‘Connecting research, policy, and practice’: Knowledge translation in the context of child and family early intervention and prevention-based research in Ireland

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ACRONYMS

ABC - Area Based Childhood

AP - Atlantic Philanthropies

CECDE - Centre for Early Childhood Development and Education

CES - Centre for Effective Services

ChARM - CHildren At Risk Model

CIHR - Canadian Institute of Health Research

CMHCR - Centre for Mental Health and Community Research

CMO – Context, Mechanism, Outcomes

CRA - Children’s Rights Alliance

DCYA - Department of Children and Youth Affairs

DoH – Department of Health

DOI - Diffusion of Innovations

DHC - Department of Health and Children

DSCFA - Department of Social, Community and Family Affairs

EBP – Evidence-based Practice

EoG-KT – End-of-Grant KT

ENRICH - EvaluatioN of WRaparound in Ireland for CHildren and Families

GDPR - General Data Protection Regulations

GUI - Growing Up In Ireland

HRB - Health Research Board

iKT - Integrated Knowledge Translation

KEDS – Knowledge Exchange and Dissemination Scheme

KP – Knowledge Producer

KT - Knowledge Translation

KTA - Knowledge-to-Action Framework

KT-D - Knowledge Translation – Dissemination

KT-I - Knowledge Translation – Implementation

KTPT - Knowledge Translation Planning Template

KU – Knowledge User

LinKT – Linking into Knowledge Translation

NCO – National Children's Office

OMC - Office of the Minister for Children

OMCYA - Office of the Minister for Children and Youth Affairs

QCBI - The Quality and Capacity Building Initiative

QUERI - Quality Enhancement Research Initiative

PEI - Prevention and Early Intervention

PEIN - Prevention and Early Intervention Network

PEIP/PEII - Prevention and Early Intervention Programme/Initiative

PEIU - Prevention and Early Intervention Unit

PHN - Public Health Nurse

PIN - Parent and Infant Programme

REU - Research and Evaluation Unit

REF - Research Excellence Framework

RCT - Randomised Controlled Trial

WHO - World Health Organisation

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RESEARCH ABSTRACT

This multi-method research was carried out as part of a large, six-year research programme called ENRICH which assessed the effectiveness and cost-effectiveness of two early years service models developed to support young children and families in Ireland. The overarching aims of the research were twofold: (1) to explore how research evidence relevant to child and family services and policies is disseminated in the field of public health; and (2) to increase visibility and understanding of, and engagement with, the evidence emerging from the ENRICH programme through a series of strategies targeted at KUs within child and family services in Ireland.

The research comprised there separate but related phases including an evidence synthesis using realist principles; a documentary analysis; and a KT-D case study. The results from Phase One showed that the facilitation of engagements and relationship-building are important KT-D strategies across a range of contexts. A combination of KT-D strategies is likely to achieve multiple positive outcomes. More specifically, research summaries and social media are effective at increasing awareness, promoting engagement, and/or enhancing understanding. The results from Phase Two showed that research evidence was found to play an increasingly significant role (but is not the only factor involved) in the decision-making processes relating to child and family well-being policy and practice in Ireland. Phase Three of the research involved professionals working in child and family services/research in Ireland (N=162) (research *n*=57, practice *n*=67, policy *n*=9, other (funder, intermediary organisations) *n*=29) who completed a Research Dissemination Survey designed to explore a range of perspectives, experiences and views on research dissemination. Thirty-seven one-to-one interviews were completed to explore the barriers and facilitators to research dissemination and to amplify the survey findings (research *n*=7, practice *n*=7, policy *n*=12, other (funder, intermediary organisation) *n*=3, and parents *n*=8). Two focus groups were also carried out with parents (*n*=8) and with members of the ENRICH research team (*n*=3). The qualitative data were analysed using standard thematic analysis and the quantitative data were analysed using appropriate descriptive and inferential statistics; and online tracking analytics. The main factors influencing the dissemination of evidence, as identified by the participants were: a lack of resources; an under-developed understanding of research use and dissemination; insufficient collaboration and communication; and conflicting stakeholder priorities. The ENRICH research programme was also found to benefit from a multi-component KT plan, as guided by the Knowledge Translation Planning Template (Barwick, 2008, 2013, 2019). The case study was the first of its kind to provide important insights for stakeholders in Ireland and elsewhere, about how to improve the research dissemination process. Exploring the KT planning process resulted in more efficient and targeted dissemination of research findings, thereby delivering a better return on research investment and producing positive outcomes from research outputs.

CHAPTER ONE: INTRODUCTION

1.1 Background

The past 10-15 years have seen significant public investment and continuing global interest in early intervention and prevention programmes aimed at educating and supporting parents and nurturing early childhood development (Richter et al., 2017). This is in direct response to the considerable international evidence demonstrating that adversity early in life can lead to a series of negative social, emotional, health, and behavioural outcomes in adolescence and adulthood, including criminality, low educational status, lower life expectancy and intergenerational transmission of disadvantage, inequality, and maltreatment (Loeber et al., 2013). Socio-economic disadvantage in childhood coupled with poor parenting behaviours can also impact negatively on child health and behaviour outcomes (Hickey et al., 2018; Hutchings et al., 2017; Sanders et al., 2012; Tremblay et al., 2004), whilst also leading to greater utilisation of health, education, social welfare, and judicial services and therefore higher costs (Farrington & Welsh, 2007; Odgers et al., 2008; Sethi et al., 2013; Shonkoff et al., 2012).

Many early childhood interventions involve the delivery of one or more structured and manualised, evidence-based/evidence-informed programmes(e.g. the Incredible Years series, Lifestart, and the Triple P-Positive Parenting Programme) which have been implemented and evaluated with positive outcomes for a range of families (e.g. foster families, families from disadvantaged backgrounds) in a number of countries, including the Republic of Ireland, UK, the Netherlands and Canada (e.g. Furlong et al., 2012; de Graaf et al., 2008; McConnell et al., 2012; Miller, 2015). Specifically, the available evidence suggests that these parent-focused programmes positively contribute to healthy child development and well-being, greater educational achievement, improved health outcomes, reduced reliance on welfare, as well as a lower risk of criminality and antisocial behaviour in the medium to longer-term (e.g. Leijten et al., 2015; Morawska et al., 2014). These programmes are also considered to provide a cost-effective means of tackling social disadvantage and promoting long-term societal health and economic benefits (Garcia et al., 2019; O'Neill et al., 2013).

Many countries have developed and prioritised policies promoting early intervention and prevention including, for example, *Every Child Matters* in the UK and *Better Outcomes Brighter Futures* in Ireland (Department of Children and Youth Affairs [DCYA], 2014). Likewise, initiatives such as the Area Based Childhood (ABC) programme in Ireland (DCYA, 2013) involved the implementation of community-based approaches providing evidence-based/informed supports to parents and children. Overall, the aim of these types of policies and initiatives is to improve the long-term outcomes for children and families and reduce inequality and disadvantage (Dretzke et al., 2009; Leijten et al. 2013; McCart et al., 2006; Weisz & Kazdin, 2010).

Despite the wealth of research supporting the effectiveness of these family-focused programmes and considerable attendant investment in public health research both nationally and internationally, these interventions are not always effectively disseminated (or implemented) as intended with the targeted knowledge users (KUs) (Cunningham et al., 2018; Powell et al., 2017). It is unlikely that health research evidence will benefit children and young people and communities unless the findings are communicated appropriately to the intended KUs. Inappropriate or ineffective dissemination can, in turn, impede the realisation of optimal health outcomes for children and families (Li et al., 2018; Moore et al., 2017).Thus, a growing body of literature focuses on how research is disseminated to a wide range of KUs as well as the barriers and facilitators to effective dissemination (Barwick et al., 2012; Milat et al., 2011).

The process of disseminating and/or implementing research evidence is often referred to as ‘knowledge translation’ (KT) (Canadian Institute of Health Research [CIHR], 2004). The dissemination element of KT (as opposed to implementation) is the focus of the research presented here and the term ‘KT-D’ will, therefore, be adopted throughout. This is discussed in more detail in Chapter Two. KT-D efforts aim to maximise the outcomes of research findings through a range of processes and strategies that make evidence more accessible and understandable to numerous KUs, including policy makers, practitioners, researchers, and service users/the public (Barwick et al., 2012; Sladek & Tieman, 2008).KT-D strategies may be executed in isolated or multi-faceted ways to achieve a range of goals and, ideally, involve engagement with multiple KUs throughout the course of a research study (Barwick, 2016; Vedel et al., 2018). KT-D goals can include generating awareness or enhancing understanding of the research evidence, promoting KU engagement, and/or informing other research studies as well as KU decision-making. Indeed, there is increasing support for an integrated knowledge translation (iKT) approach which involves engaging in well thought out, often multi-pronged, KT-D efforts as early as possible in the lifetime of a research project (Barwick, 2016; Cambon et al., 2017; Grimshaw, 2012).

Many studies have reported on the effectiveness of a variety of KT-D strategies that aim to enhance the dissemination of research evidence and knowledge (Stevens et al., 2014; Yamada et al., 2015). However, to date, there is no gold standard approach for disseminating or accessing evidence (Powell et al., 2015). This can lead to difficulties for knowledge producers (KPs) in selecting appropriate dissemination strategies, as these can vary quite considerably depending on dissemination goals, KUs, and contexts (Edwards et al., 2019).

Nonetheless, there is consensus that a multi-method approach (i.e. targeting several KUs using a variety of strategies to share knowledge) results in more successful communication and is associated with better dissemination outcomes (Li et al., 2018).

KT-D is not a straightforward process. Many interacting factors can influence the effectiveness of KT-D strategies. For example, KUs can experience difficulties accessing dissemination outputs, may juggle time constraints and work-related priorities, and may have preferred formats and ways of accessing and interacting with evidence (Aarons et al., 2009; Barwick et al., 2009; Palinkas et al., 2014). Furthermore, KT-D strategies targeted at one particular KU group or setting may not yield the same outcomes as with other KUs or settings. Thus, it is important to understand and explore the contextual factors that may impede dissemination efforts and address these with corresponding and appropriate KT-D planning (Barwick et al., 2008; Bauer et al., 2015; Stevens et al., 2014). Consideration of these context-specific factors and engagement in adequate dissemination planning can, in turn, help us understand how KT-D informs practice and policy decision-making (Hack et al., 2011).

1.2 Research Rationale

The increasing public investment in research across a number of public health and other domains, including child and family welfare has led to a growing onus on KPs to be more accountable in demonstrating their research impact beyond academia (Barac et al., 2014; Barwick, 2016; Tetroe et al., 2008). Maximising the potential of dissemination outputs can help to ensure that research investments yield better value for money. Recently, there have been emerging requirements from a number of national and international funding agencies(e.g. the Health Research Board (HRB) in Ireland and the CIHR Project grants in Canada) for KT-D plans to be incorporated as part of research grant applications. Funders have also been offering additional funding opportunities to KPs to enable them to focus more intensive efforts on effective dissemination (Barwick, 2016).

Although many public health KPs recognise the importance of engaging and communicating research evidence in ways that go beyond academic outputs targeted primarily at other researchers(i.e., publications, presentations), most admit to using opportunistic and haphazard KT-D strategies (Oliver & Cairney, 2019). Typically, these KT-D outputs tend to neglect non-academic KUs and/or are conducted in the later stages- or at the end of - a research programme. Although end-of-grant KT may be the most appropriate dissemination format for a specific piece of research (e.g. clinical research, in cases where iKT is more suitable), it is often not prioritised appropriately. In fact, evaluations that involve KUs throughout the research process are historically not well documented in the literature (Mitton et al., 2007; Wathen & MacMillan, 2018).Further still, specific strategies that help to improve research dissemination within the policy context – particularly networking strategies - are still relatively underdeveloped and require further investigation (Haynes et al., 2018; Oliver & Cairney, 2019; Van de Goor et al., 2017).

However, studies have found that few KPs engage in formal KT-D planning or use a structured approach to monitor and evaluate KT-D strategies in light of the intended KT-D goal (Lombardi, 2018; Ngamo et al., 2016). A number of authors suggest that applying and utilising a KT-D framework or tool and engaging in prospective and considered planning can ensure a more structured and effective dissemination effort and attainment of KT-D goals (Barwick, 2016; Cambon et al., 2017; Grimshaw, 2012). Moreover, evaluating dissemination efforts can contribute to the development of more tailored, cost-effective, and successful strategies (Barwick et al., 2008). The field of KT-D is evolving and there is still much to learn, therefore, about how best to conduct and support effective dissemination (Morton &

Sedita, 2018). Further investigation on the effectiveness of dissemination studies in real-world contexts has been indicated (e.g. Cunningham et al., 2018).

1.3 Research Context

The present research was carried out as part of a larger, six-year research programme (2014-2019) called ENRICH (**E**valuatio**N** of W**R**aparound in **I**reland for **CH**ildren and Families). The ENRICH research programme was funded by the HRB under its Collaborative Applied Research Grant scheme (€1.25m; grant no. 2050146). The research was led by a multidisciplinary team at the Centre for Mental Health and Community Research (CMHCR), Department of Psychology, Maynooth University, and conducted in collaboration with a range of community-based practitioners, stakeholders, and academics based in several different organisations and institutions in Ireland and the UK.

The overarching aim of the ENRICH programme was to assess the development, implementation, effectiveness and cost-effectiveness of two wraparound-inspired models designed to promote child and family well-being in the early years. These models address the complex health and social care needs of parents and their young children who are deemed to be at risk of developing emotional and/or behavioural problems, or those families who reside in communities characterised by socio-economic disadvantaged. Both models evaluated by the ENRICH research programme (https://cmhcr.eu/enrich-programme) comprised a range of core components from the Incredible Years programmes designed to promote parent sense of competence and well-being and encourage positive infant health and development (Menting et al., 2013; Reid & Webster-Stratton, 2008), and from non-standardised services and supports targeting additional family needs such as child safety, paediatric first aid and dental health workshops, as well as play and oral language development sessions.

These two models are described in more detail below.

1. The Parent and Infant (PIN) or UpTo2 programme is a group-based programme for parents and their infants from age 0-2 years. Itwas developed in Ireland by a non-governmental organisation in collaboration with public health nurses and other community-based organisations funded through the ABC programme (Hickey et al., 2018; Leckey et al., 2019). Practitioners responsible for the deliveringthe programme includePublic Health Nurses (PHNs), family support workers, local health officers, and community development workers. This service model is being implemented in areas characterised by socio-economic disadvantage in West Dublin and County Louth, Ireland.
2. The CHildren At Risk Model (ChARM) was developed by a child welfare team in collaboration with the ENRICH research team and is aimed at parents of children aged 3-11 years to help prevent child maltreatment and improve child well-being within high-risk families. The programme isdelivered by social workers and family resource workers in socio-economically-deprived areas of Dublin and Kildare, Ireland.

Overall, both programmes combine, within a wraparound-inspired framework, a comprehensive range of developmentally-appropriate parent and family supports tailored to the parent/community needs. The programmes are coordinated with available supports within the local community system, involving multidisciplinary service provision. A number of publications have been produced, to date, on the research (e.g. Hickey et al., 2021; Hickey et al., 2019; Leckey et al., 2019), and dissemination is ongoing. The candidate has been involved in co-authoring some of these publications (see Appendix 1).

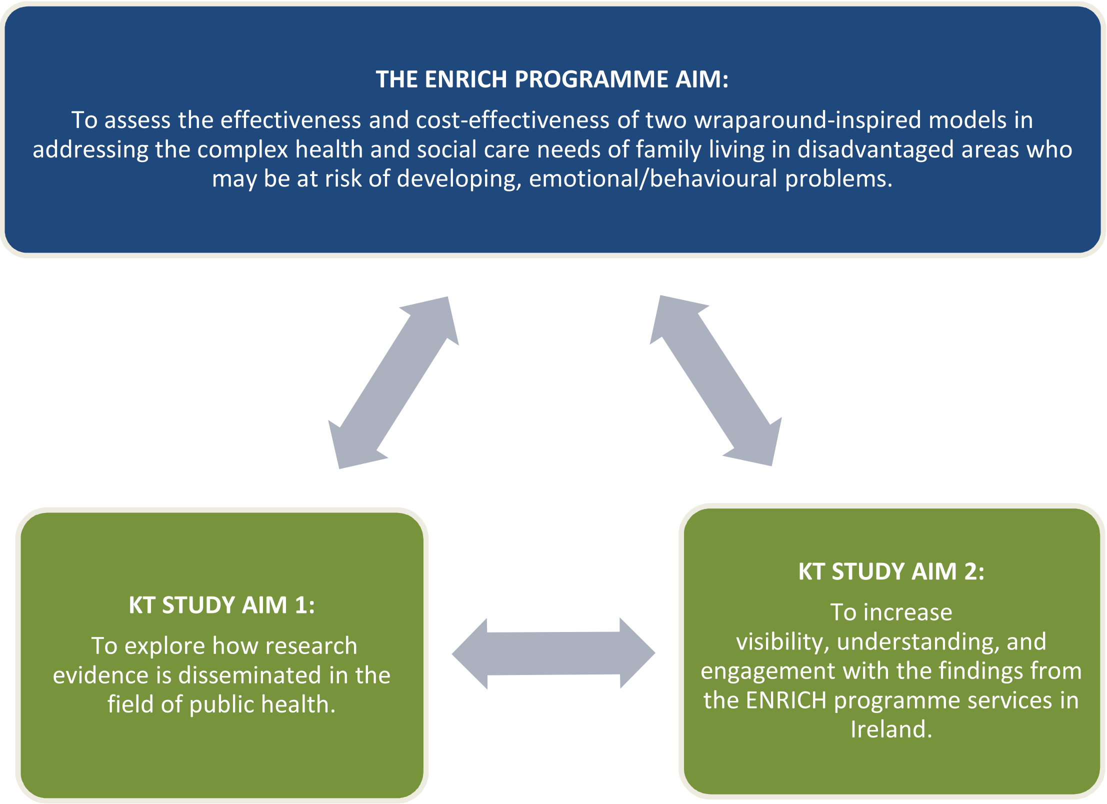
1.4 The Current Research

One of the six work packages within the ENRICH research programme involved a KT element, designed to help disseminate the research findings as they emerged throughout the duration of the research (as opposed to at the end of the programme), and also to evaluate the dissemination process and related outputs on an ongoing basis. This work package formed the basis of the research reported here (which began in 2015) (see Figure 1.1). Additional funding for further KT-D strategies during the ENRICH programme was also sought and secured (€59,944) as part of a subsequent successful application to the HRB Knowledge Exchange and Dissemination Scheme (KEDS) in 2018. The emergent findings from the KT-D case study helped to inform the preparation of this application which was co-led by the candidate (as lead co-applicant).This additional funding (called the 'LinKT' study (**Lin**king into **K**nowledge **T**ranslation) enabled the team to undertake more work on the embedded, and evolving dissemination process to inform, develop, execute, and evaluate KT-D strategies within the ENRICH programme and, more importantly, to generate learning on effective dissemination within an early intervention and prevention context.

A key aim of the ENRICH programme was also to implement the findings by informing practice and policy (e.g. through the development of an implementation manual for practitioners). However, it was not possible within the timeframe of the research, to examine implementation so as indicated earlier, this research investigated, instead, the dissemination component of KT or KT-D. Further information on the wider implementation context, is provided later in Chapter Two.

Figure 1.1

Current Research in the Context of the Larger ENRICH Research Programme



THE ENRICH PROGRAMME AIM:

To assess the effectiveness and cost-effectiveness of two wraparound-inspired models in addressing the complex health and social care needs of family living in disadvantaged areas who may be at risk of developing, emotional/behavioural problems.

KT STUDY AIM 1:

To explore how research evidence is disseminated in the field of public health.

