the behaviour are likely to have a high degree of perceived behavioural control (Ajzen, 1991). A conceptual model of the Theory of Planned Behaviour is

proposed by Ajzen (2002) and an application of the model to the Twf scheme is shown in Figure 2.

Figure 2
Application of the Theory of Planned Behaviour to the Twf scheme
(after Ajzen 1991)



5.1.1.6 The Theory of Planned Behaviour is widely applied in areas as diverse as driving behaviour (Elliott et al., 2007), exercise behaviour (Brickell et al., 2006), sports training behaviour (Palmer et al., 2005), voting behaviour (Bassili, 1995), disease prevention behaviour (Jemmott et al., 2007), birth control behaviour (Agnew, 1998), breastfeeding behaviour (Swanson & Power, 2005) and fruit and vegetable consumption prediction (Hewitt & Stephens, 2007).

Research in action

Application of the Theory of Planned Behaviour (Ajzen, 2002)

Stead et al., (2005) conducted a four year longitudinal cohort study that examined the impact of a road safety mass media campaign in Scotland, which was shaped by the Theory of Planned Behaviour, with attitude, subjective norms and perceived behavioural control as the three main predictors. They found empirical support for the decision to use the Theory of Planned Behaviour as the theoretical underpinning of the advertising campaign. The advertising was effective in triggering desired communications outcomes and was associated with significant changes in attitudes and affective beliefs about speeding.

Elliott et al., (2007) investigated the ability of psychosocial variables to predict driver behaviour. They found that the Theory of Planned Behaviour was a strong predictor of drivers' intentions and self-reported speeding behaviour. They found that intention was the sole predictor of observed speeding behaviour.

Swanson and Power (2005) conducted a study on new mothers' subjective norms in relation to both breast and bottle-feeding and found that subjective norms were the most important determinants of initiation and continuation of breast and bottle feeders. The mothers who continued breastfeeding perceived their partners as more pro-breastfeeding at six weeks.

6 Discussion

- 6.1.1.1 The results of the Twf and onwards impact assessment study demonstrate that two main categories of influence prevail when considering Welsh language transmission in the family and these are concerned with firstly, the home and secondly, the community. The distinction between home influences and community influences is important since it requires understanding and action at two quite different levels. Drawing on the considerable body of knowledge that has been developed in the discipline of health promotion, a useful distinction between the home and community can be made, where the focus of individual approaches is in the home, and the focus of structuralist approaches is at the community level. Individual approaches focus on encouraging and empowering people to change their behaviour and in the case of health promotion, adopt a healthy lifestyle, whereas structuralist approaches focus on efforts to change the wider determinants of health such as the physical, social and economic environment (Douglas, 2007).
- 6.1.1.2 Our research showed that there are clear relationships between individual parental characteristics and the intention to transmit Welsh to a new baby. For example, the data demonstrate that parent's attitudes towards bilingualism, confidence and fluency all have a bearing on their intention to transmit Welsh to their new baby and ultimately, whether these intentions are converted into action. The Theory of Planned Behaviour (Ajzen, 1991) lends itself well as a model that can be used to understand why parents decide to transmit the Welsh language to their children, or not. As explained in the previous section, essentially the model predicts an intention to behave based on individuals' beliefs, attitudes and perceptions in relation to in this case, language transmission, family and friend's response to the issue and the individual's ability to control language transmission. In general, the Twf scheme addresses these issues to a satisfactory level.
- 6.1.1.3 Twf officers make efforts to influence attitudes to the Welsh language through the distribution of promotional materials and by talking to parents, either opportunistically or in planned sessions and events. Furthermore, they have begun to develop initiatives that focus on building language confidence and skills and they offer parents advice on strategies that can be used to expose their children to the Welsh language.
- 6.1.1.4 That said, it is evident in the research that the Twf message is failing to reach almost half of the W/W and W/E parents, that is, the target audience for the Twf scheme, in the crucial pre-natal stage. In addition, this research reveals that Twf tends to take an approach that falls short of targeting specific groups to its work in that the

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message falls short of some groups of people (e.g. fathers, grandparents, and people from lower socio economic groups) who are shown in the data to strongly influence the likelihood of parents transmitting Welsh to their children. Indeed, the materials that Twf distribute are in the main for consumption by parents in general; and not tailored for specific audiences, such as fathers or grand parents.

- 6.1.1.5 When parents do receive the message, it is often through no more than the receipt of a leaflet, with no verbal reinforcement. One likely explanation for the lack of face to face communication offered to parents is the small ratio of Twf officers to the population of the county that they serve, and their limited capacity to make individual contact with parents, due to the part time nature of many of the Twf officers' employment.
- 6.1.1.6 When Twf officers engage in face to face discussion with parents they are adept at making points relevant to their audience. Nevertheless, those who receive the Twf message report that in general, Twf confirms the decisions that they make about transmitting Welsh to their children.
- 6.1.1.7 It is now well established that interventions aimed at influencing attitudes, beliefs and behaviours tend to be more effective when they are planned and delivered within the framework of a theoretical approach (Jepson, 2000). The Theory of Planned Behaviour is one such theoretical framework. It offers guidance for measures that could be taken within the Twf scheme to improve the chances of parents confirming an intention to transmit Welsh to their children; and of those intentions being converted into action. Such measures might include:
- Focusing on the attitudes and beliefs of parents - the Twf scheme currently takes measures to address this but there is scope for improvement.
 - Rolling out their programmes that focus on improving parental skills and confidence in the use of the Welsh language so that parents feel that they have the necessary language, and interpersonal competencies to control language transmission with their children.
 - Using different means and media to disseminate the advantages of:
 - Welsh language transmission in the home
 - Bilingualism
 - Welsh medium education
 - In partnership with other agencies, offer 'family and friends workshops' to clarify attitudes and reconcile beliefs so that the effect of the response of family and friends is fully recognised by all concerned.

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- 6.1.1.8 The Twf scheme also needs to consider the measures that can be taken to convert intentions into behaviour. The post natal face to face interviews showed that whilst many parents who had indicated their intentions to transmit Welsh when they were expecting their baby adhered to these plans, some parents failed to fulfil their ambitions and were using far less Welsh with their new baby than they had planned. The reasons given for this deviation were often pragmatic in nature, for example, a lack of skills, limited commitment from others or a reluctance or inability to disturb established language patterns in the family. There is room therefore for the Twf scheme to develop their database of expectant parents who have indicated an intention to transmit Welsh to their baby. This information could then be used to work with such parents to ensure that they had the necessary toolkit (skills, competencies, strategies for dealing with obstacles, access to resources) to overcome the possible barriers to language transmission as they arose.
- 6.1.1.9 There is a wealth of evidence that scrutinizes the effectiveness of the strategies and approaches that have been used to influence choices and stimulate change in behaviour in health education and health promotion, which would be of benefit to the Twf scheme. Much of this evidence focuses on the comparative merits of the individual and the structural approaches that are adopted.
- 6.1.1.10 Significant criticism is directed towards an approach that focuses entirely on encouraging people to change their behaviour because of the established modest relationship between knowledge attitudes and behaviour (Bennett & Murphy, 1997). Furthermore, it is evident that that a number of critical factors such as environmental circumstances, social-political structures and cultures, which are largely beyond the control of individuals, have a direct influence on lifestyle. For example, our research, and the work of others such as Aitchison and Carter (2000) shows that, in spite of good intentions, many factors beyond the control of parents come into force, such as the perceived status of the Welsh language and the availability of Welsh medium childcare and education; which can either hinder or facilitate language transmission in the family.
- 6.1.1.11 Whilst at worst the individual approach is considered to be unethical because it gives rise to 'victim-blaming' where people feel responsible and culpable for inaction, lifestyle approaches should not be dismissed entirely. It can be reasonable to expect some level of behaviour change as an outcome if careful consideration is given to the underpinning theoretical and practical constructs. Moreover a well considered initiative, which dovetails into a wider structural approach, should enhance overall achievement of the aim, since structural changes alone may not lead to health improvement if individual competencies are not in place.

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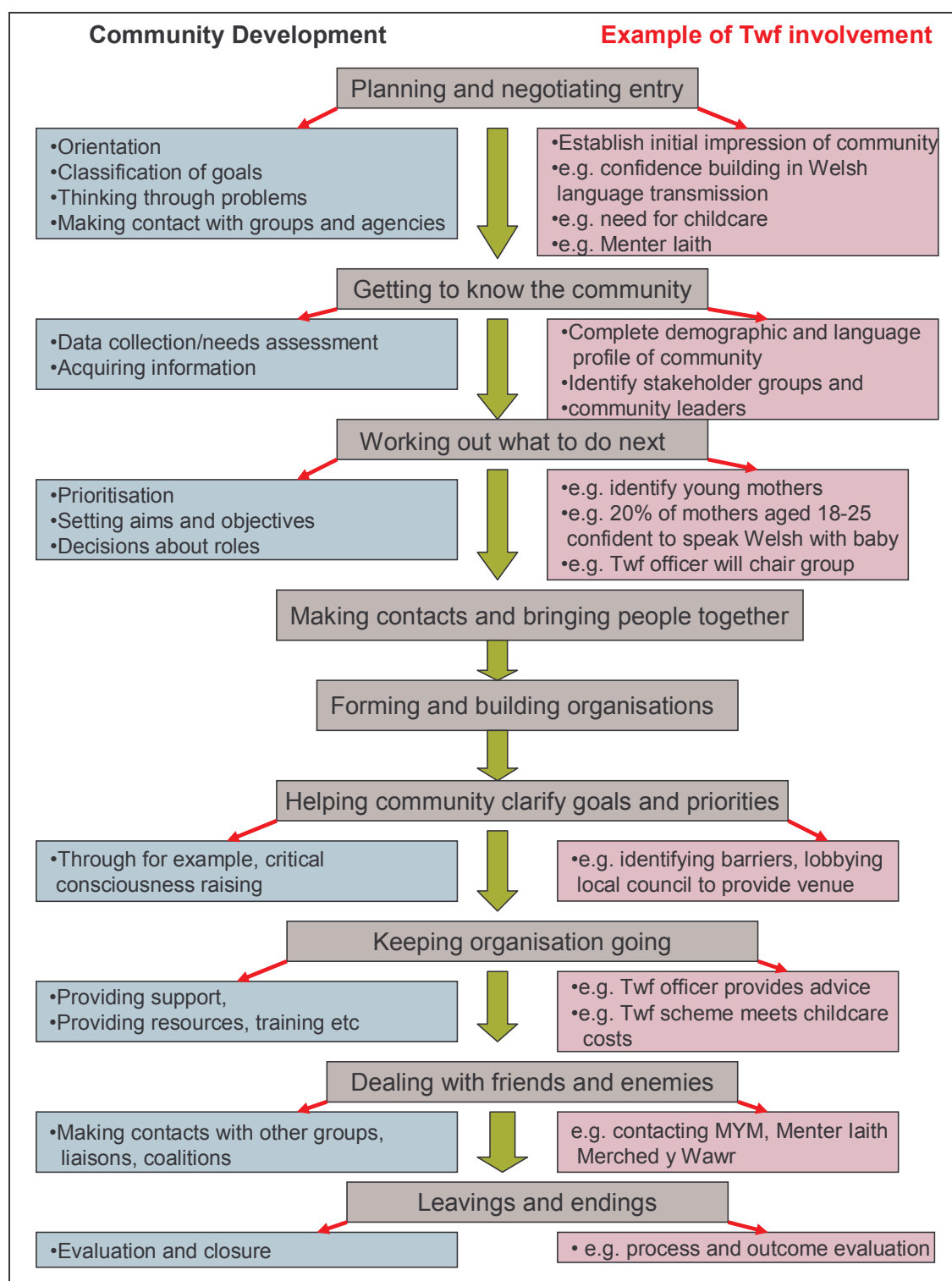
- 6.1.1.12 Aitchison and Carter (2000) recognise the criticality of structural approaches to influence Welsh language vitality in Wales and cite the influence of the media, education and community language initiatives in language transmission. However, as Gathercole et al., (2006) acknowledge if the home context is insufficient to support language transmission (for example because of limited fluency or confidence), then efforts made at the structural level will not reach fruition. Nevertheless, access to Welsh medium schools is critical since this is instrumental in shaping parents' decisions about language transmission.
- 6.1.1.13 Thus in relation to language transmission, it can be argued that intervention at the individual level would benefit from supplementary work that focuses at the community level. As we showed earlier, the Twf scheme has developed a niche in terms of activity at the individual level, where (mainly) parents are targeted to address their language attitudes, beliefs and skills. However, to make a significant difference to the whole population, this needs to be supplemented with a community orientated approach.
- 6.1.1.14 Community development is afforded great worth as an approach that aims to empower the community and ensure that the decision making processes which relate to the objectives and activities of a strategy are owned by that community (Ritchie et al., 2004). Thus it enables communities to identify problems, develop solutions and facilitate change (Blackburn, 2000). In other words; community development is user-led and as such, demands innovative ways of working.
- 6.1.1.15 At present Twf officers are not involved in true community development work as this falls outside of their current remit; however, with careful consideration, the Twf scheme may prove effective agents for community development work. Clearly, it should be necessary for some harmony between the identified goals of a community group and the aims of the Twf scheme, and as such, any initiative would be directed towards improving the social, environmental and political climate in order to enhance Welsh language transmission in the home. If a community group expressed that limited opportunities for Welsh language nursery provision were impeding attempts to transmit Welsh to their children, the Twf scheme may be the appropriate agent to facilitate community development work
- 6.1.1.16 One of the key principles of successful community work is effective collaboration, to allow for sharing of power and resources for the achievement of mutual or compatible objectives. This research revealed some partnership working between the Twf scheme and other organisations such as MYM. However, this appeared to be fragmented, and crucially missing any additional impact beyond that which could be achieved by the Twf scheme (or its partner) working in isolation. Given that there are multiple influences on language