KT STUDY AIM 2:

To increase visibility, understanding, and engagement with the findings from the ENRICH programme services in Ireland.

1.4.1 Current Research: Aims and Objectives

The two overarching aims of this dissemination-focused research were to: (a) explore how research evidence is disseminated in the field of public health; and (b) to increase visibility, understanding, and engagement with the ENRICH programme evidence through a series of KT-D strategies targeted at KUs within child and family services in Ireland.

The specific objectives of this research were:

1. To identify and analyse the underlying contexts and processes involved in achieving KT-D goals (through KT-D strategies) and resultant KT-D outcomes– relating to increasing awareness, understanding, and engagement – tailored to KUs (policy makers, practitioners, researchers, and parents) in public health.

2. To identify and critically review key national policies, website information, and organisational reports (from the previous 20 years) relating to child and family health and social care in Ireland in order to ascertain, insofar as possible, the extent to which - and how - policy and practice have been influenced by research;
3. To identify the influential factors (facilitators and barriers) that shape access, awareness, dissemination, and the interpretation of evidence in an early years context in Ireland from the perspective of targeted KUs (e.g. researchers, policy makers, practitioners, and parents); and to undertake a detailed KT-D case study on the design and development of a multi-component KT-D plan that involved documenting, tracking, executing and, where possible, evaluating a series of KT-D strategies in relation to specified KT-D goals for the ENRICH research programme, as guided by a planning tool and, in part, by the above findings.

1.5 Thesis Outline

The following section outlines the content of the remainder of the thesis.

Chapter Two presents a review of the international literature on the background and growth of the field of KT-D including terminology, evidence on the effectiveness of KT-D, and availability of KT-D tools and frameworks to inform planning and evaluation of KT-D goal attainment. This chapter also focuses on the literature pertaining to the primary facilitative and inhibitive factors that have been identified as associated with effective dissemination conducted with KUs in the field of public health.

Chapter Three details the overall study design and the methodological approach underpinning the current research in the context of the ENRICH research programme and addresses other important methodological issues, including ethical considerations, reliability and validity concerns, and researcher reflexivity.

Chapter Four presents the method and results pertaining to Phase One and objective one above. This chapter focuses on an evidence synthesis of international literature using realist principles to explore the underlying processes and contextual factors involved in KT-D strategies, and the outcomes of the corresponding KT-D goals for the targeted relevant KUs (policy makers, practitioners, researchers, and parents).

Chapter Five presents the method and findings relating to Phase Two - a critical documentary analysis (which aligns with objective two above). The analysis critically reviews a range of documentation (e.g. national government policies and organisational reports) to determine how evidence-based research on children and families has informed policy and practice decision-making over the past two decades.

Chapter Six describes the methodological approach and results from Phase Three - n integrated case study based on a description and evaluation of the KT-D strategies executed as part of the ENRICH research programme (including several strategies that were added midway through the research programme following the additional HRB funding). This chapter addresses the third research objective. In-depth analysis of the views and experiences of both KUs and KPs (from qualitative and quantitative findings) are discussed and themes presented.

In **Chapter Seven**, all findings are synthesised and critically discussed in the context of previous research. The chapter concludes with a discussion of the strengths and limitations of the research, and considers future directions for research, as well as the implications of the findings for researchers, practitioners, policy makers, and parents.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of the published national and international literature on the evolution of the KT-D field and the factors that contribute to the effectiveness of knowledge translation-dissemination (KT-D) in public health. The first section describes the evolution of health research dissemination, the influence of evidence in public health decision-making, and related terminology and definitions. The subsequent section focuses on the literature pertaining to the key barriers and facilitators that are commonly associated with disseminating public health research evidence, as identified by the primary knowledge users (KUs) and knowledge producers (KPs).The increasing importance of measuring the impact of KT-D strategies and the development of KT-D frameworks and planning tools is described in the concluding section of the chapter.

2.2 Dissemination of Health Research Evidence: Evolution

2.2.1 What is Evidence?

According to Puddy and Wilkins (2011), evidence combines the best available research findings with field-based expertise and contextual factors. Thus, research findings are deemed a crucial element of the decision-making process in terms of public health policy formation, service provision, and future research (Comiskey et al., 2015; Squires et al., 2015).More specifically, Haynes and colleagues (2018), defined research evidence as "collections or analyses of data, or theory, found in peer-reviewed papers, books, or in grey literature such as internal evaluations and reports on authoritative websites, or presentations from researchers" (p. 2).

2.2.2 ‘Evidence-based’ versus ‘Evidence-informed’ Approaches to using Research Evidence

The concept of disseminating and implementing evidence in practice settings in order to improve population health outcomes came to the fore in the late 1970s (Horsley et al., 1978). The term ‘evidence-based practice’ (EBP) subsequently emerged and was popularised in the 1990s (Parahoo, 2017). Also, the ‘80s and ‘90s saw a move towards evidence-based policy formation that evolved from EBP (Banks, 2009). This process of utilising the most reliable and rigorous available research evidence to improve the efficiency, quality, and sustainability of health service provision and policy materialised across different sectors (e.g. health and education) and countries, including Australia and the United Kingdom (e.g. Baumbusch et al., 2008; Ingold & Monaghan, 2016). Further still, during the 1990s, the Cochrane Collaboration and Campbell Collaboration were established in the United Kingdom to compile evidence from the highest quality randomised controlled trial (RCTs) in order to guide health research, social and educational policies, and practices (The Campbell Collaboration, 2019).

EBP and evidence-based policy also subscribe to the idea of the hierarchy of evidence. While there is no universally agreed-upon hierarchy of research evidence, traditionally the quality of the research is based on its reliability and the likelihood of bias (Del Mar et al., 2013; Glover et al., 2006) (Figure 2.1). Thereby, the least reliable forms of research evidence stem from anecdotal or non-empirical designs (Usher & Fitzgerald, 2008). This is followed by case controlled studies, case reports, and cohort studies which are deemed to be slightly more reliable in-depth empirical studies that combine both qualitative and quantitative data (Del Mar et al., 2013).At the higher end of the research quality scale are RCTs - referred to as the ‘gold standard’ of research design (Koch et al., 2008). Finally, the most rigorous and reliable form of evidence are systematic reviews and meta-analyses that compile all of the available empirical literature on a particular topic (Cochrane Community, 2015). Therefore, evidence hierarchies primarily categorise the strength of the evidence and can guide decision-making, with less attention to other forms of evidence, such as practice knowledge(Kumah et al., 2019; McTavish, 2017).However, over-reliance on this approach leaves little room for flexibility in terms of the how to address population concerns.

Figure 2.1

Hierarchy of Research Evidence Pyramid According to Glover et al. (2006)

Practitioners and policy makers can encounter difficulties when applying more rigid forms of evidence in policy, creating a reduced desire to implement the evidence among some researchers, practitioners, and policy makers (Kumah et al., 2019; Wensing & Grol, 2019). For example, Cairney (2016) argues that the process of policy-making is complex and the use of evidence alone can underestimate other aspects of decision-making, such as political will. Cartwright and Hardie (2012) also opposed an over-reliance on expensive and time-consuming RCTs that do not always reflect the reality on the ground and can restrict decision-making capability, possibly impacting population outcomes. For instance, the Nurse-Family Partnership- an early intervention parenting programme - was found to be effective in a California-based RCT, but had non-significant effects in other parts of the United States and in the UK (e.g. Robling et al., 2016).Assuming the programmes' lack of significance outside California reflected an intervention failure and not an implementation failure, this example illustrates how a programme found to be successful in one setting can fail in others, despite a 'gold standard' level of evidence. It must also be noted that is unclear whether the programme failed because the intervention did not work in another setting/context or because it was poorly implemented.

For this reason, 'evidence-informed' policy and practice are being increasingly advocated for and utilised in public health (Ingold & Monaghan, 2016; Van de Goor et al., 2017). Although both evidence-based and evidence-informed approaches involve utilising research findings in decision-making -the latter implies, to a greater or lesser degree, the notion that decision-making should be guided by empirical evidence whilst also giving equal weight to contextual factors (such as tacit knowledge, the political and social context, personal values, and professional and lived experience) (Palinkas et al., 2014; Rycroft-Malone et al. 2011). An evidence-informed approach rejects a strict hierarchy of evidence, in favour of contextualised evidence (including systematic reviews, RCTs, qualitative research, observational studies, and expert opinions). In this way, interventions deemed to be supported by empirical evidence and suitable for a particular context are considered in the decision-making process (Epstein, 2009). For example, the likelihood of evidence-based interventions being taken up in child and family services decreases if usual practices and/or service user preferences are considered a better fit for the given context (Aarons & Palinkas, 2007; Morton, 2015).

Whilst some authors, (e.g. Cardoso et al., 2017) use the terms 'evidence-based' and – 'evidence-informed' interchangeably, others debate which of these approaches best facilitates the effective dissemination and/or application of evidence (Kumah et al., 2019; Nevo & Slonim-Nevo, 2011). Some of the differences between the two approaches are outlined in Table 2.1. For example, according to Epstein (2009), evidence-informed practice should be utilised more than EBP so that decision-making in healthcare practice "might be enriched by prior research but not limited to it" (p. 9). Thus, allowing more flexibility in the decision-making process can benefit the knowledge user (KU) by maximising the impact of research evidence.

2.2.3 Bridging the 'Knowledge-to-Dissemination' Gap

The utilisation of research evidence is not always evident within policy and practice settings (McCormick, 2013). It has been widely reported that evidence can take, on average, 17 years to be implemented into routine clinical practice and, still, only about half of evidence-based interventions achieve widespread use in community settings (McClean et al., 2012).Thus, a recurring finding in the literature over the last couple of decades is the slow and haphazard process of communicating evidence to practice or policy (e.g. Grimshaw et al., 2001;Powell et al., 2017). High-quality evidence that does not reach intended KUs can arguably negatively impact services and the health and well-being of the population.

Table 2.1

A Summary of the Differences between Evidence-Informed Practice and Evidence-Based Practice

Evidence-Based Practice	**Evidence-Informed Practice**
• There is no room for flexibility when applying evidence into practice. • Ranks the quality of different types of research evidence (Nevo & Slonim-Nevo, 2011).	• Offers a more critical approach and considers the context of the decision-making process. • All forms of research evidence are considered. • The service user is at the centre of the decision-making process, not the evidence (McTavish, 2017).

In the mid-2000s, the World Health Organisation (WHO) recommended the more effective communication and promotion of reliable and relevant health evidence within policy and practice (Graham, et al., 2006). Since then, there has been an increasing need to ensure that high quality and relevant evidence is available, and that it is disseminated and contextualised in order to enhance population well-being.

Furthermore, there is an increasing need to justify the funding allocated for research (Proctor et al., 2011). Each year, considerable public investment is devoted internationally to expanding knowledge in various health research domains including child and family services. For example, in 2016 alone, Australia committed $6.5billion (Australian dollars), the United States $171.8billion (US dollars), and the UK £755.5million to health and medical research (Eljiz et al., 2020). However, it has been estimated that the failure to effectively translate high-quality evidence has cost approximately $200billion overall, in research waste in the

U.S. (Graham et al., 2018), signalling a poor return on research investment (Neta et al., 2014).

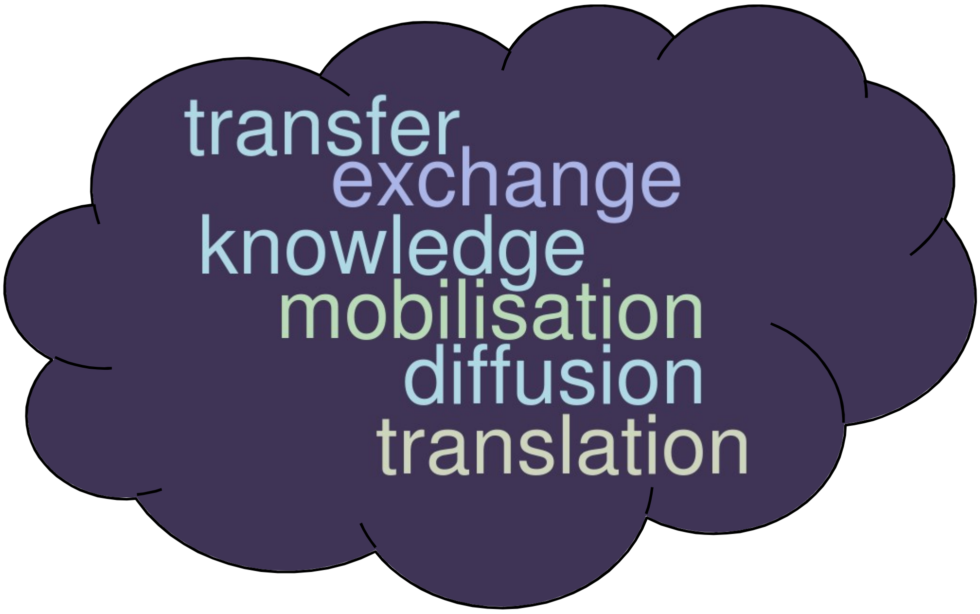
Many developed countries have established centres and programmes focused on maximising knowledge translation, such as: the Centre for Effective Services (CES) in Ireland; Collaborations for Leadership in Applied Health Research and Care in the UK; the Quality Enhancement Research Initiative (QUERI) in the United States; and Knowledge Translation Canada (Bauer et al., 2015; Wensing & Grol, 2019). In addition, major global funders, such as the National Institute for Health Research in the UK, the National Institutes of Health in the USA, the Canadian Institutes of Health Research, and Innovationsfond in Germany, have made substantial funding available to advance research in KT (Wensing & Grol, 2019). Another example is from one of Australia's leading research funding bodies – the National Health and Medical Research Council – that identified research translation as a priority area in their 2013–2015 Strategic Plan (Commonwealth of Australia, 2012). Research funders have been key drivers in promoting and disseminating evidence over the last 10-15 years.

2.3 Dissemination of Health Research Evidence: Terminology

There has been considerable investigation and interest in the evolving process of advancing the use of evidence in both policy and practice. The process and strategies used to share evidence in policy and practice has been described using numerous terms in the international literature, many of which are applied interchangeably. McKibbon and colleagues (2013) found that there are up to 100 terms, with some of the most prominent including 'knowledge translation'; 'knowledge transfer'; 'knowledge mobilisation'; 'knowledge exchange'; and 'diffusion' (Figure 2.2).

Figure 2.2

Word Cloud of Common Terms Used to Describe the Dissemination Process (McKibbon et al., 2013)



While the meaning of the numerous terms is open to interpretation, all capture the concept of sharing research evidence between researchers and relevant KUs– usually in a reciprocal way - using a range of methods and strategies, with the ultimate aim of improving health outcomes for individuals (Straus et al., 2009). Although the terms are synonymous, they can differ depending on the field of study. For instance, outside of the healthcare sector, 'knowledge transfer' and 'knowledge mobilisation' are commonly used terms (Graham et al., 2006).

2.3.1 Knowledge Translation: Dissemination and Implementation

One of the most commonly used terms to describe the process of sharing evidence in healthcare, is knowledge translation (KT) (Armstrong et al., 2007). The term KT was coined by the Canadian Institutes of Health Research (CIHR) in 2000 when Canada was becoming the established leader in the field of research dissemination and implementation (Mathew et al., 2014). While there is no single agreed-upon definition for the term 'knowledge translation' (Wathen & MacMillan, 2018), it is most commonly defined as capturing a "dynamic and iterative process that includes the synthesis, dissemination, exchange, and ethically-sound application of knowledge within a complex set of interactions among knowledge producers and knowledge users" (Canadian Institutes of Health Research [CIHR], 2014, para. 4).This definition suggests that KT is an overarching umbrella term that includes the dissemination and/or instrumental implementation of evidence in health care settings, (Barwick et al., 2020).Thus, KT can involve *both* dissemination and implementation.

Indeed, during the 2000s, KT influenced the emergence of the field of implementation science and the launch of the now well-known and reputable peer-reviewed journal *Implementation Science* in 2006 (Bauer et al., 2015; Ward et al., 2009). Implementation science has been defined as "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice settings, and, hence, to improve the quality and effectiveness of health services" (Eccles & Mittman 2006, p. 1). The ambition of this field is to generate knowledge and produce insights into implementation processes, barriers, and facilitators to evidence uptake, and to identify strategies that promote better use of evidence (Fixsen et al., 2019; Westerlund et al., 2019).

Importantly, the field of implementation science provides the wider context for the current research, in the sense that one aspect of this field relates to increasing awareness of, and understanding, knowledge before it can be implemented (Bauer & Kirchner, 2020). As outlined in Chapter One, this knowledge dissemination (or KT-D) - rather than evidence implementation per se which, arguably, is a much longer and more complex process - is the sole focus of the current research.

Dissemination itself is a comprehensive and active means of “spreading of information” and sharing knowledge (Bauer et al., 2015, p. 3). Typically, therefore, this can be both a process and an outcome, and includes purposeful strategies to help make research accessible and understandable through two-way communication and collaboration with a wide range of researchers and knowledge users (Sladek & Tieman, 2008). KT-D has also evolved over time, moving from primarily disseminating research to other researchers, to sharing findings with a range of other additional knowledge users such as policy makers, service users, community and voluntary sector organisations and the general public (Wathen & MacMillan, 2018). Current KT-D approaches also encourage more tailored processes of disseminating knowledge in order to better suit the needs and preferences of relevant knowledge users and their particular contexts (Tetroe, 2007). Indeed, according to Hanneke and Link (2019) - and in line with a social marketing philosophy - the more tailored a ‘product’ or strategy is, the more likely it is to be seen, hence its importance in effective dissemination.

2.3.2 Types of Knowledge Translation -Integrated KT and End-of-Grant KT

There are two ways in which researchers and knowledge users can engage with evidence during the research process- *integrated KT (iKT)* and/or *end-of-grant KT (EoG-KT)* (McClean et al., 2012).The former involves researchers and knowledge users (such as policy makers or practitioners) working together through interaction and active participation from the beginning and throughout the research process in a mutually beneficial way (i.e., developing research questions, methodologies, carrying out data collection and analysis, interpreting research findings, and developing and executing KT-D strategies) (Kothari &

Wathen, 2013). In this way, iKT leverages the mutually beneficial relationship between knowledge producers and knowledge users and can thereby increase the likelihood that health evidence will influence policy and practice (Gagliardi et al., 2016; Wathen & MacMillan, 2018). However, it has been highlighted that there is limited evidence and guidance about how researchers and knowledge users should engage in iKT to maximise impact and, in turn, how this might be evaluated (Graham et al., 2018; Zuiker et al., 2019).This lack of specificity and evidence of effectiveness could impact the likelihood that researchers will choose to engage in this process.

It is also important to note that aspects of iKT overlap with the concept of Public and Patient Involvement (PPI) in research which has assumed an increasing importance in recent years. PPI takes into account the opinions, views and experiences of the public and/or services users – who are at the centre of a research project - in the research process, in order to increase the relevance and impact of the findings and to strengthen the relationship between the researchers and the participants (National Institute of Health Research, 2021). This involvement can also lead to service users or ‘experts by experience’ being included, for example, as co-applicants on a research project, identifying and advising on research, or assisting in the development and review of research materials (Walsh et al., 2020). Likewise, iKT aims to include all KUs in the research process, including service users.

EoG KT-D strategies are more common and are undertaken by researchers at the end of research programmes and projects. These include strategies such as publications or presentations, with KUs having a minimal or non-existent role in the knowledge production and dissemination process (CIHR, 2015). Although EoG-KT is still a necessary and common practice in academia, an iKT approach is increasingly being adopted by researchers in health care and clinical sciences in order to maximise the impact of their research (Graham et al., 2006).