transmission in the home, operating at various levels, it is necessary to work in a systematic way to secure the desired outcomes through action with all those sectors that have a contribution to make. Therefore, a precursor to effective collaboration is the recognition by agencies that they can not single-handedly facilitate such work and the structured input of many organisations and agencies may be necessary to produce an effective community development initiative. For example, an initiative that aims to increase the provision of Welsh language nursery places may need the contribution of Twf, MYM, Mentrau Iaith, private businesses, the local education authority, the local county councils and others.

- 6.1.1.17 Tones and Green (2004) cite the work of Henderson and Thomas (1980) to outline key steps and stages in the community development process, outlined in Figure 3 which could be used to map appropriate activities for the Twf scheme and to identify where there is a role for Twf and where other community organisations (such as Mentrau Iaith) would be better placed to engender collective activities.
- 6.1.1.18 As Ritchie et al., (2004) point out, it is commonly agreed that appropriate leadership and effective organisational structures are crucial to successful community participation. The challenge for the Twf scheme is to recognise its place in a community development approach; to acknowledge the criticality of community members, such as parents, community groups (e.g. Merched y Wawr) and local organisations (e.g. town councils) in the process; and to use and increase the capabilities and resources within the community. Furthermore, if they are to afford effective action, the Twf scheme and other community development workers must recognise that agendas should arise from grass roots (Labonte, 1994). One means of ensuring that Welsh language related issues appear on community driven agendas is through raising the status of the Welsh language. Please see Figure 3 for an example of how community development may be achieved.
- 6.1.1.19 Baker (2003) contends that raising the status of a language across many domains provides motivation for families to reproduce the Welsh language with their young; and this is a key component of language planning, which Cooper (1989 p.45) defines as:

'Deliberate efforts to influence the behaviour of others with respect to the acquisition, structure or functional allocation of their language codes'.

Figure 3
Key stages of the community empowerment process
 (after Henderson & Thomas, 1980)



- 6.1.1.20 Our research supports Baker's (2003) assertions, showing unequivocally that the status of the Welsh language is of significance to prospective parents when they consider transmitting Welsh to their new baby and when they make efforts to access Welsh language activities for their children in the community. The main focus of the Twf scheme is working with individuals, but Twf makes some efforts to facilitate social networks for parents who are seeking opportunities to engage in social activities through the Welsh language. However, this effort is concentrated at the individual level and whilst this level of effort has its merits, a successful strategy would be one that combines individually focussed initiatives with activity at the community level.
- 6.1.1.21 A move towards working at the community level to raise the status of the Welsh language would offer another 'tier of reason' (Baker, 2003) for parents to transmit the Welsh language to their young. The obvious brokers of such community activity are the Mentrau Iaith and Urdd Gobaith Cymru, whose success in Welsh language related community development programmes has gained significant recognition (Williams, 2000, Llwyd Morgan, 2007). However, in the spirit of collaboration, the Twf scheme could make a significant added contribution to community based activities that address the status of the Welsh language through their experience of working with families and family focussed organisations. Such input would help to ensure that through their contribution to collaborative working that the 'whole is greater than the sum of the parts'.
- 6.1.1.22 At the interface between individual and structural approaches lies social marketing, which involves utilising the mass media as a means of conveying social messages (Lefebvre & Flora, 1988). This approach adopts marketing theory to ensure that messages have the right balance of audience targeting, underpinning research and channels of communication. Thus social marketing can be directed at specific groups (such as individual families) or to whole populations.
- 6.1.1.23 We were unable to locate any literature that considered specifically the effectiveness of social marketing approaches to convey the advantages of bilingualism in the home; however, in the health field, there is evidence of mass media advertising acting as a 'cue to action' whereby the provision of an initial awareness of an issue triggers a related decision towards action (Bennett & Murphy, 1997). For example, advertising the benefits of bilingualism in the

family may prompt an expectant parent to discuss language transmission with their partner or significant other, or to seek out additional information.

- 6.1.1.24 However, realistic expectations about the effects of advertising are needed. It is unlikely that in isolation a media campaign will effect changes in attitude or behaviour amongst a population (Bauman et al., 2004). Nevertheless, as part of a structured programme that draws on the expertise of various stakeholders to work in collaboration on different levels of intervention, it may be sufficient to inspire individuals and communities to take on activities that result in increased Welsh language transmission.
- 6.1.1.25 The issue of collaboration with stakeholders is of significance when considering the role of healthcare professionals in the promotion of bilingualism and language transmission in the home. Health visitors and midwives are recognised by the Twf scheme as pivotal collaborators in conveying the Twf message to new parents. As such it might be expected that these healthcare professionals are already actively engaged in communicating the advantages of bilingualism to prospective and new parents.
- 6.1.1.26 Yet our research demonstrates that in fact healthcare professionals' work in this area is inconsistent and depends on the inclination of individual practitioners rather than a well designed strategy that is aligned with the Twf scheme. Clearly this disappointing finding needs to be addressed. Firstly, it is worth asking whether the Twf scheme should continue to identify health visitors and midwives as key players in their overall strategy to improve language transmission in the home. To an extent an affirmative answer depends on the will of the two organisations to work in collaboration.
- 6.1.1.27 There is clearly some dichotomy in their roles. The Twf scheme exists solely to promote Welsh language transmission in the home whereas health visitors and midwives are concerned with all aspects of child, maternal and family health. As such the promotion of bilingualism features at the perimeter of their work and therefore may be one of the first activities to be forsaken when external pressures threaten their activities. Moreover, health visitors and midwives entered their profession with the intention of dealing with health issues and thus may not be fully committed to embracing a role in the promotion of bilingualism; seen by some contributors to our research as secondary to their work rather than a key public health issue.

- 6.1.1.28 Health visitors and midwives are required to undertake a lengthy period of study at least to degree level in order to enter the professional register whilst there is no requirement for Twf officers (who directly engage with health visitors) to have completed such studies. This anomaly may lead to some feelings of professional hegemony, particularly as health visitors and midwives work in a system that is inherently hierarchical in nature. As a consequence of the perceived power differential, it is possible that health visitors and midwives develop negative or indifferent perceptions about the prominence of the message that Twf officers are attempting to broker through health professionals and this was evident amongst some of the participants in our study. These difficulties might partly explain why Baker (2003) questions whether the move to work with health visitors and midwives has an effect on language transmission in the home.
- 6.1.1.29 Notwithstanding the limitations of working with health visitors and midwives, there are clearly some advantages to adopting a collaborative approach with these health professionals. Health visitors and midwives have a broad experience of working with individuals, families and (in the case of health visiting) whole communities. Moreover, from their education, they are able to draw on the theoretical base to ensure that their work is planned and executed successfully. Indeed, Lowe (2007) point out that the main focus of health visitors' work is at the family and community level, where they should be working in collaboration with community groups to achieve collective goals. Together, health visitors and midwives are therefore in a very strong position to effectively convey the Twf message at the individual and the community level. They are generally well known in the community that they serve and are seen as credible agents of the health service (Williams et al., 2004). The Twf scheme would therefore be wise to persevere with its associations with health professionals. However, some strengthening and revision of these alliances are necessary, to include clear policy directives and to take account of the interests and expertise of the health visitors and midwives. Some suggestions of how this might be executed are submitted in the recommendations in this report.
- 6.1.1.30 That said, it is important to recognise that an overemphasis on collaborative work with one agency would not be sufficient to achieve Twf's overall aim. The Twf scheme should therefore continue to strengthen their allegiances with other partners, such as MYM and consider developing new partnerships with a more diverse range of groups and

organisations, such as youth and community workers, and housing organisations and so on.

- 6.1.1.31 A strong message that emerges from the literature is that evaluation is an essential element of the overall process of planning and developing any initiative, if its on-going survival and viability is to be ensured (Øvretveit, 1998).
- 6.1.1.32 Robust evaluation is necessary to determine the level and extent to which the Twf scheme is achieving its objectives, as well as ensuring efficient and cost-effective use of resources. In essence, the two main reasons for evaluating the Twf scheme are firstly, the need to generate hard evidence about the overall success of the scheme and secondly, the desire to make valued judgements about the effectiveness of various interventions. Furthermore, adopting rigorous evaluation strategies demonstrates readiness to show accountability for the success or failure of the Twf scheme.
- 6.1.1.33 An evaluation approach that uses both process and outcome measures is recognised as an effective means of establishing the worth of an initiative (Whitehead, 2003) and would be a fitting approach for evaluating the Twf scheme. Outcome evaluation involves measuring the success of an initiative against its objectives, whilst process evaluation focuses on gaining an understanding of how the effects have been achieved.
- 6.1.1.34 It is beyond the scope of this study to give detailed recommendations of how the Welsh Language Board and the Twf scheme should perform their evaluation process. However, it would be reasonable to expect that it is likely to require a combination of qualitative and quantitative methods to ensure adequate breadth and depth of measurement. In addition, an objective evaluation would require robust internal monitoring processes in combination with objective measurement by agents who are external to the Twf scheme.
- 6.1.1.35 In conclusion, this research suggests that as an initiative that seeks to promote the use of the Welsh language within homes in Wales, the Twf scheme is beginning to make some headway. The research offers some evidence that the Twf scheme can support families in making the decision to transmit Welsh language to their child if they have received the Twf message in sufficient detail. If families are not aware of the benefits that bilingualism offers them, then, bilingual acquisition will be left to chance, and the likelihood of fluent minority language acquisition occurring 'naturally' is low. The level and nature of support

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offered by the Twf scheme should be developed; making use of the theoretical base that offers guidance for campaigns directed at the individual and the community level. This will ensure that future Twf strategies to promote Welsh language vitality within the home, are based on an understanding of realistic support and goals for parents and the wider community.

7 Recommendations and the way forward

7.1.1.1 Twf aims to: increase the transmission of the Welsh language within the family through the following objectives:

Objective 1: To collaborate with midwives and health visitors so that they convey the Twf messages to the target population.