2.4 Key Factors Influencing Health Research Dissemination

Despite continued growth in health research and improved recognition of the importance of KT-D, efforts to share research evidence still face many challenges. Understanding the differing perspectives, needs, and expectations of various KUs remains a significant challenge to effective KT-D (Barwick et al., 2009). Public health research programmes, in particular, are often highly complex and comprise multiple interacting KUs(such as numerous service providers in mental health, physical health, education), which, in turn, can inhibit or challenge the effective execution of KT-D (Morton & Sedita, 2018; Darker et al., 2018). For this reason, substantial efforts have been made to identify ways to overcome barriers and maximise the benefit that can arise from research evidence (Cvitanovic et al, 2015; Oliver et al, 2014). The following section explores the most common barriers and facilitators to disseminating research evidence identified in the KT literature. Notably, these appear to vary little by jurisdiction or by area of health research, including clinical and public health (Sibley et al., 2017).

2.4.1 Availability of Resources and Access to Research Evidence

The dissemination of evidence to targeted knowledge users requires sufficient resources to meet the demand (e.g. Margaryan et al., 2011; Tricco et al., 2016). However, for decades, researchers and KUs (such as policy makers) have reported insufficient resources available to support the dissemination of evidence, including in both low- and middle-income countries (Edwards et al., 2019). This has also impeded the general awareness of, and accessibility to evidence, both of which are imperative if health research findings are to be considered or introduced into policies and routine service provisions (Haynes et al., 2018; Oliver et al., 2014). The specific resources that influence research visibility can be sub-divided into a number of categories as described below.

Adequate Funding. A lack of adequate funding can be a major barrier to effectively sharing evidence (e.g. Parahoo, 2017). Funding is required to, for example, attend conferences or engage in capacity-building training. There is no shortage of national and international academic journals that contain health research evidence. However, access to many journals lies behind expensive paywalls (where a paid subscription is required to view articles), hindering access by non-academic KUs who are then further prevented from benefitting from the evidence. Limited access to relevant high-quality evidence has been cited as a barrier by both policy makers and practitioners alike for decades (Aarons & Palinkas, 2007; Stevens et al., 2014).According to Green (2019), 'invisible' research is a waste of time and funding if it only gathers "digital dust" online by being located behind firewalls. Although academic journals and conferences are by far the most common means by which researchers disseminate their research, only half of public health practitioners use academic journals in their day-to-day work (Hanneke & Link, 2019). This suggests a need to improve access to research evidence through other means, as conferences and journal articles are not expressly aimed at non-academic KUs.

Adequate research funding and KT-D incentive schemes for researchers, in particular, have been found to enhance the dissemination of evidence in practice amongst child mental health practitioners (Barwick et al., 2008; Moore et al., 2011).Allocating funding to KUs to access evidence through the paywalls on academic journals and attend conferences and capacity-building training can enhance the visibility of evidence. Publishing journal articles in an open access format can allow all KUs to source the evidence more easily (e.g. the *Implementation Science* or *BMC Health Services Research* journal). For example, Horizon 2020 (European Research Council, 2017) - the biggest EU Research and Innovation programme - aims to develop and implement policies to ensure that publicly funded evidence is made available online for free. However, for most academic journals to be open access there is often a considerable cost for the knowledge producer which, in turn, can create a barrier to this avenue of research dissemination (Hanneke & Link, 2019). Open access articles have the advantage of being accessible to all readers free of charge, which increases the chance of being visible to the readers (Tripathy et al., 2017). However, open access will only build awareness and knowledge for those KUs who seek it and who can understand what is being communicated.

Research Funders. Researchers may not prioritise KT-D due to competing demands, limited timelines and budgets. Funding bodies can play a crucial role in encouraging research dissemination by providing incentives or funds for KT-D planning, execution, and evaluation (Barwick, 2016), for instance, through the Health Research Board (HRB) Knowledge Exchange and Dissemination Scheme in Ireland and the CIHR Planning and Dissemination grants in Canada) (Mitton et al., 2007).

Available Time for KUs. Typically, KUs (e.g. practitioners such as nurses) report having insufficient time to source research evidence (Maaskantet al., 2013; Parahoo, 2017). With hectic work schedules, there can be few incentives for practitioners and policy makers to invest working hours in identifying, retrieving, reading, and absorbing research findings (Tricco et al., 2015). Systematic reviews (as championed by the Cochrane Collaboration) have been used for some time to share evidence with several KUs (including child and family welfare policy makers and practitioners)and to inform health policy decision-making in a more synthesised format (Holzer et al., 2007). However, systematic reviews can be daunting in terms of their length and technical detail and can be challenging for the non-expert reader. Concise and summarised research dissemination strategies may help to address these concerns.

Available Time for KPs. From an academic perspective, researchers may also have inadequate time and/or incentive to engage and participate in KT-D and to develop and deliver a variety of KT-D strategies, other than, for example, traditional EoG KT-D strategies from funder obligations (Stevens et al., 2014). Thus, key resources for promoting research communication include protected time for the retrieval and evaluation of research findings and for planning knowledge dissemination and application (Landry et al., 2006).

Human Resources. Within the health practice setting and particularly in the field of mental health and child and youth services, staff turnover rates tend to be high (Evans & Huxley, 2008). Staff shortages in a practice setting generally lead to high workloads which can impact on KUs ability to access or disseminate research (Parahoo, 2017; Stevens et al., 2014). Indeed, staff shortages have also been reported as a barrier in terms of not having designated personnel to interpret research evidence on behalf of KUs (such as child mental health providers) or organisations (Barwick et al., 2008).

Researchers at international large-scale organisations often have access to professionals who can help them engage in targeted KT-D such as policy makers and community partners. For example, Australia and Canada have seen the emergence of dedicated teams or new roles (i.e., knowledge brokers or KT practitioners) created to promote research communication and mitigate the constraints experienced by KUs in accessing and understanding research evidence (Eljiz et al., 2020). University-based researchers are far less likely to have access to KT-D supports and resources and identified a need for personnel to act as KT ‘experts’ to facilitate dissemination, thereby relieving the time constraints of such activities (Hanneke & Link, 2019).

2.4.2 KT-D Strategies used to Communicate Research Evidence

The means and strategies by which research findings are communicated and how KUs prefer to access evidence can also impact the likelihood of successful dissemination (Aarons & Palinkas, 2007). Traditionally, and as indicated earlier, the translation of research into public health practice and policy was not a major concern of academic researchers and, therefore, was carried out usually in a passive and linear way (e.g. publishing papers in academic journals), reflecting the expectations and pressures of academia (Bauer et al., 2015; Kernohan et al., 2018).This traditional form of research dissemination still remains the dominant method of sharing evidence amongst researchers, with more than one million health-related papers being published in the PubMed database each year –or approximately two papers per minute (Landhuis, 2016). This strategy usually suggests that the onus is on the KU to source, filter, and interpret a vast literature in order to identify, critique, and/or apply relevant findings (Eljiz et al., 2020). Whilst this is still a useful and widely accepted means of dissemination depending on the KT-D goal (e.g. sharing knowledge within the academic community and to funding bodies). However, it has been argued that it is no longer enough in terms of achieving all intended KT-D goals, such as increasing awareness amongst service users and other KU groups (e.g. child practitioners) that do not normally access academic journals (Barwick et al., 2008).

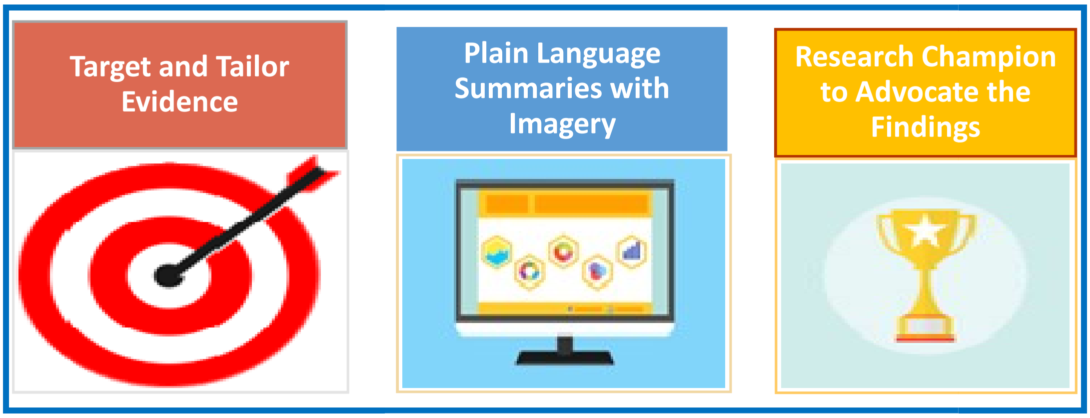
KT-D effectiveness depends, in part, on the goal of the dissemination (Mitton et al., 2007). However, it has also been suggested that the more sources from which evidence emanates (e.g. print, web-based, and audio), the more likely it is to be heard, seen, and acted upon (Li et al., 2018). Therefore, employing multiple tailored KT-D strategies to share knowledge is recommended over the use of a single strategy (Stienstra, 2012). In addition, it is thought that combining traditional researcher-facing (e.g. peer-reviewed articles, conference presentations) with more concise and interactive KT-D strategies (e.g. media engagement, interactive educational sessions, research summaries) is key to advancing evidence dissemination across key KUs (Eljiz et al., 2020). There are also important questions about the kinds of KT-D strategies that are most (or least) effective – this is discussed in more detail in Chapter 4. Nonetheless, it is proposed that KT-D strategies are more likely to be effective if they are actioned in line with the following guidelines, as developed by the researcher (SO'C) based on a review of the literature (Figure 2.3):

1. Strategically target and tailor research evidence to the KU needs, preferences, and the particular context such as the practice or policy setting (Flinders, 2013; Graham & Tetroe, 2009). This includes adapting the evidence content and language so that it fits the intended context (Darker et al., 2018). This can be achieved through consultations with key KUs.
2. Ensure that research evidence is made easily accessible to KUs, with main messages presented as key points or summarised in plain and shared language. In line with this, a Plain Language Bill was introduced to Ireland in 2019 to help ensure that information for the public from the Government is easily interpreted (National Adult Literacy Agency [NALA], 2020).
3. Individuals are 80 per cent more likely to read a piece of text when it is accompanied by an image as it becomes more relevant to the user (Green, 2019). Therefore, it can be useful to include imagery or infographics that are easy to understand but not over-simplified within research summaries, posters, educational materials, oral presentations, and videos (Marquez et al., 2018).
4. Consider working with an individual(s) or organisations with high credibility - who usually work within the KU environment – who can act as a champion and advocate and encourage awareness of the research findings and promote engagement amongst

KUs throughout the research (Darker et al., 2018). Empirical studies have found that KUs (e.g. policy makers) are more likely to engage with research shared via trusted and reputable channels rather than from unknown sources (Hawkes et al., 2016; Jessani et al., 2020).

Figure 2.3

General Recommendations for Effective KT-D Strategies



2.4.3 Knowledge Users' Capacity and Skills to access Research Evidence

As highlighted, the ways in which research findings are presented can also impact the extent to which they are successfully disseminated. Research evidence that is reported using jargon and complex statistical analyses can be difficult for non-academic KUs (e.g. practitioners or policy makers) to interpret and can hinder access to emerging findings (Grimshaw et al., 2012). Presenting research in an academic manner does not account for KUs who may prefer evidence to be portrayed in plain language or through audio (Bowen & Graham, 2013; Kajermo et al., 2010; Parahoo, 2017).

Therefore, capacity-building initiatives aim to increase KU ability (i.e. policy maker and practitioner) to source and interpret academic research and enhance their critical appraisal and research skills (Cairney et al., 2016; Melnyk & Newhouse, 2014). According to Haynes and colleagues (2018), capacity-building is “conceptualised as a suite of strategies that seek to increase the self-sustaining ability of people to recognise, analyse and solve their problems by more effectively controlling and using their own and external resources” (p.100). International and domestic initiatives that aim to build KU capacity in research dissemination – and typically are aimed at practitioners and policy makers - include, for example, the Quality and Capacity Building Initiative (QCBI) and ‘What Works’ resource in Ireland, the Research to Practice Programme in Australia, and the Evidence Request Bank Project in the UK (DCYA, 2019; Holzer et al., 2007; Morton & Sedita, 2018). For instance, the first of these, the QCBI offers a central database and online learning platform for policy makers, service providers, and practitioners to access, appraise, and apply evidence in their work (DCYA, 2018). These initiatives also highlight the developing importance placed on KT-D in the health sector.

Knowledge Producers’ Capacity and Skills to disseminate Research Evidence.

Knowledge producers can also lack the skills and expertise necessary for dissemination, such as using social media to share findings with diverse audiences and plain-language writing (Edwards et al., 2019). Therefore, enhancing the visibility of health research requires knowledge and skills capacity-building for both researchers and KUs (Barwick et al., 2008). Indeed, over the past decade, researchers have been expressing increasing interest in learning more about engaging in KT-D, such as developing KT-D plans and working with KUs (Sibley et al., 2017).Further still, as mentioned previously, the role of funders is an important influence in this regard as increasingly academics also need to show how they will engage in KT-D and produce dissemination plans in line with their capabilities (Banks et al., 2017).

2.4.4 Enhancing Collaboration between Knowledge Users and Producers

The importance of developing meaningful collaborations among KPs and KUs involved in health research has been recognised for decades (Caplan, 1979). The need for two-way exchanges between the researchers and users of knowledge is important because effectively disseminating knowledge in a one-way fashion is usually not sufficient to achieve a range of KU goals (Baumbusch et al., 2008). Consequently, collaboration among multiple KUs represents an important component in improving health and well-being outcomes for children and families – as well as across health research areas (Moore et al., 2017). A number of authors have argued that close collaboration between researchers and knowledge users in the health sector should be encouraged as early as possible (following an iKT approach) and throughout the research process to increase the relevance of the research results to the user and promote the uptake of findings (Bowen & Graham, 2013). The quality of these relationships and clarity around KU roles and how each KU contributes to the research is another important factor in building and sustaining connections (Grimshaw et al., 2012). Less tokenistic and more sincere and regular interactive and collaborative meetings between KUs (e.g. researchers and health policy makers) are considered paramount in facilitating discussion and communicating the strengths and weaknesses of a research study clearly (Marquez et al., 2018; Oliver et al., 2014).

Available evidence suggests that specific KT-D strategies may be used to facilitate collaboration and build capacity to promote access to research evidence. These can range from formal (e.g. advisory committees) to more informal collaborations (e.g. social networking groups). Also, researchers can collaborate with KUs, for example, as co-investigators, co-authors on academic papers, and co-presenters at conferences (e.g. Semeniuk et al., 2005). Co-authoring fosters a sense of ownership and responsibility that is key to bringing about any change in policy and/or practice (Tripathy et al., 2017).

Furthermore, according to Oliver and Cairney (2019), the co-production of research is considered the most likely way to promote the use of research evidence in policy. However, this can result in biases and differences between researchers and policy makers in how data is interpreted, which needs to be managed. Commitment to the collaborative research and dissemination process can create the potential for longer-term professional relationships and encouraging better research design and dissemination in future research (Langer et al., 2016). To be most effective, both formal and informal collaborations and interactions require the investment of time, effort, commitment, and motivation from the KUs involved (Buick et al, 2016). However, it must be noted that there is also no guarantee that this investment of time will 'pay off' until years later or not at all.

However, engaging KUs throughout the research process can also be complex and challenging (Kitson et al., 2013). For example, if a particular public health programme has shown to be effective, this can be difficult for practitioners to acknowledge, particularly if they are seeing a positive impact on the frontline while the programme is running (Guerin et al., 2017). Managing KU expectations and facilitating multiple perspectives can be an onerous task, leading to mutual mistrust, tension and power struggles between KU groups, including policy makers (Innvaer et al., 2002). Therefore, a careful balance is required to meet the demands of research rigour with the realities of practice.

2.4.5 The Organisational Context in which KUs and KPs Operate

There appears to be a consensus in the literature that there is no "one size fits all" approach to effective dissemination of research, and that numerous complex interacting factors must be considered, such as the setting, organisation, the individual, the communication channels, and the properties of the evidence itself (e.g. Dunne, 2011; Morton and Wright, 2015). Therefore, a key message highlighted within the KT-D literature is the need to consider the context or setting in which knowledge will be disseminated as this may be the most important enabler of successful KT-D (Bowen & Graham, 2013; Van de Gooret al., 2017). According to Damschroder and colleagues (2009), context is the “set of circumstances or unique factors” (p. 3) and these can impede or strengthen dissemination efforts.

A team of researchers in, for example, Australia and Northern Ireland, identified that many of the barriers to research dissemination reported by practitioners lie in the organisational contexts in which they work and relate to, for example, inadequate facilities and infrastructure, and/or administrative constraints (Cherney & Head, 2011; Elueze, 2015; Parahoo, 2017). Therefore, the organisational setting in which one works can have more impact in terms of promoting effective research dissemination than even individual factors. For example, an individual who may wish to engage with research findings may be restricted by having insufficient authority to do so within an organisation (Glacken & Chaney, 2004). Therefore, an organisation can constrain or enhance research visibility (Baumbusch et al., 2008; Li et al., 2018). Interestingly, Williams and colleagues (2017) reported an increase in intent to access evidence amongst child mental health practitioners in the United States when the organisation improved supports and resources in relation to evidence uptake. Thus, enhancing institutional infrastructure and resourcing can impact sourcing research and KT-D effectiveness (Langer et al., 2016; Park et al., 2018).

‘The Three Cultures’ of Research, Practice, and Policy. Within the public health field – and according to Stevens et al. (2014) - the contextual factors that influence evidence dissemination are the different work environments and conflicting roles and priorities of the KUs involved in the KT-D process. Importantly, Lewig and colleagues (2006) described the notion of three separate ‘cultures’ or ‘communities’ of research, practice, and policy that can influence health research. The contextual experiences of these three key KU groups - as well as service users - are explored in more detail in the sections that follow.

The Practice Context. As with many professions, practitioners can have a myriad of work responsibilities that occur alongside the increasing need to source research findings. The typically high levels of bureaucracy in child and family services, in particular, has been linked to poor practitioner attitudes toward sourcing and adopting evidence (Aarons & Palinkas, 2007). Crucially, a practitioner's attitude or assumptions about research evidence in mental health services can predict the likelihood of effectively disseminating evidence (Sundberg et al., 2018). For example, two dominant but diametrically opposed perspectives in terms of attitudes towards research evidence have been identified amongst health practitioners working in Ireland (and elsewhere); they may either consider the importance and need for evidence in the sector, or they are sceptical about the motivation behind some research and the quality of the findings (Dunne, 2011). High levels of mistrust in research findings can increase resistance to the research evidence (Armstrong et al., 2007). This, in turn, leads to a tendency to prioritise 'practice wisdom' and service user preferences over research evidence when engaged in decision-making in 'real-world' frontline services (Zeira, 2010). This evidence-informed approach can include a limited consideration of research findings. As mentioned, meetings and collaborative strategies can engage practitioners and try to overcome the barrier of mistrust in research.

The Policy Context. There are difficulties experienced when researchers and policy makers try to engage (Kitson et al., 2013; Oliver et al, 2014). Policy makers have reported that, due to the nature of their work, they usually need immediate answers to emerging issues and do not have the time to wait for research findings to be produced (Stevens et al., 2014). As such, Lewig and colleagues (2006) described how "scholars embrace complexity. Policy-makers demand simplicity" (p. 182). In these cases, policy makers tend to prioritise expert opinion when research findings are deemed insufficient or untimely (e.g. systematic reviews or longitudinal studies) with regard to their short-term decision-making needs (Haynes et al., 2011; Saul et al, 2013). According to Baumbusch et al. (2008), more rapid access to emerging findings (e.g. policy briefs or research summaries) of emerging findings can help to meet the needs of policy makers rather than waiting until the conclusion of a research project, even though the findings at the end of a study are more comprehensive and accurate. This can also help maintain relationships and awareness of the research study and the research interests of the policy makers. As in the practice context, the effectiveness of KT-D efforts with decision makers in the field of health depends on their attitude toward research and their contact with researchers (van de Goor et al., 2017). Therefore, it has been suggested that health policy makers require more direct interaction with researchers to influence policy formation (Oliver et al., 2014).