Objective 2: To raise awareness among parents, prospective parents and the public in general of the value of introducing Welsh in the home, the value of bilingualism and the benefits of a Welsh education. Twf's main target in this respect, are prospective parents and parents with babies under 6 months old.

7.1.1.2 Taking into account the objectives above, and drawing on the findings of the study derived through the synthesis of the four main data sets, the following recommendations are proposed to move the Twf scheme forward. See Table 3.

Table 3
Recommendations

Twf scheme's objective	Recommendation	Evidence	Theoretical focus	Responsibility
1	1. Clarify the public health role of health visitors and midwives in Wales in relation to supporting Welsh language transmission within families	Twf activity analysis Focus groups with midwives and health visitors	n/a	Welsh Language Board Chief Nursing Officer for Wales Local Health Boards NHS Trusts Higher Education Institutes Health Inspectorate Wales
1	2. Seek statutory directives from government and professional bodies to uphold standards for health visitors and midwives on entry to the register in relation to their role in supporting Welsh language transmission within families in Wales	Twf activity analysis Focus groups with midwives and health visitors	n/a	Welsh Language Board Chief Nursing Officer for Wales Royal College of Nursing Royal College of Midwives Community Practitioners' and Health Visitors' Association - (CPHVA) Health Inspectorate Wales
1	3. Identify and maintain opportunities within the midwifery and health visiting curricula to deliver and enhance language awareness and the Twf scheme's training programmes	Twf activity analysis Focus groups with midwives and health visitors	Behavioural beliefs	Higher Education Institutes

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Twf scheme's objective	Recommendation	Evidence	Theoretical focus	Responsibility
1	4. Establish a new role within healthcare organisations for health visitors and midwives designated to the Twf scheme	Twf activity analysis Focus groups with midwives and health visitors	n/a	Chief Nursing Officer for Wales NHS Trusts Local Health Boards
1 & 2	5. Establish uniform guidance for Twf officers, health visitors and midwives to develop knowledge and cues for action for their client group	Twf activity analysis Focus groups with midwives and health visitors	Knowledge and cues to action Behavioural intention	Twf officers Health visitors Midwives
1 & 2	6. Establish methods of working for Twf officers, health visitors and midwives to develop strategies to convert intentions into behaviours	Twf activity analysis Focus groups with midwives and health visitors	Knowledge and cues to action Behavioural intention	Twf officers Health visitors Midwives
2	7. The Twf scheme to collaborate with designated health visitors and midwives to reach Welsh/English and other families based on local demographics	Twf activity analysis Focus groups with Midwives and health visitors	Knowledge and cues to action	Health visitors Midwives Twf officers
2	8. The Twf scheme to target difficult to reach groups, such as parents from low socio economic groups, expectant fathers and other extended family members	Telephone interviews Face to face interviews	Knowledge and cues to action	Health visitors Midwives Twf scheme Twf officers

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Twf scheme's objective	Recommendation	Evidence	Theoretical focus	Responsibility
2	9. Improve the Twf scheme's monitoring and evaluating systems in order to provide a more rigorous evaluation method	Twf activity analysis	n/a	Twf scheme Welsh Language Board
2	10. Welsh Language Board to develop appropriate campaigns to raise awareness and improve knowledge amongst the general public concerning the : - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education	Twf activity analysis Telephone interviews Face to face interviews	Knowledge and cues to action Normative beliefs Subjective norms	Welsh Language Board
	11. Twf scheme to enhance ways of working with early years partners to raise awareness and improve knowledge amongst parents concerning the : - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education	Twf activity analysis Telephone interviews Face to face interviews	Knowledge and cues to action Normative beliefs Subjective norms	Twf scheme

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Twf scheme's objective	Recommendation	Evidence	Theoretical focus	Responsibility
2	12. Develop parents' knowledge of the benefits of using the Welsh language in the home	Telephone interviews Face to face interviews	Attitudes towards behaviour	Health visitors Midwives Twf officers
2	13. Develop parents' levels of confidence and competency in transmitting the Welsh language in the home	Telephone interviews Face to face interviews	Perceived behavioural control	Health visitors Midwives Twf officers
Consider 3 rd objective	14. Work in partnership with other organisations to engage in community development activities to ensure focus of message reaches the structural level as well as the individual level	Twf activity analysis	All stages of community process	Welsh Language Board Twf scheme
2	15. Enhance the capacity and operational efficiency of the Twf scheme to increase face to face contact with parents	Twf activity analysis	Perceived behavioural control	Welsh Language Board Twf scheme

Table 4 Examples of the proposed way forward for the implementation of the recommendations

Recommendation	Example of the proposed way forward for their implementation
<p>1. Clarify the public health role of health visitors and midwives in relation to supporting Welsh language transmission within families in Wales</p>	<p>The Welsh Language Board to encourage: NHS Trusts and Local Health Boards to disseminate a professional directive clarifying the public health role of health visitors and midwives in relation to supporting Welsh language transmission within families in Wales</p> <p>The Chief Nursing Officer to disseminate a practice directive clarifying the public health role of health visitors and midwives in relation to supporting Welsh language transmission within families in Wales</p> <p>Higher Education Institutes to ensure that the relationship between public health and bilingualism on an individual, group and community level are included in health visiting and midwifery curricula</p>
<p>2. Seek statutory directives from government and professional bodies to uphold standards for health visitors and midwives on entry to the register in relation to their role in supporting Welsh language transmission within families in Wales</p>	<p>The Welsh Language Board to emphasise to the Welsh Assembly Government, the Nursing and Midwifery Council and Chief Nursing Officer the importance of supporting Welsh language transmission within families in health visiting and midwifery practice; and the significance of bilingualism to public health</p> <p>The Chief Nursing Officer to make clear to Health Inspectorate Wales the particular case for establishing standards relating to supporting Welsh language transmission in Wales</p>