The wider political context - which can differ from country to country - is also an important consideration (Darker et al., 2018). Political instability can contribute to division and tension between KU groups; for example, in times of austerity, government departments may be unwilling to allocate sufficient funding for research and/or for KT-D (Armstrong et al., 2007). For instance, in the United States, the former Obama administration funded six major evidence-based social initiatives. However, the subsequent Trump administration de-funded the Agency for Healthcare Research and Quality, an important resource for practitioners and policy makers to access the latest evidence-based recommendations on care (Haskins & Margolis, 2014: Vogel, 2018). Thus, a non-receptive policy environment can impede research visibility(Jessani et al., 2018). The life cycle of governments can also change quite frequently, which can also impact howevidence may be considered in the decision-making process for policy (Oliver & Cairney, 2019).

The Research Context. The world of academia has not always provided an environment that encourages KT-D and varied dissemination of evidence (Mueller et al., 2007). For example, within universities and other academic institutions, researchers are typically focused on peer-reviewed publications, book contributions, conference presentations/proceedings, and other academic outputs because these are valued most within academia and are linked to career promotion prospects, obtaining research grants, and perceived professional success (Sibley et al., 2017). In this way, there is a pressure for academic outputs to be prepared 'by academics for academics' (Oliver et al, 2014). Engaging in varied KT-D strategies (e.g. interaction between KUs, social media, or lay language communication) is not traditionally recognised as a form of scholarship to measure career progression or research impact (Jacobson et al., 2004; Sibley et al., 2017).In addition, researchers are often required, as a condition of their funding, to produce a series of reports and other outputs that meet the needs of the funder but that can divert priorities away from engaging in KT-D (Kothari et al., 2009). The vast majority of research staff appointed to projects work on a contractual basis. As a result, they face time constraints at the end of a research project to disseminate the findings in effective and timely ways before they move on to their next post or project. Consequently, researchers may not feel incentivised to participate in various forms of KT-D, focusing their time, workload, and energy instead on fulfilling funder requirements and on their career development. Furthermore, it has been found that researchers may express negative attitudes (e.g. frustration and/or burnout) toward practising KT-D due to juggling the various project demands with no guarantee of impact (Oliver and Cairney, 2019; Sibley et al., 2017).

DORA (2020) stressed that peer-reviewed research papers will remain a central research output in academia that informs research impact but that a comparative importance should be given to other research outputs by knowledge users such as funding agencies, academic institutions, journals, and individual researchers. Thus, widespread engagement in

KT-D strategies by academic researchers may not be commonplace until academic institutions foster research environments that recognise the value of a variety of KT-D strategy outputs in terms of research impact and career progression (Jacobson et al., 2004; Jessani et al., 2018). This has been changing in recent times. In the last decade or so, KT-D is seen as an important element of engaged research that is a developing concept in Ireland and academic institutions elsewhere (Campus Engage, 2016). Engaged research is defined as "a wide range of rigorous research approaches and methodologies with a common interest in collaborative engagement, and a shared aim to improve, understand or investigate an issue of public interest or concern, including societal challenges. Engagement may involve, for example, research planning and design, collecting and analysing data, building capacity and translating research findings, as well dissemination activities" (p. 15).Although there are emerging changes to how academia recognises KT-D practices, the extent to which this occurs in meaningful ways, and is evaluated, in the university or academic setting is still unclear (Sibley et al., 2017).Nonetheless, systematic changes are now occurring to promote better outcomes from research production.

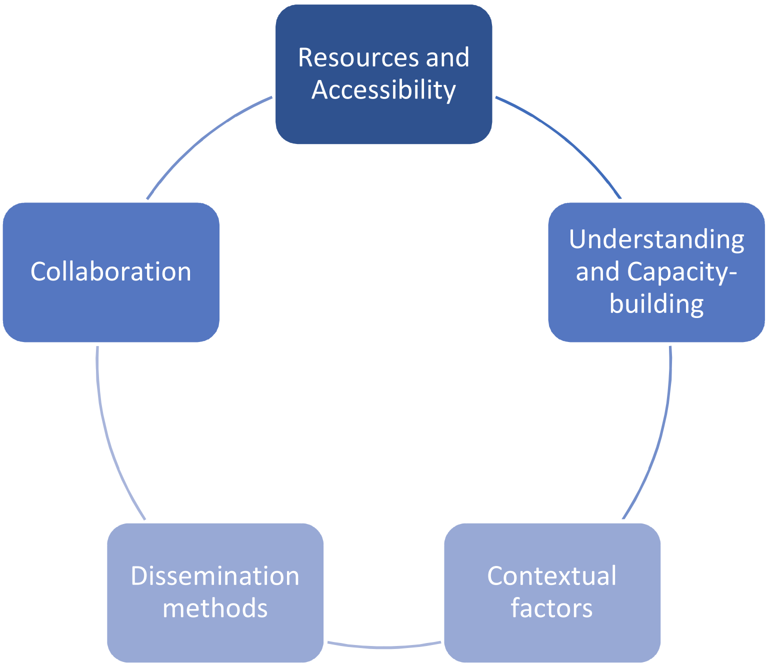
In addition, grant schemes that offer funding specifically for researchers to engage in KT-D, such as the HRB Knowledge Exchange and Dissemination Scheme in Ireland and the CIHR Planning and Dissemination grants in Canada (as mentioned earlier), provide important incentives for further development in KT-D and for embedding it throughout the lifetime of a research project (Jessani et al., 2018). There are also increasing infrastructural changes to support researchers in this endeavour, with (as mentioned above) many academic institutions offering training on effectively engaging with KUs including government departments (Kenny, 2015).

The Service User Context. Service users or recipients have also been identified (and are increasingly being recognised) as important KUs in the health research process and the successful dissemination of health evidence (Ocloo, et al., 2016). Hayes and Comiskey (2012) even declared that researchers working in public health settings have an ethical obligation to ensure the results of the work carried out within a community are fed back to those involved in the knowledge production process and shared with KUs and stakeholders as appropriate. However, as recent as five years ago, there were still only a limited number of KT-D studies that focused on the experiences, preferences, and views of the service users themselves (Gagliardi et al., 2011; Rycroft-Malone et al., 2013). Several studies even found that researchers believe that the public is largely not interested in research evidence as a source of health knowledge (Besley & Nisbet, 2013). This is somewhat surprising as, crucially, service user involvement in research and evaluation may increase the reach, responsiveness, relevance, dissemination, and impact of the findings (Davis et al., 2012). Therefore, the involvement of this KU group in the research process is critical for gaining an insight into how the recipient of the research interprets the findings and their presentation. For example, a service user advisory group can assist researchers in communicating the findings by providing feedback on the progress (or other aspects) of a research project during its lifetime (Sick & Abraham, 2011). Encouraging public engagement is another example of KT-D that can be embedded within a research institution's ethos and as a form of engaged research (RCUK, 2010).

To conclude, there are many intertwining and complex factors that can impact research dissemination (Figure 2.4). Although most of the studies included in this review have been conducted in developed, English-speaking countries, such as the United States, the United Kingdom, and Canada (Massarani, 2015), findings in the literature suggests that similar challenges are experienced in developing countries in terms of a scarcity of resources, low levels of scientific literacy, and a lack of institutional support (Bakyawa et al., 2013; Karikari et al., 2016).

Figure 2.4

Summary of Key Factors Influencing Health Research Use



2.5 Evaluating KT-D Goals and KT-D Strategies

An important aspect of effective KT-D is the evaluation of benefits and impacts. According to Oliver and Cairney (2019), research impact is traditionally measured in specific categories that include 'instrumental', 'conceptual' and/or 'symbolic' research use (Rycroft-Malone et al., 2011). Instrumental research use involves research findings directly and visibly influencing decision-making in policy, practice, and behaviour by, for example, implementing a practice that has been shown to be effective or using research findings to inform budgetary decisions and/or the funding or decommissioning of particular services or programmes. This assessment of research use is more applicable to KT-I than KT-D. Research evidence can also impact KU thinking, understanding, and learning (conceptual use) whilst symbolic use of research involves changes in opinions or attitudes towards research evidence or helping to justify decision-making (Morton, 2015). For example, attending a research seminar can enhance a practitioners' understanding of a new practice. Evaluating and measuring KT-D goals primarily addresses the conceptual and/or symbolic use of evidence (Barwick et al., 2020).

According to Sullivan and colleagues (2007), KT-D goals can be measured through several indicators, including reach (i.e. the accessibility of research), usefulness, and/or use (Table 2.2). For example, reach indicators can include: logging the number of online downloads of research findings; the number of presentations made by a research team; media coverage of research findings; research website traffic; and referrals (e.g. sharing of the research evidence by other websites) (Barwick, 2015). 'Usefulness' or quality indicators assess the extent that KUs are satisfied with the research evidence presented (Sullivan et al., 2007) including, for example, the number of individuals who indicated that the findings were usable or useful, or who gained knowledge from the evidence. Other important usefulness indicators include: additional funding that was secured by the researchers from a piece of evidence; citations from research articles; and the impact factor of research journals where findings were published. Another central element of the research process that can be assessed as part of KT-D includes building the foundations for relationships and capacity-building, on which future potential research impact may be based (Dew & Boydell, 2017). However, collaborative impact typically evolves over time so this can be difficult to determine through one project. Finally, 'use' indicators include, for example, quantifying the number of KUs showing intent or interest in the research knowledge or intending to engage in the research findings (Barwick, 2015).

Not surprisingly, in recent years, academics have shown a growing interest in non-traditional methods of evaluating their scholarly impact but there is a reported lack of awareness of how to go about this (Brownson et al., 2018; Sibley et al., 2017). These alternative metrics are known as altmetrics and allow researchers to gauge the impact and reach of their research in the social web beyond the traditional science citation count and journal impact factors (Tripathy et al., 2017). While impact factor is useful for researchers in gauging research usefulness and in applying for grant applications or promotion (as previously mentioned), but this method is less likely to impact the KUs that do not access journal articles (Sibley et al., 2017). Thus, in turn, there is an increasing focus on other measures of research effectiveness, apart from journal impact factors. As such, alternative metrics represent an opportunity to measure dissemination to populations more diverse than the scientific community (Hanneke & Link, 2019). For example, measuring the download counts for a research report is a simple yet effective means of conveying the publication's reach, as well as logging attention received through tweets or other social media mentions. Although it can still be difficult to gauge if this translates to real-world impact of public health information, such as whether a pamphlet promoting hand hygiene or monthly breast self-examinations actually improves those practices in the community (Hanneke & Link 2019).

Including ways to measure the impact of an iKT approach is important for demonstrating that a variety of KT-D strategies are as valuable as traditional academic measures such as peer-reviewed publications and conference presentations (Boydell et al., 2016). Thus, journal-based metrics, such as journal impact factors, can be part of – but not the only way of – determining funding, appointments, and promotions.

Therefore, the use of KT-D impact indicators reflects a growing emphasis on assessing the broader consequences and effects of research dissemination such as awareness, visibility, and engagement (e.g. Geddes et al., 2018). Assessing the awareness of research is an important part of the research process as "invisible research is, by definition, low impact"

(Green, 2019).Findings from health research cannot positively impact population health outcomes and progress to KT-I unless they reach the intended KUs (Berwick, 2003). As a result, researchers internationally–in order to obtain financial support from health research funding agencies and organisations –increasingly need to demonstrate value-for-money and returns from research beyond academia (Kothari & Wathen, 2013).

The emergence of assessment schemes, such as the Research Excellence Framework (REF) or the Knowledge Exchange Framework (KEF) in the UK (or the recent Impact Toolkit project in Ireland (Univesity College Dublin [UCD], 2020) provide an incentive for academics to demonstrate the relevance and effects of research-related dissemination (Geddes et al., 2018; Oliver et al., 2014). For example, in the case of the REF, 25 % of research impact is based on the reach and significance of research findings with non-academic KUs, and this documented by, for example, recording the number of individuals/organisations that may have read, understood, or interacted with a dissemination output/product (insofar as this can be ascertained); the amount of income derived from various types of collaborative research; the amount of academic staff time dedicated to dissemination; and the proportion of publications that have non-academic co-authors (Hill & McAlpine, 2019; Kings College London & Digital Science, 2015). This information helps to provide accountability and can be used to help determine the allocation of public funds to research institutions; to benchmark university performance in relation to research impact; and to provide national-level insights on research performance and research culture (REF, 2019). These national assessment frameworks promote varied KT-D strategies and monitoring, and encourage researchers to gain a better understanding of the impact of their dissemination efforts.

2.6 Knowledge Translation- Dissemination Frameworks

KT-D frameworks and planning tools have emerged to assist researchers in structured and systematic dissemination. Their relevance aligns with external drivers for dissemination (i.e., funder requests). Numerous frameworks and tools are available to support the KT-D planning process for health and social care research including addressing potential barriers and facilitators that can inform the design and delivery of KT-D strategies; and to help evaluate and measure KT-D strategies and the related impact (Ngamo et al., 2016).

The terms *theory*, *model*, and *framework* are often used interchangeably and imprecisely in the field of KT, which can lead to confusion (Bauer et al. 2015).While some theories, models, and frameworks pertain to dissemination, an overwhelming number are implementation-specific, addressing implementation process, determinant factors, strategies, and evaluation (Strifler et al., 2018). A description of all of these frameworks is beyond the scope of this research, but their development is explored in more detail below.

2.6.1 Theory Underpinning KT-D Frameworks

Rogers' classic Diffusion of Innovations (DOI) theory (1962; 2003) - first popularised in the early 1960s - has been considered the most influential and frequently used theory for addressing the research dissemination within healthcare (Armstrong et al., 2007; Dunne, 2011; Squires et al., 2015). The DOI has its origin in the United States in the field of rural sociology and agricultural practices but has since been developed within a variety of sectors, such as economics, education, geography, and public health (Rogers, 2003). According to Rogers (2003), diffusion within the DOI is described as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 11).The term innovation in a KT context refers to scientific research findings (Sudsawad, 2007). Rogers conceptualised the spread, or diffusion, of innovations as a social process with multiple determinants beyond the evidence supporting the innovation itself (Dearing et al., 2018).This reflects the continuing idea that research dissemination involves many interacting factors.

Table 2.2

Key KT-D Impact Indicators According to Sullivan et al. (2007)

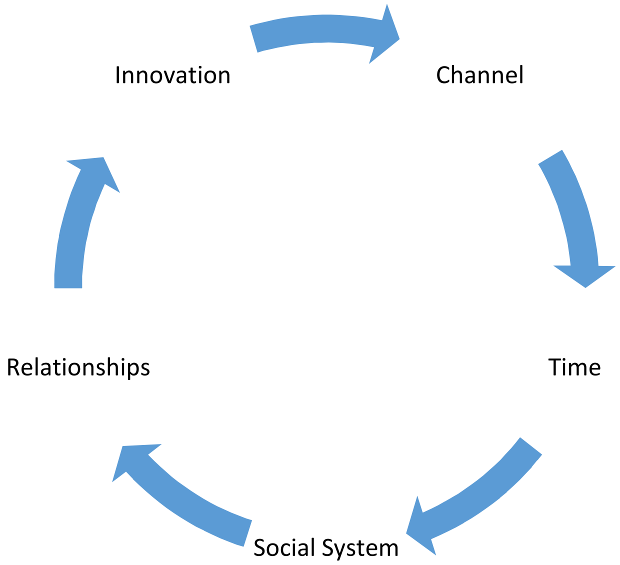
Impact Indicator	Example
Reach	Number of research publications distributed Number of online research downloads Numbers reached through media coverage/social media Research website traffic Postings by other websites/social media Number of presentations made
Use	Numbers intending to use the research Numbers adapting the research Incidences of using the research to inform policy and practice Intent to engage in behaviour change
Quality or usefulness	Numbers who read the research Numbers who were satisfied with the research Numbers who rated the research as usable or useful Numbers who reported knowledge gained Numbers who changed their views Number and significance of awards given to the research Citations of research articles Journal impact factor Relationships and networks Requests for presentations or research information Additional funding secured

The DOI theory highlights a number of elements as critical to the dissemination process (Figure 2.5) including: (1) the research findings/evidence (innovation); (2) the channels of communication, such as television, print, digital, oral, or radio format; (3) the assessment process and time required for monitoring KU awareness of the research; (4) the social system within which the KU context operates; and (5) the relationships between KUs (Rogers, 2003). DOI was one of the first attempts to specify the dissemination process through stages (Hanneke & Link, 2019). All of these elements are considered to influence the rate of the research 'diffusion' or dissemination. Therefore, the first step in the KT process, according to this theory, represents the point in time when an individual becomes aware of research findings, either passively or actively (Rogers, 2003). Passive awareness may occur when, for example, a KU receives an e-mail about an upcoming conference and active awareness relates to purposely seeking out evidence in an academic journal. However, an individual's awareness/knowledge of research does not necessarily translate to enhanced understanding or intention to utilise the evidence (Rogers, 2003).

The DOI has evolved since the 1960s to reflect the developing world of KT-D. However, it still primarily follows a linear approach focusing on the practice setting and, according to Greenhalgh et al. (2005), does not account for the range of complex processes that can arise when disseminating health research. Nonetheless, the factors described within the DOI have formed the basis of many modern KT frameworks as described below (Haynes et al., 2018).

Figure 2.5

Key Elements of Diffusion of Innovations (Rogers, 1962; 2003)



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2.6.2 The Development of KT-D Frameworks

KT-D frameworks tend to either address the research dissemination (alongside evidence implementation) process or focus on the dissemination of evidence primarily or solely (Table 2.3). Many of these earlier frameworks primarily focused on the KT-I aspect of KT and (e.g. Lomas's [1993] Coordinated Implementation Model developed in Canada) followed the DOI approach using a linear dissemination route in which research was simply transferred from researchers to users in a one-way fashion (Nilsen, 2015). This reflected the thinking that was prominent during the 1990s to early 2000s.In addition, the Framework for Knowledge Transfer (Lavis et al., 2003) – also developed in Canada – is used to guide the development of a KT strategy by considering: the research message to be shared; the various KUs involved; the messenger, communication infrastructure or mechanisms (i.e. how the research findings are shared); and the KT evaluation techniques. However, despite its practical approach, the framework requires that KUs and researchers are willing and ready to engage with each other, which may not necessarily be the case in real-world research.

From the mid-2000s to the present day, developing frameworks have acknowledged that the dissemination process is not uni-directional. These new models reflect the increasing importance attributed to the processes and the role of contextual factors. For example, the Knowledge-to-Action (KTA) framework (Graham et al., 2006) (used to guide implementation primarily) is comprehensive in that it includes the knowledge creation and action processes by encouraging and tailoring the evidence following interactions between different KUs and the identification of any barriers. The KTA is one of the most cited KT models in the literature and, importantly, includes the need to evaluate KT-D efforts (Field et al., 2014). However, although this framework takes into account the importance of adapting evidence to the given context, it is more suited to the practice setting, not the policy context (Ellen, 2012).

Another commonly used and comprehensive framework in the literature – and one that can be used to guide both dissemination and implementation of research - is the Ottawa Model of Research Use (OMRU, Logan & Graham, 1998). This framework also highlights the importance of evaluating contextual factors (both individual and organisational) that may impact research use when designing and executing KT strategies (Logan & Graham, 1998). This model is also usually applied to the practice setting and, unlike the KTA framework, it does not address knowledge creation as part of the KT process.