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Recommendation	Example of the proposed way forward for their implementation
<p>3. Identify and maintain opportunities within the midwifery and health visiting curricula to deliver and enhance language awareness and the Twf scheme's training programmes</p>	<p>Higher Education Institutes to ensure language awareness training features throughout midwifery and health visitor education in Wales</p> <p>Higher Education Institutes to ensure programme leaders for specialist public health and midwifery programmes give students exposure to the Twf scheme during the educational programmes</p>
<p>4. Establish a new role within healthcare organisations for health visitors and midwives designated to the Twf scheme</p>	<p>The Chief Nursing Officer to disseminate a guidance/ directive on the establishment of specialist roles for health visitors and midwives designated to the Twf scheme</p> <p>Local Health Boards to ensure that designated roles are included in specifications for commissioning</p> <p>NHS Trusts to ensure that sufficient health visitors and midwives are appointed to designated roles</p> <p>NHS Trusts to invite Twf to provide opportunities for in house training and education of midwives and health visitors regarding the Twf scheme's mission, target audience and role</p>

Recommendation	Example of the proposed way forward for their implementation
<p>5. Establish uniform guidance for Twf officers, health visitors and midwives to develop knowledge and cues for action for their client group</p>	<p>Twf scheme to offer workshops to facilitate different approaches to disseminating the advantages of:</p> <ul style="list-style-type: none"> • Welsh language transmission in the home, • bilingualism • Welsh medium education <p>Twf officers, health visitors, and midwives to develop methods of working to ensure awareness of benefits of:</p> <ul style="list-style-type: none"> • Welsh language transmission in the home, • bilingualism • Welsh medium education <p>are effectively disseminated to target audience</p>
<p>6. Establishing methods of working for Twf officers, health visitors and midwives to develop strategies to convert intentions into behaviours</p>	<p>Twf officers, health visitors and midwives to seek expert advice and work in collaboration to develop appropriate strategies to support parents who express the intention to:</p> <ul style="list-style-type: none"> • transmit Welsh in the home • give their children the opportunity to benefit from Welsh medium education <p>so that they have the necessary resources and competencies to fulfil their intentions. For example, reconciling subjective norms could be achieved through establishing family and friends workshops</p>
<p>7. The Twf scheme to collaborate with designated health visitors and midwives to reach Welsh/English and other families based on local demographics</p>	<p>Twf officers to establish methods of working with health visitors and midwives that allow for the sharing of parents' details between organisations within the confines of the Data Protection</p>

Recommendation	Example of the proposed way forward for their implementation
	<p>Act</p> <p>Twf officers to establish acceptable methods for contacting target parents and raising their awareness of the advantages of:</p> <ul style="list-style-type: none"> • Welsh language transmission in the home • bilingualism • Welsh medium education
<p>8. The Twf scheme to target difficult to reach groups, such as parents from low socio economic groups, expectant fathers and other extended family members</p>	<p>The Twf scheme to identify means of targeting parents from low socio economic groups for example through:</p> <ul style="list-style-type: none"> • Sure Start • Job centres • Leisure centres <p>The Twf scheme to identify means of targeting fathers for example through:</p> <ul style="list-style-type: none"> • Payslips • Paternity packs • Sport related activities, such as rugby/football/cricket clubs <p>The Twf scheme to identify means of targeting grandparents for example through:</p> <ul style="list-style-type: none"> • Community coffee mornings • Merched y Wawr • Womens' Institute • Round Table • Golf clubs • Bowling clubs

Recommendation	Example of the proposed way forward for their implementation
	<ul style="list-style-type: none"> • Religious groups • Leisure centres <p>Midwives and health visitors also to identify best approaches to ensuring that they address the issue of language transmission with fathers, and grandparents within clinical and home settings</p>
<p>9. Improve the Twf scheme's monitoring and evaluating systems in order to provide a more rigorous evaluation method.</p>	<p>The Twf scheme and the Welsh Language Board to establish new approaches to monitoring practice using rigorous methods of evaluations e.g. electronic data bases of the contact details of Twf families, so that future evaluations can be carried out easily. Such methods to take account of the process and outcome of Twf interventions</p>
<p>10. The Welsh Language Board to develop appropriate advertising campaigns to raise awareness and improve knowledge amongst the general public concerning:</p> <ul style="list-style-type: none"> - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education 	<p>The Welsh Language Board to establish a nationwide media advertising campaign (newspaper, radio, and television) about the benefits of using Welsh in the home, the advantages of bilingualism, and the advantages of Welsh medium education</p>
<p>11. The Twf scheme to enhance ways of working with early years partners to raise awareness and improve knowledge amongst parents concerning the :</p> <ul style="list-style-type: none"> - advantages of Welsh language transmission in the home - advantages of bilingualism - advantages of Welsh medium education 	<p>Twf officers to work in collaboration with early years partners to develop various strategies to support parents who express the intention to:</p> <ul style="list-style-type: none"> • Transmit Welsh in the home, • Give their children the opportunity to benefit from Welsh medium education <p>so that they have the necessary resources and competencies to</p>

Recommendation	Example of the proposed way forward for their implementation
<p>12. Develop parents' knowledge of the benefits of using Welsh in the home</p>	<p>fulfil their intentions</p> <p>The Twf scheme to hold a nationwide media advertising campaign about the benefits of using Welsh in the home</p> <p>The Twf scheme to develop their website (www.twfcymru.com) so that information about the benefits of bilingualism is easier to find. More in-depth detail about inter-generational language transmission within the home would help W/E families make better informed decisions</p> <p>Midwives and health visitors to impart knowledge about the benefits of using Welsh in the home</p>
<p>13. Develop parents' levels of confidence and competency in transmitting the Welsh language in the home</p>	<p>The Twf scheme to provide 'Mae dy Gymraeg di'n gret' (Your Welsh is wicked) / 'Siarad babi' (baby talk) sessions to new parents, to aid parents' confidence in speaking Welsh in social situations and consequently, within the home</p> <p>The Twf scheme to seek expert advice on establishing further strategies for raising confidence and competency levels</p> <p>The Twf scheme to monitor sessions using rigorous methods of evaluations</p> <p>Midwives and health visitors to encourage mothers and fathers with low confidence in their Welsh language proficiency to attend</p>

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Recommendation	Example of the proposed way forward for their implementation
	sessions provided by the Twf scheme
14. Work in partnership with other organisations to engage in community development activities to ensure focus of message reaches the structural level as well as the individual level	Twf scheme to identify relevant stakeholder groups and community leaders, with whom they should collaborate on specific projects, such as working with mothers to establish Welsh language childcare provision in a locality
15. Enhance the capacity and operational efficiency of the Twf scheme to increase face to face contact with parents	Twf scheme to establish corporate planning and evaluation templates to facilitate consistency in practice
	Twf scheme to develop a database of expectant parents who have indicated an intention to transmit Welsh to their baby, and to target these individuals at the home or in pre/post natal clinics.
	The Twf scheme to review their current workforce planning strategy

8 References

- Agnew C. (1998) Modal versus individually derived behavioural and normative beliefs about condom use: Comparing measurement alternatives of the cognitive underpinnings of the theories of reasoned action and planned behaviour. *Psychology and Health*, 13, 271-287.
- Aitchison J. & Carter H. (2000) *Language Economy and Society*. University of Wales Press, Cardiff.
- Aitchison J. & Carter H. (2004) *Spreading the Word: The Welsh Language 2001*. Y Lolfa, Talybont, Wales, UK.
- Ajzen I. (1991) The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Ajzen I. (2002) Perceived Behavioural Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behaviour. *Journal of Applied Social Psychology*, 32, 665-683.
- Baker C. R. (1988) *Bilingualism: Pictures, Prejudices and Potentialities*. Bangor: Canolfan Astudiaethau Iaith.
- Baker C. R. (1992) *Attitudes and Language*. Clevedon: Multilingual Matters.
- Baker C. R. (2003) Language planning: A grounded approach. In J.M. Dewaele, A. Housen and Li Wei (Eds). *Bilingualism: Beyond Basic Principles*. Clevedon: Multilingual matters. 88-111.
- Bassili J.N. (1995) Response latency and the accessibility of voting intentions: What contributes to accessibility and how it affects vote choice. *Personality and Social Psychology Bulletin*, 21, 686-695.
- Bauman A., Madill J., Craig C. & Salmon A. (2004) ParticipACTION. This Mouse Roared, But Did it get the Cheese? *Canadian Journal of Public Health*, 95 (Supplement 2), S14-S19.
- Benedict S., Campbell M., Doolen A., Rivera I., Negussie T. & Turner-McGrievy G. (2007) Seeds of HOPE: a model of addressing social and economic determinants of health in a women's obesity prevention project in two rural communities. *Journal of Women's Health*, 16(8): 1117-24.
- Bennett P. & Murphy S. (1997) *Psychology and Health Promotion*. Open University Press: Buckingham, UK.
- Bialystok, E. (2001) *Bilingualism in development: language, literacy, and cognition*. Cambridge: Cambridge University Press.

Twf and onwards: Impact assessment and the way forward

- Blackburn J. (2000) Understanding Paulo Freire: reflections on the origins, concepts and possible pitfalls of his educational approach. *Community Development Journal*, 35, 3–15.
- Brickell T.A., Chatzisarantis N. L. & Pretty G. M. (2006) Autonomy and control: augmenting the validity of the theory of planned behaviour in predicting exercise. *Journal of Health Psychology*, 11(1) 51-63.
- Coupland N., Bishop H. & Garrett P. (2006) How many Wales? Reassessing diversity in Welsh ethnolinguistic identification. *Contemporary Wales* 18: 1-27.
- Davey C., Austoker J. & Jansen J. (1998) Improving written information for women about cervical screening: evidence -based criteria for the content of letters and leaflets. *Health Education Journal*, 57, 263-281.
- Davies E. (2005) Welsh in the family. *Agenda*, August, 12 – 14.
- Douglas J. (2007) Promoting the public health: continuity and change over two centuries. In Douglas J. Earle S. Handsley S. Lloyd C. & Spur S. (Eds) *A Reader in Promoting Public Health: Challenge and Controversy*. Oxford University Press: Oxford, UK, 12-18.
- Drinkwater S.J. & O’Leary C. (1997) Unemployment in Wales: does language matter? *Regional Studies*, 31, 583–91.
- Edwards V. & Pritchard Newcombe L. (2003) *Evaluation of the efficiency and effectiveness of the Twf project, which encourages parents to transmit the language to their children*. University of Reading, Reading, Berkshire.
- Edwards V. & Pritchard Newcombe L. (2005) Language transmission in the family in Wales: An example of innovative language planning. *Language Problems & Language Planning*, 29, 2, 135 – 150
- Elliott M.A., Armitage C J. & Baughan C.J. (2007) Using the Theory of Planned Behaviour to predict observed driving behaviour. *The British Journal of Social Psychology*, 46(1), 69-90.
- Fishman J. (1991) *Reversing Language Shift*. Multilingual Matters, Clevedon.
- Gathercole V.C.M., Thomas E.M., Williams E. & Deuchar M. (2006) *Language transmission in bilingual families in Wales*. Welsh Language Board, Cardiff, UK.
- Gruffudd H. (2000) Planning for the use of Welsh by young people. In Williams C. (Ed.) *Language Revitalisation*. University of Wales Press, UK.