The Understanding User Context Framework (Jacobson et al., 2003) also focuses on the execution of KT strategies in order to achieve specific KT goals – such as awareness and engagement - alongside exchanges between researchers and evidence users (Ward et al, 2009). However, this framework includes a heavy focus on the individual researcher, rather than the collaborative relationships needed for successful dissemination (Graham et al., 2006). Despite acknowledging the role of contextual factors in influencing KT-D, it has been argued that none of these aforementioned frameworks describe what comprises 'context' in detail and how it is captured in the research and KT-D process (Li et al., 2018; Squires et al., 2015).

It is interesting to note that the KTA framework, OMRU, and the Understanding User Context Framework (as well as many other well-known KT-D frameworks) were all designed in Canada – further cementing this country's position as a world leader in research dissemination and implementation. Still, there are many other prominent frameworks that have been designed in other parts of the world, including, in Ireland, the recently-developed Evidence-based Model for the Transfer & exchange of Research Knowledge (EMTReK) (Payne et al., 2019) that is aimed specifically at guiding dissemination strategies for health research into practice. However, a significant number of these KT frameworks have not been applied thoroughly in the literature. According to Strifler and colleagues (2018), most of the identified frameworks within the literature have been used in five or fewer studies, with 60% only being used once.

In terms of selecting a suitable framework to guide KT, there is an ongoing dialogue around whether or not an overarching framework is needed and the absence of one may reflect the complex, interdisciplinary, and relative newness of the KT field (Brown et al., 2017). For this reason, a number of tools have been developed to assist researchers in choosing the most apt and relevant frameworks to guide specific implementation and dissemination projects. For example, the Theory Comparison and Selection Tool (T-CaST) (Birken et al., 2018) includes specific criteria that can be used to justify the selection (or not) of a framework for a given research project.

However, most of these frameworks appear to be more applicable to the practice setting and are evaluated in terms of research application in practice, rather than other KT-D goals for dissemination such as increasing awareness of research findings in policy or other contexts (Squires et al., 2015). Despite these limitations, the development of dissemination frameworks has informed our growing understanding of how KT-D can be carried out in a sequential way and how to structure and guide the process (Baumbusch et al., 2008; Kitson et al., 2013).

2.6.3 The Emergence of Knowledge Translation Planning Tools

The evolution of KT frameworks has informed the development of several KT planning tools. There is a recognition in more recent years that developing a research dissemination plan and using a KT planning tool should be a key part of every research project, not least to demonstrate impact and provide accountability for research funding (Tetroe et al., 2008). Further still, this increasing acknowledgement is highlighted in KT training initiatives where the most common component taught is KT planning (Tait & Williamson, 2019).

In addition, according to Cambon and colleagues (2017), a well thought out dissemination plan is critical and central for effective KT-D with KUs across all contexts. Planning for dissemination is an active process that helps to ensure that research is communicated in ways that match with KU needs (Hanneke & Link, 2019).This approach also allows researchers to assess if investment in specific KT-D strategies is an efficient use of resources and researchers' time (Raghavan, 2018). In one sense, much of KT-D planning can be considered common sense. Despite this, however, it is not typically prioritised and as a result, is often executed in a haphazard manner by researchers (Oliver & Cairney, 2019).

Table 2.3

Examples of Frameworks that can be used for KT-D Implementation and Dissemination, Dissemination Primarily, and Dissemination Only

Frameworks to guide both dissemination and implementation
RE-AIM Framework (Glasgow et al., 1999)
Ottawa Model of Research Use (Logan & Graham, 1998)
The PRISM Model (Feldstein & Glasgow, 2008)
Frameworks to guide dissemination mostly and some implementation elements
Coordinated Implementation Model (Lomas, 1993)
Framework for Knowledge Transfer (Lavis et al., 2003)
The Stetler Model of Research Utilisation (Stetler, 2001)
Knowledge-to-Action Framework (Graham et al., 2006)
Frameworks to guide dissemination only
Effective Dissemination Strategies (Scullion, 2002)
Understanding User Context Framework (Jacobson et al., 2003)
Evidence-based Model for the Transfer & exchange of Research Knowledge (EMTReK) (Payne et al., 2019)

Few public health researchers and practitioners have been found to even use a formal tool when engaging in KT-D planning or executing KT-D strategies (Ngamo et al., 2016). Also, although researchers express a desire to disseminate findings beyond their peers in academia, researchers across countries lack supports to increase dissemination efforts, particularly in developed and developing countries (Hanneke & Link, 2019).

Many of these KT planning tools in the literature e.g. (The Knowledge Translation Planning Primer [The Public Health Agency of Canada, 2012]; Knowledge Translation Planning Tool (Lemire et al., 2013) have been developed only over the past decade to be used as a ‘roadmap’ to explicitly guide and structure the core elements involved in the execution of KT-D strategies by KUs during the research process (Ngamo et al., 2016). As in the case of KT frameworks, most of these KT planning tools originate from Canada. As opposed to other dissemination frameworks, KT-D planning tools can be utilised for a variety of KUs (e.g. policy makers and service users), and KT-D goals (e.g. increasing awareness of evidence and informing research). In this way, the KT-D strategies selected can be more specific and appropriate for varied contexts which is often lacking in other KT frameworks (Shibasaki et al., 2016). These tools also encourage the researcher to emphasise the main aim of a KT-D strategy and how it will be evaluated and what will the results mean for the research findings and project (Alberta Addiction and Mental Health Research Partnership Program, 2014). This helps to align the KT-D plan with the research objectives and the related outcomes. This also can be used by research teams early on in the lifetime of a research project to bring awareness of a research programme before findings exist.

In summary, it is generally acknowledged in the literature that the following key components are integral in the KT-D planning process and are included in most corresponding tools, often represented as checklists (e.g. Zuiker et al., 2019): (Figure 2.6):

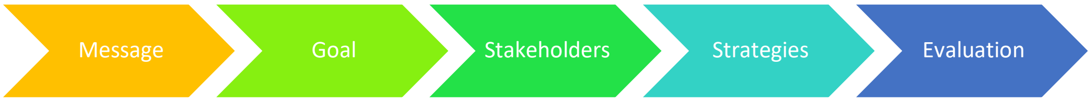
- Communicating the broadly anticipated key/main **message(s)** from the research, tailored to what the research findings want to convey to the given context and why they are important.
- Disseminating research evidence in terms of **KT-D goal(s)** (dissemination or implementation) including, for example: generating awareness; sharing knowledge; informing research and decision-making; and generating practice or policy change (Barwick, 2019).
- Identifying the target **KU(s)** with whom the research knowledge will be shared. It is usually recommended that this involves 2-3 key groups. The level of engagement and established relationships before, during, and after the research process should be

accounted for and tracked as this can influence the KT-D process (Goering et al., 2003). Context-specific barriers and facilitators can also be considered and collected at this point (Knowledge Transfer & Exchange Workbook, 2006).

- Outlining and defining the medium through which the evidence will be tailored and communicated to the intended KUs - the **KT-D strategy/strategies**. At this stage, the scheduling of particular strategies, the project budget, and available resources should be outlined (Barwick, 2019). Some planning tools include a limited list of KT-D strategies, while others offer the knowledge producer more flexibility in choosing how they would prefer to communicate research based on their targeted KUs (Eljiz et al., 2020).
- Including measures to track, **evaluate**, and report the impact of executing the KT-D strategies. The evaluation and measurable criteria for each KT-D strategy can include short (e.g. increased awareness), medium (e.g. changes in service provision), or long-term impacts (e.g. changes in health outcomes) (Goering et al., 2003).

Figure 2.6

Main Components of KT-D Planning Tools



Thus, the core components of KT planning are all interlinked and help to assess KT-D strategies so that they are suited to the research message, goals, and intended KUs. As mentioned, the cost and resources needed to execute KT-D strategies are primary considerations for researchers (Eisman et al., 2020). With this in mind, researchers must ensure that the KT plan is manageable within available resources, as well as taking into account other factors such as KT expertise within the project team, the timeline and capacity of the research project, and the expectations of all KUs involved (Cambon et al., 2017). Resources include personnel with the time and skills to develop visually appealing and appropriate research outputs, a budget to cover the production of KT-D products, and infrastructure and equipment to support the selected KT-D strategies (e.g. website or video software). As a result, Barwick (2018) explored feasibility as part of a KT plan, as well as the perceived competence, credibility, and motives of the KUs and how they influence the extent to which the research message is communicated to the intended KUs. This can provide further insight and structure into the practicality of a given KT plan for a research project.

2.7 Conclusion

This chapter discussed the development of the field of dissemination/KT-D over the past few decades. There is widespread agreement that the effective dissemination of relevant and robust research in policy-making and service provision can be improved, with potentially enormous social gains and improved population health outcomes (Haynes et al., 2018).Within both evidence-based and evidence-informed approaches to healthcare decision-making, the role of research evidence is paramount. Indeed, the increasing focus on an evidence-informed approach reflects how the perception of dissemination has evolved to include the KU perspective and context as more pivotal parts of the dissemination process.

However, research dissemination is a broad and complex process that is still evolving and that presents many challenges. The primary barriers and facilitators to effective KT-D discussed in this chapter may be broadly divided into three categories as recommended by Van de Goor and colleagues (2017). The first relates to the timely access to evidence through sufficient resources, education, and capacity. KT training initiatives can help to build KU and researcher skills and confidence in utilising evidence. Within this, individual attributes of the KU, such as beliefs, political leanings, and level of education, can all impact the extent to which evidence is communicated (or not) (Haynes et al., 2018). The second category that influences research dissemination incorporates the development of KU collaborations and networking, as well as nurturing existing KU relationships (Jessani et al., 2018; Van de Goor et al., 2017). The third and final category incorporates an increasing acknowledgement of the role of context in KT and aligns with the move toward evidence-informed policy and practice. A supportive institutional environment and leadership that is open to change, with sufficient financial and personnel resources available, is important in facilitating KT-D (Van de Goor et al., 2017). However, systemic factors such as the organisational culture and funding agreements (as well as the political and economic context), are unlikely to change in the short to medium term for health research and are more difficult for researchers, practitioners, and policy makers to influence (Langlois et al., 2016). Also, most of the proposed facilitators of KT-D in the literature relate to the first two categories above with considerably less focus on how to tackle systemic issues (Oliver & Cairney, 2019).

Haynes and colleagues (2018) emphasised that these barrier categories do not relate to all KUs and that, for example, there are many policy makers who are actively and competently engaged in using research. This challenges the expectation that improved access to research, or greater capacity to source evidence will result in increased awareness or dissemination. This also provides additional justification for assessing the research context prior to executing KT-D strategies in order to determine what best suits the KUs. It must also be noted that barriers and facilitators to evidence dissemination have been explored extensively (and across KU groups) over the past two decades and yet most of these influential factors remain unchanged (Van de Goor et al., 2017). Until there is systemic change, particularly in the world of academia, these factors are likely to remain problematic in research dissemination and may continue to reduce the potential impact of research evidence (Shibasaki et al., 2016).

Nonetheless, there would appear to be sufficient evidence to suggest that utilising a KT-D framework or KT planning tool can help to address at least some of the barriers to research use and can help to assess how researchers can feasibly promote their research findings within a given context. These kinds of frameworks, at a minimum, provide a systematic structure for the development and management of dissemination efforts (Tabak et al., 2017). Importantly, a KT framework and/or a KT planning tool can help to evaluate and measure the execution of KT-D strategies – and explore the use of KT-D impact indicators - which is still an under-developed area of research (Morton, 2015). In addition, KT planning can help researchers to reduce unnecessary or redundant costs and expenses through ineffective KT-D strategies that may be commonly utilised in other research settings, or are easy to use, but that are ineffective or not appropriate for the given context (Shibasaki et al., 2016). Furthermore, according to Green (2019), researchers who are prepared to invest as much time in KT-D as knowledge production, are more likely to have visible and impactful research findings and perhaps to secure even more research grant funding in the future. Thus, it is clear why an increasing number of KT planning tools are being developed over the past number of years as this field continues to evolve and increase in importance.

The next chapter details the study design underpinning the current research as part of the ENRICH programme.

CHAPTER THREE:

RESEARCH DESIGN AND OVERALL METHOD

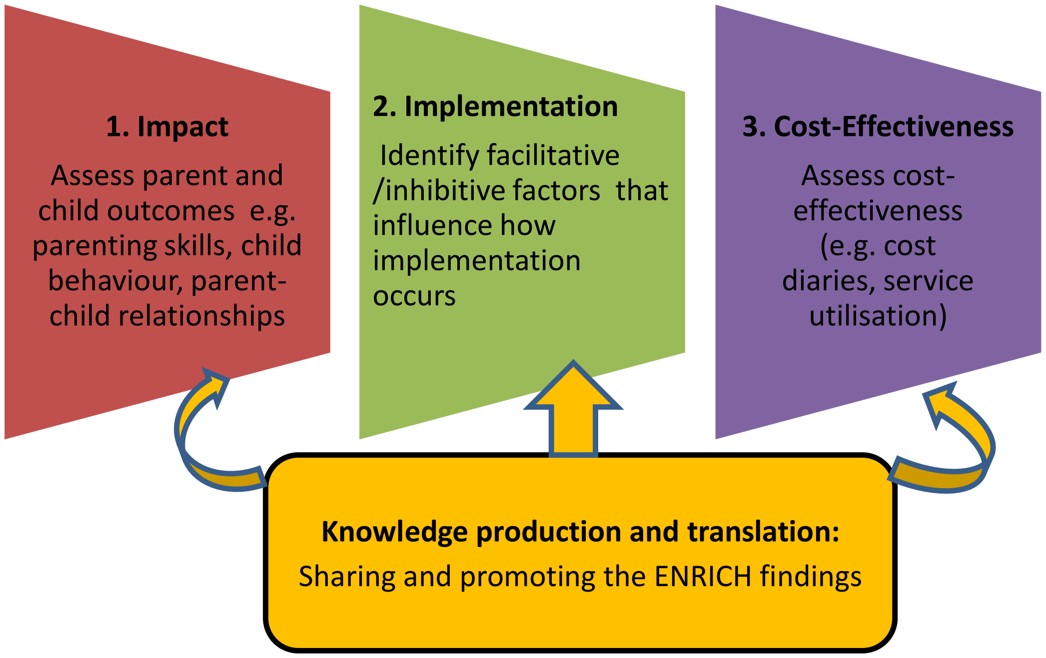
This short chapter includes two separate sections, the first of which provides a description of the overall study design, with relevant contextual information included on the larger ENRICH research programme, of which this research was a part. The second section comprises a discussion of more general methodological issues relevant to the research, including ethical considerations. Detailed methodological information for the three separate phases of the research, is included in Chapters Four, Five, and Six respectively.

3.1 Study Design

As mentioned in Chapter One, this research was carried out as part of the ENRICH research programme, a methodologically rigorous and multi-method project conducted over a six-year period and completed in December 2019. The two wraparound-inspired interventions which were the focus of the investigation (i.e. the Parent and Infant (PIN)/Upto2 and the ChARM service models) were evaluated through three interlocking studies including : (1) an impact evaluation to assess the effectiveness of the models in terms of parent and child outcomes (e.g. parenting skills, child behaviour, parent-child relationships); (2) a process evaluation to explore implementation and the contextual factors that influence or shape implementation; and (3) an economic analysis designed to assess the cost-effectiveness and longer-term cost-benefits of the two service models (and in particular, the PIN/Upto2 intervention) (Figure 3.1).[The impact evaluation of the PIN/Upto2 programme involved a longitudinal, quasi-experimental, non-randomised controlled trial, whilst the ChARM study comprised a smaller randomised controlled trial (RCT) design.]

Figure 3.1

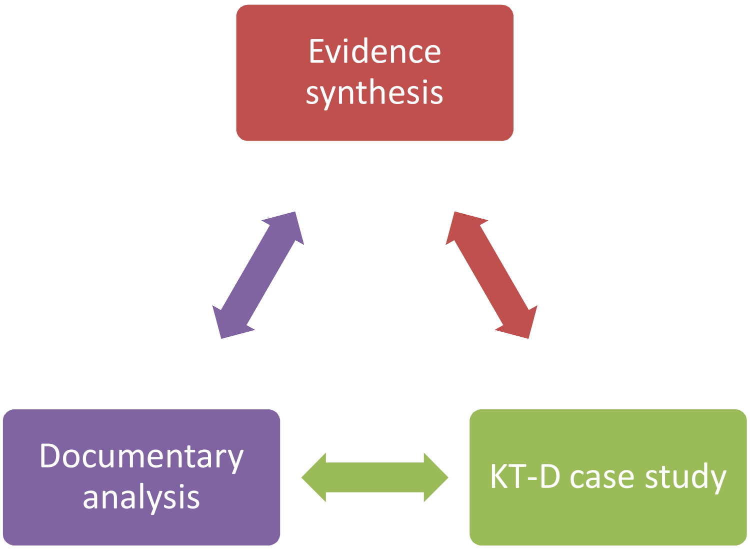
The ENRICH Programme Study Design



The methodological framework for the current research, which was embedded within the larger ENRICH project, comprised three separate but related phases, using a multi-method approach that overlapped and informed each other throughout the research (Figure 3.2). These phases involved: 1) undertaking an evidence synthesis of KT-D strategies using realist principles; 2) a critical documentary analysis; and 3) a 'live' case-study within which, firstly, a series of KT-D strategies were designed, executed and evaluated throughout the duration of the ENRICH programme, and secondly, the views and experiences of key stakeholders were assessed.

Figure 3.2

The Three Phases of the Current Research



3.2 Methodological Issues

This section addresses other general overarching methodological issues relevant to the research including ethical considerations, reliability and validity issues, and researcher reflexivity.

3.2.1 Ethical Considerations

The larger ENRICH research programme received ethical approval from the Social Research Ethics Committee of Maynooth University in 2015. Ethical approval to conduct the current research was obtained on 4th April 2016. Ethical issues such as consent, confidentiality, and safety were carefully considered when planning and executing the research and the research was conducted in accordance with guidelines of the Psychological Society of Ireland (PSI, 2011). Fully informed written consent was sought from all participants.

For the online survey, participants were offered the chance to win a €50 One4all voucher as a token of thanks (by including their email address in a survey item). This information was extracted and stored separately in an Excel file away from the survey data to ensure confidentiality. Subsequent to the survey data collection, the Microsoft Excel function RAND was applied to the email addresses of those participants who entered the draw and the winner of the voucher was chosen at random and contacted through their email address regarding their prize. Prior to participating in the online survey, participants were required to click that they ‘agree’ to participate in the research and that they had read the information sheet (Appendix 3a) before they could proceed to the survey. Before agreeing to participate in the interviews, participants were provided with an information sheet and, where possible, a consent form (Appendix 6a). Written informed consent was obtained from all participants in relation to the audio recording of the interviews.

Participant consent forms were stored in a locked filing cabinet at Maynooth University and were accessed only by the researcher. All data files (SPSS, MS Excel, and MS Word) are held on a password-protected computer. The likelihood of discomfort or distress arising from the data collection process was minimal. Nonetheless, participants were reassured that they are under no obligation to take part in the research and that no identifiable information will be published. All participants were informed, both verbally and in writing, of the purpose and nature of the research. They were also assured that their data would be treated in confidence. The data was anonymised through the allocation of a unique identification code at the analysis stage and stored under lock and key. This number was then used on all database files and hard copy forms, instead of names, for the duration of the project. Subscription to the ENRICH e-newsletter followed the General Data Protection Regulation (GDPR) guidelines enforced from 25th May 2018. Furthermore, in accordance with Data Protection guidelines and Maynooth University Research Ethics Policy, the data will be retained for ten years following the completion of the research and will then be destroyed by the researcher.