Twf and onwards: Impact assessment and the way forward

- Henderson P. & Thomas D. N. (1980) *Skills in neighbourhood work*. Allen and Unwin, London.
- Hewitt A.M. & Stephens C. (2007) Healthy eating among 10-13 year old New Zealand children: understanding choice using the Theory of Planned Behaviour and the role of parental influence. *Psychology, Health & Medicine*, 12(5), 526-35.
- Higgs G., Williams C. & Dorling D. (2004) Use of the census of population to discern trends in the Welsh language: an aggregate analysis. *Area* 32(2), 187-201.
- Jemmott J.B. 3rd., Heeren G A., Ngwane Z., Hewitt N., Jemmott L.S., Shell R. & O'Leary A. (2007) *Theory of Planned Behaviour predictors of intention to use condoms among Xhosa adolescents in South Africa*. *Aids Care*, 19(5) 677-84.
- Jepson R. (2000). *The Effectiveness of Interventions to Change Health-related Behaviours: a Review of Reviews*. MRC Social & Public Health Sciences Unit Occasional Paper No. 3.
- Jones K. & Morris D. (2007) Welsh- language socialization within the family. *Contemporary Wales*, 20(1), 52-70(19).
- Labonte R. (1994) Health Promotion and Empowerment: reflections on professional practice. *Health Education Quarterly*, 21, 253–268.
- Lefebvre R.C. & Flora J.A. (1988) Social Marketing and public health intervention. *Health Education Quarterly*, 15, 299-315.
- Letourneau A.R., Sonja B., Mazure C.M., O'Malley S.S., James D., and Colson E.R. (2007) Timing and predictors of postpartum return to smoking in a group of inner-city women: an exploratory pilot study. *Birth*, 23(4), 245-52.
- Llwyd Morgan R. (2007) The challenge of language equality. In C. Williams (Ed.) *Language and Governance*. University of Wales Press, Cardiff.
- Lowe R. (2007) Facing the Future: A review of the role of health visitors. Queen's Nursing Institute. <http://www.dh.gov.uk/cno>
- Lyon J. (1991) Patterns of parental language use in Wales. *Journal of Multilingual and Multicultural Development* 12, 3, 165-183.
- McAllister F. & Thomas H. (2005) *Living lives through the medium of Welsh study*. Beaufort Research, Cardiff, UK.
- Morris D. (1989) A Study of Language Contacts and Social Networks in Ynys Môn. Cited in G. Williams and D. Morris. (2000). *Language Planning*

and Language Use: Welsh in a Global Age. Cardiff University of Wales Press.

- Morris D. & Jones K. (2002) *Twf Appraisal*. Welsh Language Board, Cardiff, UK.
- Murphy S. & Smith C. (1992) An examination of the use of leaflets by health promotion officers. *Health Education Journal*, 15(4), 166-170.
- Murphy S. & Smith C. (1993) *Crutches, Confetti or Useful Tools? Professionals views on and use of health education leaflets (Good Health Wales Technical Report No 3)*. Health Promotion Authority.
- National Assembly for Wales. (2005) Learning Wales. *Childcare is for children*.
http://www.learning.wales.gov.uk/scripts/fe/news_details.asp?NewsID=2215. Site accessed on 21/01/08.
- National Statistics. (2001) *Census 2001: Report on the Welsh language*. Office for National Statistics, TSO, London.
- National Statistics. (2003) *2001 Census of Population: First Results on the Welsh Language, SB 22/2003*, Statistical Directorate, National Assembly for Wales, Cardiff.
- Øvretveit J. (1998) *Evaluating Health Interventions: An Introduction to Evaluation of Health Treatments, Services, Policies, and Organizational Interventions*. Open University Press: Buckingham, UK.
- Packer A. & Campbell C. (1996) *Pam fod rhieni yn dewis addysg Gymraeg i'w plant?* Undeb Cenedlaethol Athrawon Cymru, Aberystwyth, UK.
- Palmer C.C., Burwitz L., Dyer A.N. & Spray C.M. (2005) Endurance training adherence in elite junior netball athletes: a test of the theory of planned behaviour and a revised theory of planned behaviour. *Journal of Sport Sciences*, 23(3), 277-88.
- Reynolds P., Bellin W. & Ab Ieuan R. (1998) *A Competitive Edge: Why Welsh Medium Schools Perform Better*. Cardiff: Institute of Welsh Affairs.
- Ritchie J. & Spencer L. (1994). Qualitative data analysis for applied policy research. In A. Bryman and R. Burgess *Analyzing qualitative data*, 173-194.
- Ritchie D., Parry O., Gnich W. & Platt S. (2004) Issues of participation, ownership and empowerment in a community development programme: tackling smoking in a low income area in Scotland. *Health Promotion International* 19 (1), 51-59.

Twf and onwards: Impact assessment and the way forward

- Siren U. (1995) Minority language transmission in early childhood. *International Journal of Early Years Education*, 3(2), 75-84.
- SPSS for Windows, Release 14.0 (2005). *SPSS Screen Images*. SPSS Inc. Chertsey, Surrey.
- Stead M., Tagg S., MacKintosh A M. & Eadie D. (2005) Development and evaluation of a mass media Theory of Planned Behaviour intervention to reduce speeding. *Health Education Research*, 20(1), 36-50.
- Swanson V. & Power K G. (2005). Initiation and continuation of breastfeeding: theory of planned behaviour. *Journal of Advanced Nursing*, 50(3), 272-82.
- Tones K. & Green J. (2004) *Health Promotion: Planning and Strategies*. Sage Publications: London, UK.
- Tudor Hart J. (1971) The Inverse Care Law. *Lancet*, 1, 4005-4012.
- Welsh Assembly Government. (2003) *Iaith Pawb: A National Action Plan for a Bilingual Wales*, Welsh Assembly Government, Cardiff, UK.
- Welsh Language Board. (2006) *2004 Welsh Language Use Survey*. Welsh Language Board, Cardiff, UK.
- Whitehead D. (2003) Evaluating health promotion: a model for nursing practice. *Journal of Advanced Nursing*, 41, 490-498.
- Wiggins M., Rosato M., Austerberry H., Sawtell M. & Oliver S. (2005) *Sure Start Plus National Evaluation: Final report*. Social Science Research Unit Report, Institute of Education, London.
- Williams C. (2000) Community empowerment through language planning intervention. In C. Williams (Ed), *Language Revitalization: Policy and Planning in Wales*. University of Wales press, Cardiff.
- Williams A., Allen D., Carnwell C., Griffiths L., Heyerdahl E., Irvine F., Jones M., Kenkre J., Merrell J. & Snooks H. (2004) *Review of Primary Care in Wales. Research Report*. University of Wales, Swansea.