3.2.2 Qualitative Analysis: Epistemological Considerations

A number of analytical methods (e.g. Constructivist Grounded Theory and Framework Analysis) were considered for the analysis of the qualitative data, but it was decided that thematic analysis was the best fit for the research. For instance, it was thought that Constructivist Grounded Theory (Charmaz, 2006) is more appropriate for exploring individual processes, interpersonal relations and generating social theories, whilst the Framework approach is highly systematic and is often used alongside trials with pre-determined aims and objectives and short time frames (Richie & Spencer, 1994). In the case of the current research, all findings - and not only those related to pre-determined questions or hypotheses (as in the Framework approach) - were considered important.

3.2.3 Ensuring Methodological Soundness

It is important to ensure that the findings emanating from any study are trustworthy, but there can be a number of challenges in this regard. Montgomery (2004) outlined several criteria which should be considered when conducting qualitative research and which can enhance methodological rigor, including reliability, validity and objectivity. Each of these is discussed below in relation to the current research.

3.2.4 Reliability and Validity

It is important to ensure (insofar as possible) the reliability and validity of research (Smith, 2008). To this end, records of the research methodologies were maintained by the researcher at all stages of the research - from beginning to end - in order to maintain reliability and allow replication of the research. Methodological triangulation was used in the current research by utilising a realist approach, documentary analysis, executing a series of KT-D strategies, using a questionnaire-based survey, focus groups and interviews, all of which informed each other to better understand participant experiences and to enhance credibility and confirmability (Salmona & Kaczynski, 2016).

In terms of the documentary analysis, it was important for the researcher to maintain objectivity in order for the results to have credibility and reliability (Bowen, 2009). Limitations noted in this regard were that the researcher was the sole reviewer and documents from the public domain can be affected by selection bias. However, the documents reviewed in the research were considered reliable data sources.

Establishing the generalisability of qualitative findings is usually more challenging than quantitative research due to the use of typically smaller and purposive samples (Bowen, 2009). However, the interview findings within the current research were enhanced by virtue of the fact that they were consistent with, and supported, the survey results which reflected the views of participants from a range of organisations and institutions across Ireland. Respondent validation was also employed by, for example, sending the transcripts to interviewees and also informing them about the primary KT-D barriers and facilitators identified from the survey results. These findings indicated a high level of agreement with regard to the proposed main KT-D barriers and facilitators, relative to the research context.

Case studies are naturally limited but Yin (2003) argues that they should be viewed as generalisable to theoretical propositions rather than to populations. Realist-inspired methodologies also offer opportunities for increased scientific rigour, objective understanding and better consideration of contextual differences (Minian et al., 2018).Lastly, the reliability and validity of the analysis were also highlighted through the inclusion of verbatim extracts from the interview transcripts, as included in Chapter Six. However, all of the data were coded and analysed by the researcher only, due to time and resource limitations. Nonetheless, the researcher discussed, in detail, the themes with the supervisory team and other members of the ENRICH research team, at a number of junctures, an approach which is quite commonly used in qualitative studies as an alternative to inter-rater reliability (e.g. Teddlie & Tashakkori, 2009). In addition, as the survey was self-report, there was the potential for self-report bias while there was also possibility of general response bias in the sample, as those participants who agreed to take part in the research may have been more likely to value the dissemination of evidence than those who did not take participate.

3.2.5 Researcher Reflexivity/Objectivity

Reflexivity refers to the process whereby the researcher's own subjective biases, influences and interactions with participants can influence the research process (Charmaz, 2006). A number of authors recommend that researchers who engage in qualitative research should attempt to critically examine their own role in order to be aware of, and to address, any subjective biases that may impact the data analysis and interpretation (Tong et al., 2007). Reflexivity, in the context of the current research, was facilitated by debriefing the participants after the interviews/focus groups, while the researcher also repeated statements back to interviewees during the interviews/focus groups to clarify understanding and reduce the possibility of misinterpretation (Laws et al., 2016). Furthermore, reflexivity is less of an issue in thematic analysis than on other analytical approaches such as Grounded Theory.

Etherington (2007) suggests that a researcher's line of questioning can prompt particular responses from participants and lead the direction of the interview. As a member of the academic community, the researcher actively considered her position, as part of the wider ENRICH team, to influence the data collection and analysis process. A conscious effort, to ensure objectivity was made to avoid communicating personal opinions when asking questions regarding KT-D experiences within academia. The researcher was also involved in conducting fieldwork for the larger ENRICH programme and had already met and developed a rapport with some of the parents who took part in the Parent Advisory Panel. This may have influenced the feedback given, but it also helped the parents to be open and honest, as they were made to feel comfortable by means of the rapport which had already been established with the researcher.

Participant expertise and relationships were also important considerations. Some of the participants included in the research (e.g. the focus group with the research team) were the researcher's supervisors and to avoid any issues regarding a power relationship, the same interview schedule was followed as with other participants. Trust and rapport with participants was prioritised and this was easily established as the researcher has extensive experience of interviewing across a range of settings. It is possible that another researcher would have analysed the data in a different way, or that there may be other variables of which the researcher may be unaware and which could influence the interpretation of the data. However, according to Charmaz (2006), no analysis is completely unbiased and there is always potential for contamination.

3.3 Conclusion

The method and results pertaining to each of the three phases involved in this research, are presented in Chapters Four, Five and Six. The next chapter will present the method and findings pertaining to Phase One - the realist-informed evidence synthesis.

CHAPTER FOUR: REALIST-INFORMED EVIDENCE SYNTHESIS

4.1 Introduction

The evidence synthesis conducted as part of Phase One, was conducted in line with a ‘realist-informed’ approach in order to identify and review the underlying contexts and processes involved in effective KT-D strategies aimed at enhancing health research awareness, understanding and engagement (Pawson et al., 2005; Ward et al., 2009). Realist approaches are considered to be particularly useful for investigating processes within social interventions, such as policy or healthcare (in this case KT-D), as they are suited to a mixed body of evidence with multiple interacting components (Edwards et al., 2019; Greenhalgh et al., 2007; Ward et al., 2009; Wong et al., 2013). The realist methodology is based on the recognition that an intervention may be effective in some settings but not others. Therefore, it has been suggested that the only way to understand whether an intervention works, is by uncovering the causal processes and the contexts in which interventions operate, rather than simply observing outcomes (Edwards et al., 2019; Jagosh et al., 2015; Greenhalgh, 2004; Pawson and Tilley, 1994).The methodology underpinning this phase is described first below.

4.2 Method

A traditional realist review is conducted in three stages as described by a number of authors (Pawson & Tilley, 1997; Rycroft-Malone et al., 2011; and Westhorp, 2018). The first stage involves summarising, thematically analysing and synthesising relevant literature organised around the different components of the intervention, and categorised according to ‘contexts’, ‘mechanisms’, and ‘outcomes’. The second stage involves identifying recurrent themes and semi-predictable patterns and links by formulating and generating ‘CMO configurations’ that describe how specific contextual factors (C) work to trigger particular mechanisms (M), and how this combination generates or produces outcomes (O) (Rycroft-Malone, 2012). The third and final stage usually consists of testing and refining the CMOs identified in stage two by synthesising and comparing these with emerging findings from the research. It is also recommended that other methods should, ideally, be used in parallel, such as surveys, key informant interviews, and document reviews (Byng et al., 2005; Pawson and Tilley, 1997). This involves an iterative process to help fill any gaps or validate findings from previous research and allow for a more in-depth understanding of the topic under investigation.

Several authors have suggested adopting a more flexible 'realist-informed' approach that is more time-efficient and less labour and resource-intensive than the traditional realist review (Hewitt et al., 2012; Salter & Kothari, 2014; Ward et al., 2012; Wong et al., 2013). This was considered to be a more useful way of developing, refining and extending a theoretical understanding of KT-D in the present phase, by investigating how the process unfolds in specific circumstances (Hewitt et al., 2012; Ward et al., 2012). The key differences between this and the more traditional approach are summarised in Table 4.1. The aim of this phase was to understand how KT-D strategies worked within specific contexts (e.g. public health policy and practice) and what conditions influenced the successful outcomes. The identified CMO configurations aimed to produce findings that illuminated how evidence relating to children and families health and well-being is disseminated.

Table 4.1

Features of this Realist-Informed Review in Relation to Traditional Realist Reviews

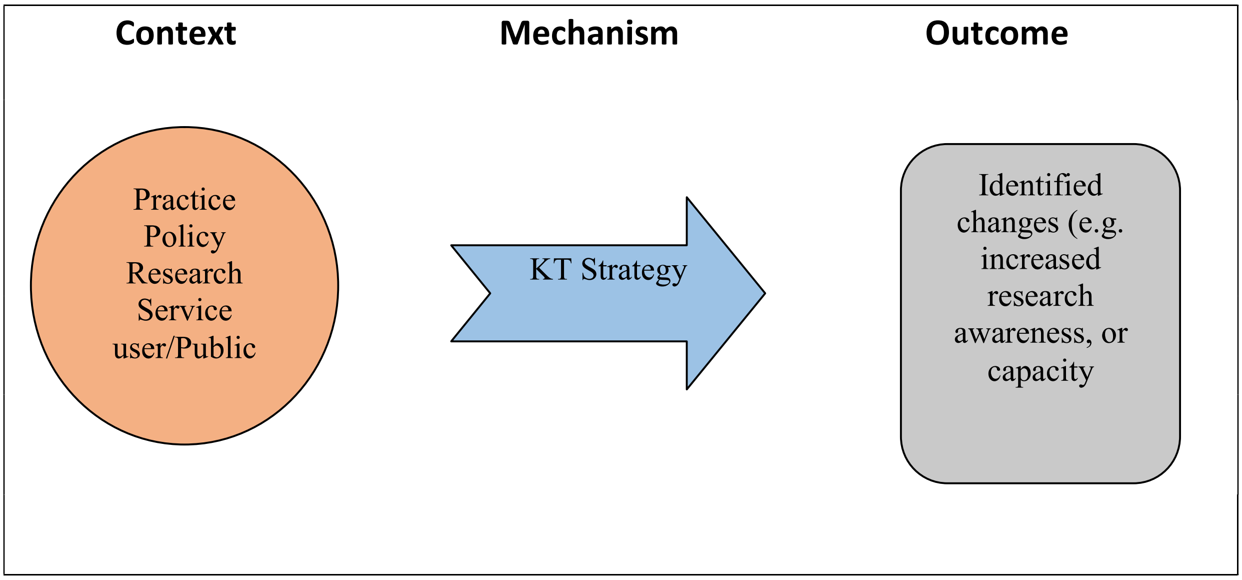
Elements of a review	Characteristics of a realist review	Characteristics of this review
Aims	To advance understanding of which interventions work for whom, and in what circumstances. Realist reviews engage stakeholders in the process.	To advance understanding of which interventions work for whom, and in what circumstances. The findings from stakeholders were used to inform the overall research.
Search strategy	This is guided by an initial theory that is refined throughout the search	No overarching theory or causal hypothesis was used to frame the search or analysis
Data extraction and synthesis	Focuses on demi-regularities, middle range theories, CMO configurations	Focuses solely on CMO configurations

The realist-informed approach in this research considers how a KT-D strategy (M) might achieve a specific KT-D goal (O) for particular KU groups in specific settings (C) (Figure 4.1). According to Hewitt and colleagues (2012), the ‘context’ element of CMOs may refer to the setting in which KUs operate and therefore, the KU group at whom the KT-D strategy is targeted (e.g. policy, practice, research, public). ‘Mechanisms’, within the CMOs described here, refer to the practices or processes that enable a KT-D goal to be achieved (Hewitt et al., 2012). Specifically, these relate to key KT-D strategies that have been used successfully in studies within the literature. Lastly, ‘outcomes’ refer to the impact of these strategies in achieving KT-D goals, such as increased awareness in research evidence, greater capacity to access research findings, improved knowledge and skills in accessing evidence, and more productive interactions amongst KUs and KPs (Barwick et al., 2018).Each element within a CMO configuration is dependent on the other. As such, the context (e.g. KUs) is required for a mechanism (i.e. the KT-D strategy) to operate and mechanisms are activated to varying extents depending on the interactions with the context (Squires et al., 2013).

Furthermore, the interactions between mechanisms and contexts influence or trigger particular outcomes such as increased knowledge or awareness (Hewitt et al., 2012).

Figure 4.1

CMO Configurations for this Realist-Informed Evidence Synthesis



4.2.1 Search Strategy

A series of search keywords was first developed by the researcher to guide the literature search (as recommended by Zhao et al., 2017); these were then developed by examining the research aims and objectives, the inclusion and exclusion criteria (see below), and the common terms used to describe KT-D (e.g. McKibbon et al., 2010).

The search string~~s~~ is indicated below.

(knowledge translation* OR dissemination* OR knowledge exchange* OR knowledge use* OR research-practice gap* OR knowledge into action* OR knowledge transfer* OR research utlis(z)ation* OR knowledge mobilis(z)ation* OR evidence-informed decision-making*) AND (strategy* OR activity* OR intervention* OR programme* OR plan* OR process*) AND (awareness* OR visibility* OR engagement* OR collaboration* OR communication* capacity* OR skills* OR understanding*) AND (networking* OR educational* OR summary* OR technology* OR media* OR arts-based* OR training* OR presentation* OR broker*) AND (health researchers* OR health policy makers* OR health practitioners* OR health patients* OR health service user).

Maynooth University's online library portal – which has over 200 databases, 714,000 e-journals and 550,000 e-books - was used to carry out a comprehensive literature search for this phase. 'High yield' journals that regularly publish KT-D material such as Implementation Science, PubMed, Web of Science, ScienceDirect, and the Cochrane Library were included (McKibbon, 2010). Other online searches were also conducted using Google and Google Scholar, but due to the volume of search results returned and time limitations, only the first page of results for each search was reviewed for inclusion in the synthesis. Snowballing strategies were also used by scanning the references of eligible studies to help source additional relevant studies. The searches were carried out during January 2016 to July 2020 and, given that the development of the KT-D field is relatively recent, the journal article searches were limited to the previous 20 years (2000 onwards), but with an increased focus on articles from the last 10 years to account for the more rapid development in the field during this time. Therefore, more weight and precedence was given to more recent articles that explored KT-D strategies while also evaluating how these findings may (or may not) have differed to older studies. The quality and rigour of the articles were appraised based on the researcher's (SOC) judgement - and including review, where necessary by the supervisory team - and also from using the relevant Critical Appraisal Skills Programme (CASP) appraisal tool(https://casp-uk.net/casp-tools-checklists). There are seven CASP appraisal tools (for different types of evidence e.g. RCTs or qualitative research) and each assesses internal validity, the results, and the relevance of the results to the research. It was not the aim to conduct an exhaustive search (e.g. using all of the many terms used to described KT-D) so it is possible that not all relevant articles were included.

4.2.2 Inclusion and Exclusion Criteria

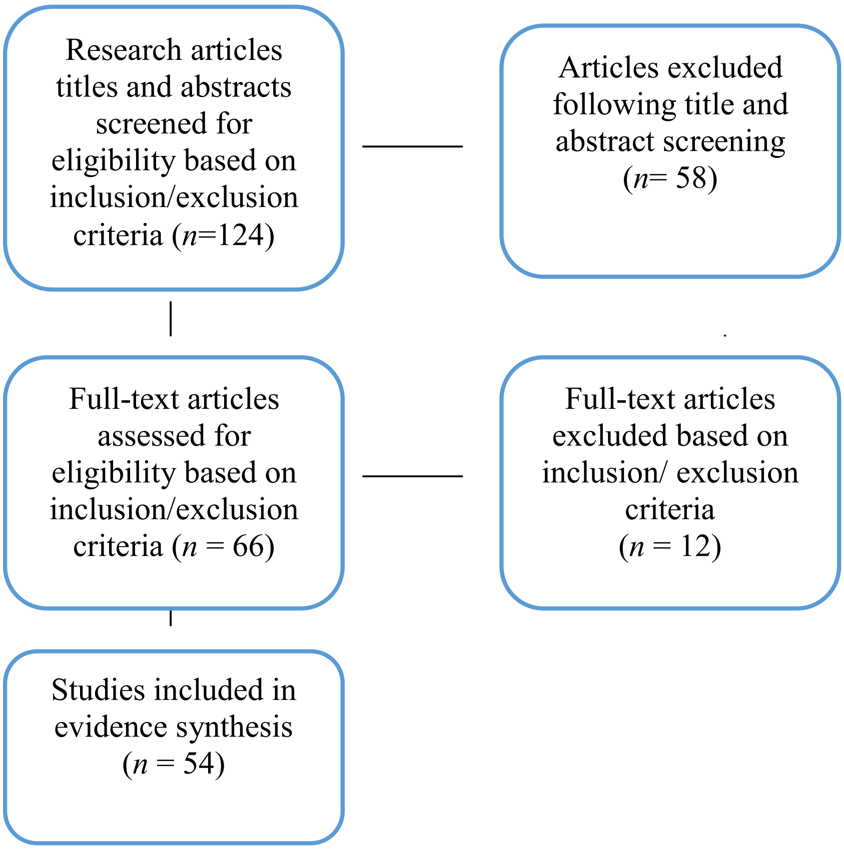
The inclusion criteria were developed in line with the research aims and objectives and these were used to help refine the evidence synthesis by filtering out research that was outside the scope of the synthesis, as recommended by Harden & Gough (2012).Inclusion criteria at the title and abstract screening level included peer-reviewed articles that reported on an intervention or strategies aiming to facilitate some form of research dissemination (awareness, knowledge, attitude, beliefs, behaviour, networks and partnerships) relevant to public health. Eligible study designs included randomised controlled trials, observational studies, surveys, qualitative research, case studies, mixed-methods research, analytical studies and research syntheses, such as systematic reviews. Articles were excluded if they were not written in English and if the KT-D strategies under investigation had been used in non-health related fields.

4.2.3 Data Extraction and Synthesis

Data extraction was conducted using a Microsoft Word table. The following data from the included articles was extracted, analysed and summarised: author(s), year, population, setting/location, type of KT-D intervention or dissemination strategy executed, contextual considerations and outcomes. A PRISMA diagram, shown in Figure 4.2, details the results of the search strategy, including the total number of journal articles that were generated initially through a preliminary database searching and screening of study titles and abstracts (*n*=124) that reported on an intervention or strategies aiming to facilitate some form of research dissemination in health. Following this screening, the remaining full-text articles (*n*=66) were reviewed and those which did not address the research objective or the inclusion criteria were excluded (*n*=12) (e.g. did not assess the effectiveness of a strategy or were applied in non-health related fields.). A total of 54 full-text articles was identified for inclusion in the research synthesis.

Figure 4.2

Summary of Article Search and Assessment Process



4.3 Results

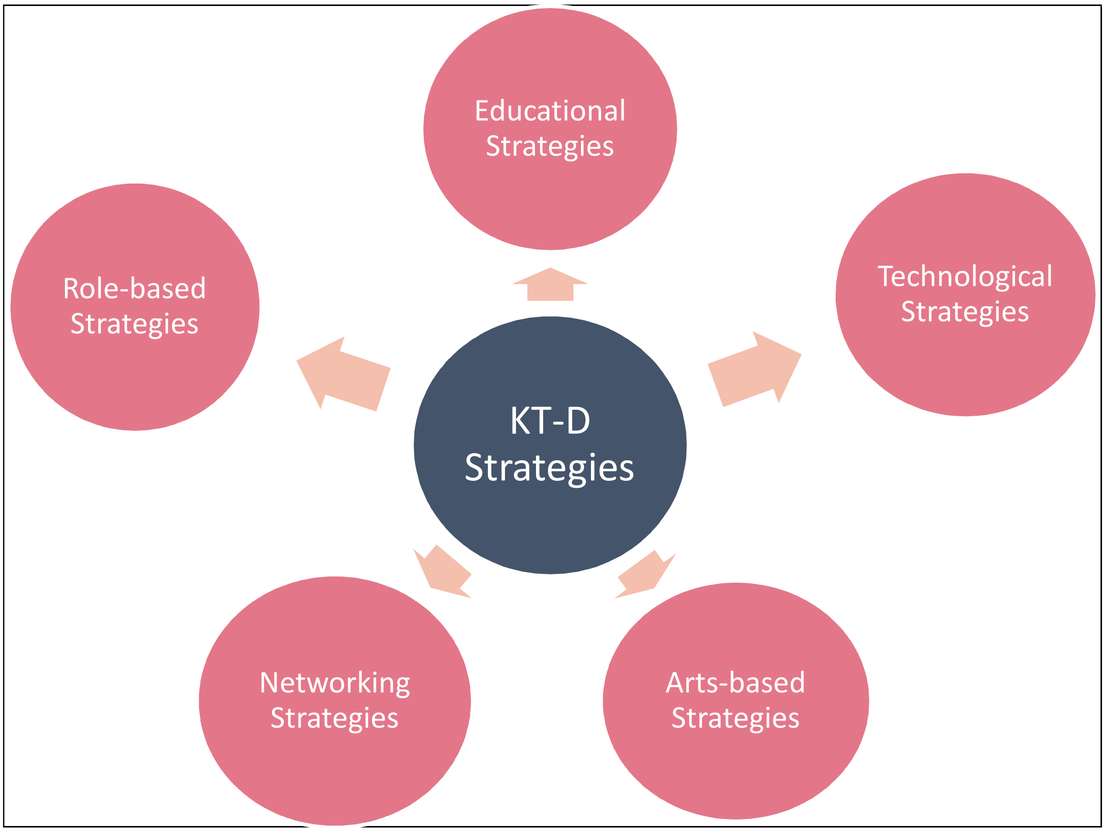
As discussed earlier in this thesis, KT-D strategies can be utilised by researchers in order to achieve a range of KT-D goals, such as changes in awareness, skills, engagement, or understanding in relation to research evidence (Vedel et al., 2018). A number of commonly reported factors which promote the dissemination of evidence were described in Chapter Two. This current chapter builds on that work by presenting a synthesis conducted in line with a 'realist-informed' approach in order to describe the underlying processes involved in effective KT-D strategies - and specific outcomes in relation to KT-D goals (Pawson et al., 2005; Ward et al., 2009). This synthesis of studies (*n*=54) involves a description and critique of the effectiveness of KT-D strategies in a range of groups and contexts, thereby attempting to addressing an important gap in the literature. The chapter begins with a contextual description of commonly employed KT strategies, as described by Barwick (2018). All of the included studies are summarised in Appendix 9.

4.3.1 Descriptions of Commonly Employed KT-D Strategies

According to Barwick (2018), some of the most common KT-D strategies considered appropriate for disseminating health-related research can be categorised as 'educational', 'technological', 'networking', 'role-based' and 'arts-based' (Figure 4.3). It is important to consider each of these separately in the context of the synthesis which follows in this chapter. Each category is first described below.

Figure 4.3

Categories for Commonly Executed KT-D Strategies (Barwick, 2018)



4.3.1.1 Educational KT-D Strategies

Educational KT-D strategies include “print, CD-ROM, video, or graphic materials intended to inform, promote behaviour change, or practice change” (Barwick et al., 2018, p.19). Prior to informing change, these strategies can also promote awareness and understanding of evidence (Bauer & Kirchner, 2020). As discussed in Chapter Two, academic researchers traditionally disseminate findings through publications in peer-reviewed academic journals. The formal peer-review process involves other experts in the field of research who are invited by journal editors to assess the quality and accuracy of a paper (Kelly et al., 2014). This approach is one of the most common methods of research dissemination, typically employedby,and for, academics (Hanneke & Link, 2019). Therefore, academic papers can have a relatively limited reach to non-academic audiences, albeit this has improved with the development of open access publishing (Tripathy et al., 2017).

Several studies carried out in the 2000s highlighted the need for evidence to be presented in an abbreviated form, rather than solely publishing articles in academic journals (Dobbins et al., 2009; Grol & Grimshaw; 2003; Lavis et al., 2005). These kinds of research summaries can range from one-pagers to more detailed, yet concise, reports that can be read by KUs in a relatively short period of time. Research summaries usually contain a 'key points box' on the front page to allow the reader to easily obtain this information from the document (Phipps et al., 2012). For example, policy briefs have become increasingly popular in recent years, as research summaries aimed at policy and decision makers. These short documents focus on a single policy topic of interest, described in plain non-academic language and with clear and concise policy recommendations aimed at policy makers or those who are best placed to influence policy (Jessani et al., 2018; Petkovic et al., 2016). A summary also usually includes charts, tables, or some form of imagery to enhance understanding (Marquez et al., 2018).These types of research summaries have been successfully used to promote and advocate for various public health issues, such as introducing sugar laws to tackle obesity (Brownson et al., 2018).

Television, radio, and/or print media (e.g. newspaper or magazine articles) are often used to share research messages in plain language to both academic and non-academic KUs (Grilli et al., 2002).The media can often influence political prioritising and agenda setting by bringing research topics to public awareness (Van de Goor et al., 2017).However, there are many factors - other than the quality of the evidence - involved in how, and if, research is reported (Brownson et al., 2018). The media can be biased or agenda driven as it relies heavily on advertising income and can influence the audience response to a particular issue.

Therefore, news content that typically gains media attention includes local and/or human interest stories (e.g. experiences of a parent) or controversial topics (Oliver & Cairney, 2019).

Educational KT-D strategies vary in presentation and their likelihood of reach to various KUs. Arguably however, research summaries aimed at all knowledge users (KUs), are one of the most suitable KT-D strategies for promoting research awareness as they are not subject to media biases or the dissemination restrictions often imposed by the peer-review publication process. On the other hand, research summaries – due to their concise nature - may not include sufficient detail on a research study. Some examples of the educational KT-D strategies used within the ENRICH research programme (i.e. academic paper, newspaper article and research summary respectively) are shown below in (Figure 4.4, enlarged in Appendix 11). The academic paper is aimed primarily at an academic audience. The newspaper article aimed to reach a range of KUs and included an appealing headline and image to attract readers. The research summary is also aimed at a range of KUs but was more likely to be sourced intentionally and/or distributed to targeted KUs.

4.3.1.2 Technological KT-D Strategies

Technological KT-D strategies primarily describe a range of web-based approaches to communicate evidence, such as websites, social media, and multimedia platforms (e.g. podcasts and infographics) (Barwick et al., 2018).Initially, most technological KT-D strategies were carried out via blogs and podcasts. Blogging is used to engage in knowledge sharing, reflection, and debate, and often attracts a dedicated readership interested in a common topic (Boulos et al., 2006).

Figure 4.4

Examples of Educational KT-D Strategies

Primary Health Care Research & Development

cambridge.org/phc

Research

Cite this article: Leckey Y, Hickey G, Stokes A, McGilloway S. (2019) Parent and facilitator experiences of an intensive parent and infant programme delivered in routine community settings. *Primary Health Care Research & Development* **20**(e74): 1–12. doi: 10.1017/S146342361900029X

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Parent and facilitator experiences of an intensive parent and infant programme delivered in routine community settings

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Abstract

Aim: The aims of this study were to (1) assess the initial experiences of parenthood amongst mainly disadvantaged mothers; (2) explore their views on the extent to which they felt they had benefitted (or not) from participating in a newly developed, intensive mother and baby support programme in the community; and (3) explore the perspectives of those who delivered the programme (i.e., facilitators), most of whom were Public Health Nurses (PHNs). *Background:* Positive parent–child interactions and appropriate levels of infant stimulation are essential to promoting a child's well-being and laying a foundation in the early years for positive developmental outcomes. It is important, therefore, to examine participants' experiences of community-based, family-focused, early prevention and intervention programmes. *Methods:* This study was undertaken as part of a larger evaluation of a newly developed parent and infant (PIN) programme which was delivered in two disadvantaged areas in Ireland. One-to-one interviews were conducted with both mothers ($n = 22$) and facilitators ($n = 8$) (including three PHNs) plus six focus groups with an additional sub-group of facilitators ($n = 17$). *Findings:* The collective findings suggest that mothers found the programme helpful in promoting a greater understanding of their infants' behaviour and needs, and in alleviating stress and concerns associated with motherhood. Mothers described feeling more knowledgeable about the importance of regular and appropriate infant interaction to encourage learning and development. Facilitators, specifically PHNs, also reported a greater awareness of the value of infant socioemotional development for their clinical practice and observed greater positive communication between mothers and infants. *Conclusion:* These findings suggest that a community-based, intensive mother and baby programme can help to promote parental competence and enhance infant learning and development. Additional benefits in terms of early intervention and positive changes to public health nursing practice are also discussed.

8 Family

Programme enriching babies and parents

Sheila Wayman

Early-parenting support programme in west Dublin brings lasting improvement in confidence of participants

'The power of mothers is phenomenal,' says public health nurse Mabel Murtagh, recalling one participant who came from direct provision, feeling very vulnerable and awkward. 'These mothers formed a cocoon around her'

Wraparound

Isolation

ENRICH

EvaluatioN of WRaparound in Ireland for CHildren and families

Evaluating the impact of universal early parenting support

ENRICHing families' lives

Summary Report 1

Centre for Mental Health & Community Research

Maynooth University

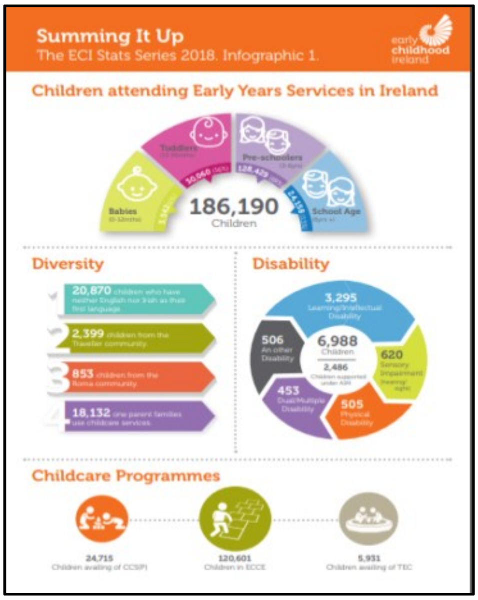
Standard blog features include quick and straightforward posting of information and archives of previous posts to promote access and to encourage engagement. A podcast, or an audio digital file, can also be used to describe, to KUs, the key findings of a research project using a more discursive/conversational format (Tripathy et al., 2017). Technological strategies have also evolved over the years to include other media, such as microblogging (e.g., Twitter), social networks (e.g., Facebook), and video-based outlets (e.g., YouTube) (Chan et al., 2020). For example, social media involves virtual social interaction in order to quickly share summarised knowledge through a large-scale international platform (Bennett & Glasgow, 2009). Thus, KUs can discuss their shared research interests(and exchange relevant information) on various social platforms (Shibasaki et al., 2016).

Recent evidence suggests that Twitter is the most popular social media platform for disseminating health research, followed by Facebook, and research blogs (Brownson et al., 2018; Zhang & Ahmed, 2019). For example, 'tagging' on Twitter (i.e. to notify another account of a piece of information), using hashtags (e.g. for your tweet to be included in a searchable theme such as #earlyyears), or ‘live-tweeting’ at conferences, can help to quickly promote and increase the reach and visibility of research by ensuring that messages are conveyed in rapid and timely ways, to a researcher’s ‘follower’ network and potentially to others, thereby increasing interest and engagement (Tripathy et al., 2017). Indeed, recent evidence suggests that health studies are one of the most commonly discussed science topics on social media (Brownson et al., 2018). Furthermore, social media dissemination has been significantly associated with more downloads and eventual citations of academic papers; however, this does not imply that tweeting directly influences research uptake (Brownson et al., 2018). Nonetheless, more research downloads suggest increased research engagement and visibility.

Infographics have also become increasingly popular during the last decade; these combine primarily images with accompanying abbreviated text to share research data in an at-a glance, concise, accessible, and engaging manner (Querol-Julián & Fortanet-Gómez, 2012) (Figure 4.3). For example, in Figure 4.5 (enlarged in Appendix 11), statistics regarding child services in Ireland are depicted simply in bold with the use of colour and graphics.These can help to improve the understanding of research evidence whilst also speeding up the dissemination process and information uptake, all of which are highly desirable given the lack of time commonly reported by KUs in accessing and appraising evidence (Thoma et al., 2018).

Figure 4.5

Example of a Technological KT-D Strategy: Infographic (Early Childhood Ireland, 2020)



4.3.1.3 Networking KT-D Strategies

The third category of KT-D strategies relates to networking between KUs and knowledge producers (KPs) which can range from intimate one-to-one meetings, and small group gatherings to larger meetings or conferences (Maher, 2014).

Conference presentations are one of the most commonly employed means by which researchers network and disseminate evidence (Hanneke & Link, 2019). Conferences can also be aimed at, and involve, practitioners and community-based organisations, as well as health and social care professionals. The format may be formal or informal, and traditionally involves some component of didactic, passive, one-way communication (Eljiz et al., 2020). Increasingly however, conference organisers are including smaller group 'breakout' sessions that allow for more discussion and engagement (Campus Engage, 2016). Conferences can also include poster presentation sessions which tend to be more interactive and can enhance

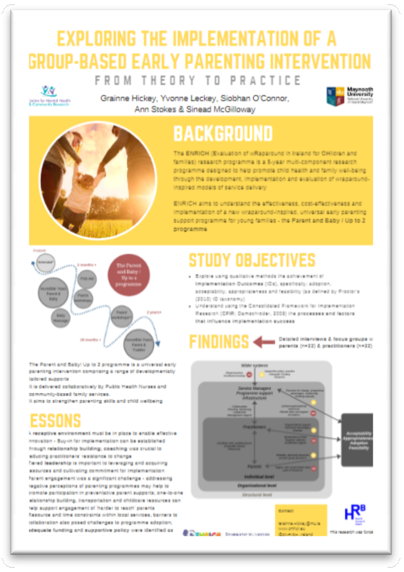
KT-D, as KPs are usually available to explain and discuss their research findings during a scheduled poster session (Querol-Julián & Fortanet-Gómez, 2012).When disseminating research findings at professional conferences, the results are more often compressed into an abstract or a poster, similar to a research summary (Edwards, 2015).In Figure 4.6 (enlarged in Appendix 11), findings from the ENRICH programme were presented in a poster format and included both graphs and text to summaries data on the implementation of a group-based early parenting intervention.

Seminars and training workshops may be delivered in many different ways, from short webinars to week-long in-person training events. Arguably, these provide a greater opportunity for KUs and KPs to engage, network, and interact with each other, as they are usually smaller and more intimate in nature (Lin et al., 2015). Indeed, according to Brownson et al.(2018), practitioners learn more about research through seminars and webinars than by any other means.

Other networking strategies commonly highlighted in the KT literature and which encourage interactive learning, are communites of practice and deliberative dialogues (Ward, Nguyen & Kuchenmuller, 2019). ‘Communities of practice’ involve a group of KUs – usually practitioners – who come together regularly with a common interest to share, develop, and advance the knowledge base in a specific research area (Anderson et al., 2013; Li et al., 2009). These communities of practice can also be carried out successfully online or virtually (Kothari et al., 2015). Likewise, ‘deliberative dialogues’ usually involve various KUs in the health policy-making process coming together to discuss research evidence in terms of their knowledge and experiences (McSween-Cadieux et al., 2018). For example, Boyko and colleagues (2014) described the stages of a deliberative dialogue to include consultations prior to meeting and the circulation of a research summary outlining the main issues; convening of the group to discuss the highlighted issues; post-event circulation of a dialogue summary; and, finally, the evaluation of the dialogue.

Figure 4.6

Example of a Networking KT-D Strategy (Poster Presentation for the ENRICH Research Programme)



EXPLORING THE IMPLEMENTATION OF A GROUP-BASED EARLY PARENTING INTERVENTION

FROM THEORY TO PRACTICE

Grainne Hickey, Yvonne Leckey, Siobhan O'Connor, Ann Stokes & Sinead McGilloway

BACKGROUND

The ENRICH (Evaluation of wRaparound in Ireland for CHildren and families) research programme is a 5-year multi-component research programme designed to help promote child health and family well-being through the development, implementation and evaluation of wraparound-inspired models of service delivery

ENRICH aims to understand the effectiveness, cost-effectiveness and implementation of a new wraparound-inspired, universal early parenting support programme for young families - the Parent and Baby / Up to 2 programme

STUDY OBJECTIVES

FINDINGS

ESSONS

Note. Hickey, G., Leckey, Y., O'Connor, S., Stokes, A. & McGilloway, S. Exploring the implementation of a group-based early parenting intervention from theory to practice. *Global Implementation Conference, Glasgow,* 16-17 September 2019.

4.3.1.4 Role-based KT-D strategies

Role-based KT-D strategies typically refer to individuals(or groups) who are appointed to assist with dissemination (Barwick et al., 2018).For example, knowledge brokers aim to link decision makers (in policy or practice) and researchers by facilitating both interactions with KUs and the transfer and exchange of relevant information (Bornbaum et al., 2015). They can also help to prepare research outputs, facilitate meetings and events, and/or help KUs to gain a better understanding of each other's roles and workplace environments. According to Fisher (2011), knowledge brokers can engage in a variety of roles depending on the KT-D goal; for example, they may be someone who already works within an academic institution (e.g. in the communications office), or an external Public Relations consultant. Some authors advocate for the regular use of knowledge brokers in order to facilitate KT-D, whilst others argue that there is a lack of evidence about how knowledge brokering works and its potential effectiveness (Dobbins et al., 2009). Furthermore, there may be resource and budgeting implications when external knowledge brokers are used in the KT-D process (as was the case in the ENRICH research programme).

4.3.1.5 Arts-based KT-D strategies

Arts-based KT-D strategies cover a range of more ‘alternative’ and relatively newly emerging approaches to sharing research findings through, for example, visual (e.g. photography, paintings), performative (e.g. drama, dance) or literary (e.g. poetry, fiction) means (Cox & Boydell, 2016). Such approaches to KT-D offer unique ways of engaging KUs and enhancing understanding by focusing on complex aspects of health care and social from a participant’s perspective (Greenwood, 2019). For instance, Lapum and colleagues (2014) depicted service user experiences through photography (e.g. feeling disconnected and floating prior to an operation) as shown in Figure 4.7.

The production of arts-based research outputs may include a high level of collaboration between researchers, the public, service users, practitioners, artists, or filmmakers and this can help to engage the general public/service users more in the research process and in the delivery of their health care (Rich et al., 2005). Thus, arts-based KT-D strategies reflect well the increasingly collaborative approaches that are being used in engaged research and also, specifically within the KT field. However, relatively little research has examined how these methods compare to others (Parsons & Boydell, 2012).

Figure 4.7

Example of an Arts-based KT-D Strategy (Lapum et al., 2014)

In summary, there is a wide range of strategies used by KPs to communicate research evidence. Although there is much in the literature regarding effective KT-D strategies, most studies tend to focus on one particular KU group (e.g. policy makers or practitioners) or one type of strategy (e.g. educational or networking strategies) (Powell et al., 2012).Therefore, there is limited understanding of the type of strategies that are likely to be effective in different (and across) contexts (Haynes et al., 2018; Prihodova, 2015). This creates challenges for researchers when selecting the most appropriate and feasible KT-D strategies to use and especially in research projects that aim to target diverse KU groups and address a range of KT-D goals (Edwards et al., 2019). In this evidence synthesis, the studies investigated educational (*n*=19), networking (*n*=32), technological (*n*=19), role-based (*n*=5) and arts-based (*n*=3) KT-D strategies. These results described CMO configurations for different KU groups involved in health research – beginning with the policy makers context, followed by the practitioners'/practice context, the research and, finally, the service user context and are described below.

4.4 The Policy Context

Traditional researcher-facing KT-D strategies, such as conference presentations and peer-reviewed journal articles, are not commonly used by policy makers to access evidence compared to more recent approaches such as policy briefs or media platforms (Edwards et al., 2019). The specific mechanisms and corresponding outcomes, which have been identified as relevant to the policy context, are discussed below and summarised in Figure 4.7. Overall, 27 studies (Appendix 9) explored the policy context.

4.4.1 Educational KT-D Strategies for Policy Makers

As research published in academic journals is primarily aimed at academics, this is not a common way to increase the awareness and visibility of research evidence with policy makers (Newman et al., 2015). Jabbar and colleagues (2015) found that health policy makers prefer anecdotal information to inform their decision-making rather than the use of academic peer-reviewed articles, which tend to be aimed primarily at academics. Conversely, however, a study by Sprion et al (2002) found that health policy makers (*n*=292) in the U.S., felt that academic journals were useful in informing policy decision-making. Thus, the evidence appears mixed in this regard.

Eye-catching and tailored research summaries and briefs can also be used to promote a greater understanding of research and allow policy makers to avoid information overload (Austin et al., 2017; Meisel et al., 2019). For instance, readers can ascertain quickly the relevance of the findings and the extent to which they can be easily utilised in the policy decision-making process, thereby improving access to evidence (Shroff et al., 2015; Yost et al., 2014). The simple targeted messaging within research summaries are particularly effective in attracting interest in research findings (Phipps et al., 2012), another important

KT-D outcome. For example, Brownson and colleagues (2011) found that policy briefs related to oncology, were understandable and credible for health policy makers (*n*=291) in the U.S. However, it is unclear from the literature as to whether policy briefs - designed specifically to guide policy recommendations - or general research summaries, are more effective at increasing the visibility of evidence for policy makers.

Researchers have also become increasingly aware of the important role of the media when disseminating evidence to policy makers in the health sector (Leurer, 2013). Newspaper articles, radio segments, and TV interviews have been shown to be effective in increasing the awareness of, and access to, health knowledge amongst health policy makers in the U.S. (Gardner, 2010). Furthermore, an interesting study by Haq (2010) showed that health policy around the health of mothers and babies in Pakistan, was heavily influenced following a TV talk show involving a panel of health policy makers (*n*=20) and a public audience. However, as highlighted earlier, the topic must be considered to have broad appeal to both the public and the broadcaster/publisher, to be considered for discussion.

4.4.2 Technological KT-D Strategies for Policy Makers

Social media (e.g. Twitter) is increasingly being used by academics to communicate health evidence messages (at both a project and/or individual level) to government representatives(Oliver & Cairney, 2019). According to Tripathy and colleagues (2017), the use of social media, as it has developed in recent years, has helped researchers to enhance their engagement with policy makers and increase the visibility of research evidence within the policy community, both of which are important KT-D outcomes. Further still, Moorhead and colleagues (2013) found that social media posts (including tweets) have the potential to influence policy. Likewise, posts on Twitter and research blogs in the USA have helped health policy makers to justify their position on particular issues in decision-making (Jabbar et al., 2015). In addition, research has shown that e-newsletters and websites can be used as effective web-based mechanisms for increasing the awareness of, and access to, health knowledge in policy settings (Brennan et al., 2016; Gardner, 2010; Grimshaw et al., 2001; Van der Heide et al., 2015). However, it is difficult to identify who is accessing websites due to data protection regulations (e.g. GDPR) and it is also unclear if e-newsletters are being read, or are simply being disseminated without being opened by KUs.

4.4.3 Networking KT-D Strategies for Policy Makers

Networking between health researchers and policy makers in, for example, child and youth mental health and in other areas of public health, has been consistently highlighted as an effective mechanism for promoting trust and facilitating mutual discussion and relationship-building (e.g. Boydell et al., 2017). Networking can take many forms. An interesting study by Langlois and colleagues (2016), undertaken in Mexico and Nicaragua, showed that frequent interactions between researchers and health policy makers helped the latter to value research evidence more, whilst also enabling researchers to better understand policy needs. These kinds of interactions between public health researchers and policy makers have also been shown to promote longer-term engagement and future collaborations (McGinty et al., 2019).

Traditional academic conference presentations can sometimes be a way of networking and sharing knowledge with policy makers (Dobbins et al., 2007; 2009; Meisel et al., 2019). However, attendance at conferences can be impacted by high conference fees, limited policy maker time, and conflicting priorities (Sprion et al., 2002). As an alternative, Shroff and colleagues (2015) found that the interpretation and understanding of, and engagement with, research (i.e. all positive KT-D outcomes) across different geographical contexts (including Argentina, Bangladesh, Cameroon, Nigeria, and Zambia), improved following regular researcher-hosted forums for connecting researchers and health policy makers. Interestingly, Crowley and colleagues (2018) found that both in-person meetings and web conferencing were important mechanisms for achieving dissemination; the latter, in particular, was found to be helpful in encouraging more remote networking and addressing any time or resource constraints for researchers and policy makers. This is particularly relevant, at present, in the context of the COVID-19 pandemic which has led to a huge increase in remote working across many countries (Kylili, 2020).

For policy audiences, one-on-one individual meetings with researchers have been shown to be an effective means by which to communicate ideas on a particular issue (Brownson et al., 2018). In addition, Kothari et al. (2014) found that findings conveyed directly to policy makers by means of more intimate seminars or interactive roundtable formats, helped to stimulate their thinking, broaden their knowledge, and contained content which was considered to be directly applicable to their work. For instance, a one-day deliberative dialogue - carried out between researchers and KUs (including health decision makers) (*n*=35) to discuss public health road safety in Burkina Faso - led to a number of important KT-D outcomes; these included generating new knowledge between KUs, creating a mutual understanding, increasing access to evidence and promoting positive attitudes toward research (McSween-Cadieux et al., 2018). The decision makers who were present, also considered the evidence to be useful and actively engaged in 'post-workshop' collaborations. However, a key challenge with conducting deliberative dialogues is stakeholders having insufficient time to plan and prepare to take part in the dialogue (Ridde & Dagenais, 2017). As highlighted in Chapter Two, KUs and KPs often report a lack of time to effective engage in KT-D (e.g. Tricco et al., 2015).

Overall, the evidence suggests that research findings presented by means of face-to-face discussions between KPs and KUs, were perceived to be more relevant and engaging than didactic content alone or printed documents. Web-based resources, such as a websites, may also be helpful, although a study by Hawkes and colleagues (2016) found that these were only useful for health policy makers (in this instance in a number of low-income countries, including Bangladesh and India) when supplemented with face-to-face interaction and discussions. This raises interesting questions about the utility of websites and the resources often invested in developing and maintaining them, in an effort to reach and engage with a wide range of target audiences.

Policy makers themselves may also need specific knowledge and skills to access, appraise, and apply research evidence in their work. As a result, training workshops have been identified as a suitable strategy for enhancing research skills and knowledge in this group (Haynes et al., 2018). For example, a one-day training workshop carried out by researchers with health policy makers (n=43) in Nigeria, helped to enhance policy maker capacity for evidence-informed decision-making and for developing policy briefs as well as building trust and improving relationships; a post-workshop mentoring programme also helped to build on these outcomes (Uneke et al., 2015). This suggests that longer-term supports are needed to maximise the positive outcomes from once-off training workshops. Another study by the same authors, found that a three-day workshop with maternal and child health policy makers led to increases in (self-reported) understanding of KT (e.g. iKT, EoG KT, models) and enhanced future relationships with researchers (Uneke et al., 2018b). Interestingly, Uneke and colleagues (2018a) went on to evaluate a novel 6-month programme involving twice weekly meetings between researchers (n=10) and policy makers (n=10) in each others' organisations. This was found to be a useful capacity-building exercise as it helped to increase participants' understanding of different contexts whilst also fostering closer professional relationships. However, it is unclear if the same positive outcomes would have been achieved if the programme had been carried out over a shorter period of time or indeed what may be the optimal time period.

Overall, it seems that KUs value the opportunity to engage with researchers in workshop settings and can share the learning thereafter within their working environment (Wathen et al., 2011). Such training/capacity-building can increase policy maker knowledge and applied skills in accessing, interpreting, and applying research, all of which are important outcomes in the CMO configurations described here (Figure 4.7).

4.4.4 Role-based KT-D Strategies for Policy Makers

Policy makers may also harness external expertise to assist with research dissemination. A review conducted by Dobbins and colleagues (2009) found mixed evidence of the effectiveness of knowledge brokers in terms of promoting evidence-informed decision-making in health-related fields. However, research conducted with policy makers (*N*=49) in Fiji - in relation to obesity - highlighted the important role of knowledge brokers (Waqa et al., 2013). The brokering process facilitated the development of evidence-informed policy briefs, and enhanced knowledge, new skills and confidence in term of searching for, appraising, and applying research. In addition, three public health departments in Canada that utilised knowledge brokers to facilitate workshops, small meetings and presentations, reported increased capacity at an individual employee level in terms of improvements in skills and knowledge in identifying and assessing evidence (Traynor, et al., 2014). Knowledge brokers can also enable policy makers to access diverse sources of research, enhance the value of the evidence shared with policy makers, and facilitate linkages and exchanges (Campbell et al., 2011). Another example from Hopkins and colleagues (2018) found that policy makers (*n*=56) in the USA utilised knowledge brokers to facilitate their access to diverse sources of research through person-to-person exchanges. The literature reviewed as part of this synthesis suggests that in the 10 or more years since the Dobbin et al study, there is more evidence to support the effectiveness of knowledge brokers with policy makers in the dissemination process.

4.4.5 Summary of the Policy Context

Figure 4.7 illustrates the range of mechanisms (or KT strategies) which trigger six key outcomes identified as important in a policy maker context. Media/social media, research summaries, conferences, web resources, and knowledge brokers were all important mechanisms for increasing awareness (and visibility) amongst policy makers, thereby facilitating greater access to evidence. Other important outcomes, such as understanding research evidence and developing skills in accessing and interpreting evidence, were triggered primarily by networking KT-D strategies (including training/capacity building and meetings), research summaries and the use of knowledge brokers. Social media, training workshops, knowledge brokers, conferences and meetings further helped to facilitate engagement between KUs and KPs - another important outcome with regard to enhancing the possibility that research findings will be understood and used in decision-making. The findings demonstrate further that the media, social media, and capacity-building training helped to inform policy decision-making whilst meetings were also key in terms of helping policy makers to value research evidence more. Knowledge brokers can also play an important role in enhancing policy maker confidence in accessing and applying evidence.

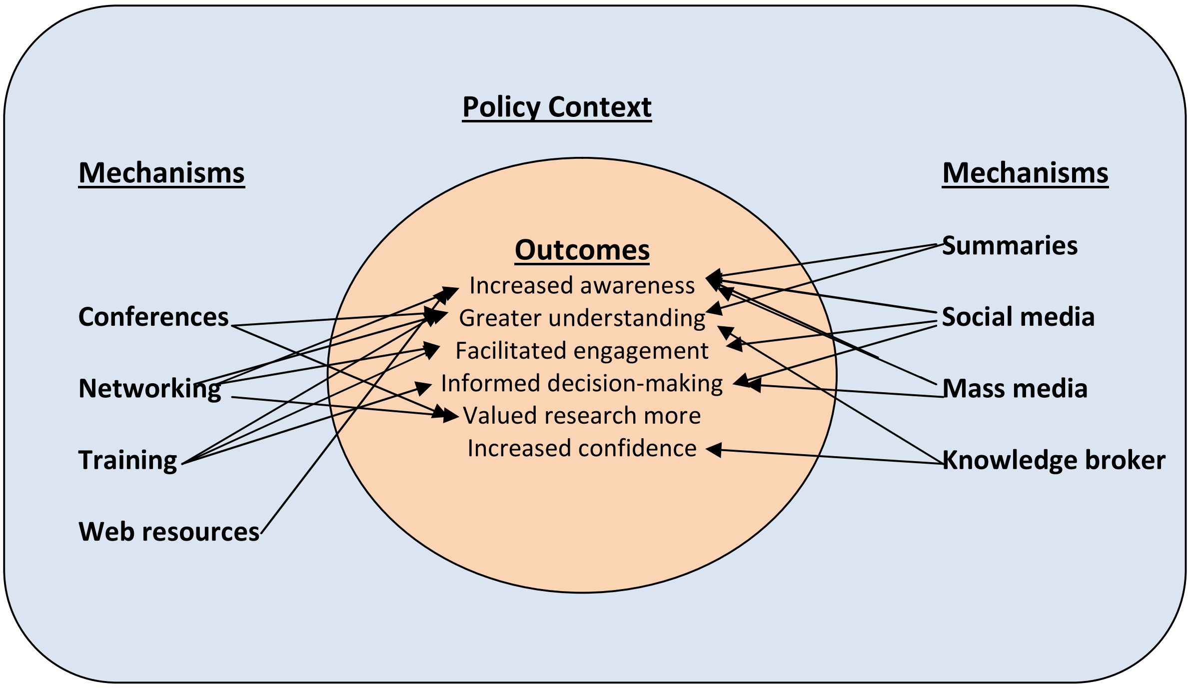
In summary, the findings indicate that increased awareness, understanding and engagement, are the primary KT-D outcomes identified within the literature. Unsurprisingly perhaps - given the value placed on communication and collaboration between KUs and KPs throughout the KT literature (Moore et al., 2017) - networking KT-D strategies, KT training workshops and social media appear to provide the three most useful means of achieving KT-D outcomes in a policy context.

4.5 The Practice Context

As mentioned earlier, most of the literature on KT-D strategies, focuses on practitioners and policy makers and while there is considerable overlap between the two, it is important, nonetheless, to identify and explore the mechanisms and outcomes that apply specifically to the practice context (Figure 4.8).The practitioners included in the synthesis studies (*n*=32) worked in the community, as managers, nurses, doctors and clinicians. The most common practitioner group investigated was Public Health Nurses (*n*=12).

Figure 4.8

CMO Configurations for the Policy Context



4.5.1 *Educational KT-D Strategies for Practitioners*

As with policy makers, peer-review publications are not commonly used by practitioners (Dobbins et al., 2009; Grol & Grimshaw, 2003). The evidence suggests that clear language research summaries are more helpful in enabling practitioners to ‘connect’ to research (Dobbins et al., 2007; Phipps et al., 2012). For example, targeted booklets were shown to increase knowledge and change (self-reported) attitudes toward research amongst nurses (*n*=92) in the UK (Kirshbaum, 2008). Likewise, a research team in Canada found that the use of research abstracts had improved research awareness in a large sample of nurses (n=488), whilst also enhancing their communication, and perceived value, of research (Doran et al., 2010).

4.5.2 Technological KT-D Strategies for Practitioners

Various online tools have been, and are currently being, utilised within practice contexts to support KT-D goals, all of which are becoming increasingly technologically sophisticated. For example, approximately 10 years ago, Dobbins et al. (2009) reported that posting information on a project website and conveying information directly to KUs via email, helped to increase research awareness (an important KT-D outcome) within community-based services aimed at improving child health in Canada. More recent research has shown that health practitioners and service providers are utilising social media tools that encourage public engagement with, and more rapid communication of, research evidence. This is nicely demonstrated in work undertaken by Martin and colleagues (2019) in Canada, in which multimedia tools such as Twitter, Facebook, blogs, podcasts, and infographics were used to increase exposure to, and knowledge of, new research amongst physicians (*n*=112). Medical students have also been found to increase their knowledge through the use of podcasts or videos (Chan et al., 2020). Access to web-based tools (e.g. webinars, Youtube) are also useful mechanisms to access evidence, increase awareness of research (positive KT-D outcomes) and enable practitioners to learn how research is applicable to their work (Bumberger, 2012; Doran et al., 2010; Hawkes et al., 2016; Van der Heide et al., 2015).

Other research has investigated differences (or lack thereof) between health care professionals. For example, one study by Crick and Hartling (2015) found no differences in the comprehensibility of research presented using infographics or as a standard research summary to nurses and physicians in Canada (*n*=58), although infographics, while considered more aesthetically appealing, were seen as less comprehensive. Similarly, another research team in Canada found that there was no differences in terms of information retention amongst health care professionals (*n*=112) when presented with infographics versus text-only research summaries, albeit there was a greater preference for, and lower cognitive load, from infographics (Martin et al., 2019). Both of these studies suggest that infographics may provide a useful alternative to traditional text-only research abstracts, in providing healthcare professionals with brief accessible and user-friendly summaries of research findings. However, it is questionable as to whether their benefits justify the typically greater investment of resources involved in their preparation.

4.5.3 Networking KT-D Strategies for Practitioners

Research conducted in the UK has highlighted the importance of personal contact between researchers and health service providers in order to improve the relevance, understanding and credibility of research and also to help build individual capacity to use research (Morris et al., 2013). Indeed, a review of 81 studies that included nurses, pharmacists, GPs, and community-based care in the USA, Europe, Australia, Indonesia, and South Africa, found that educational meetings which incorporated mixed interactive and didactic formats, were more effective than more traditional approaches (Forsetlund et al., 2009).

As described earlier, conferences and workshops are popular with researchers, but they have, also, traditionally, provided effective ways of imparting knowledge to practitioners

(Dobbins et al., 2009; Grol & Grimshaw, 2003). Likewise, a small number of studies in low and middle-income countries have demonstrated that frequent interactions during seminars, between researchers and both health practitioners and managers, helped to increase practitioner research capacity and were useful for discussing prominent issues (Hawkes et al., 2016). These interactions were also supplemented through the use of web-based resources.

More specifically, and as is the case with policy makers, a deliberative dialogue format has been found to be useful for: enhancing knowledge and relationships between KPs, KUs and health practitioners; increasing access to evidence; promoting positive attitudes towards research; and encouraging post-workshop collaborations (McSween-Cadieux et al., 2018). Furthermore, communities of practice have been used successfully, for example in Canada, to more effectively link KUs and to promote more successful engagement with research/researchers (Kothari et al., 2005). One particularly interesting example of this approach is described by Langlois and colleagues (2016) who found that a community of practice of maternal healthcare professionals (*n*=221) in Mexico and Nicaragua, helped to build the capacity of KUs to identify and use evidence, whilst exchanges and collaborations were advanced through social media interactions. This again illustrates the value of engaging in a number of simultaneous KT-D strategies. Another advantage of communities of practice is that they can still produce positive KT-D outcomes when carried out online/remotely. For instance, a global community of practice for student nurses in 160 countries with 4000 members worldwide, was found to be helpful in sharing knowledge, facilitating access to information and promoting engagement (Gresh et al., 2017). Likewise, a smaller study, also of a community of practice of nurses (*n*=8) in Canada, demonstrated clear benefits of utilising webinars to discuss best practice and engage in reflective learning (Kothari et al., 2015).

In terms of capacity-building workshops, a number of consistent findings have been reported across both low and high-income countries. Several studies have shown that practitioners in low-income countries such as Bolivia, Mexico and Nigeria, reported that research capacity-building training taught them how to work as part of a public health team, resulting in a greater understanding and empowerment to utilise research findings, whilst also improving their overall decision-making – all important KT-D outcomes (Pappaioanou et al., 2003; Uneke et al., 2012; Uneke et al., 2018b).

Pierson and colleagues (2012) argued that health practitioner skills development/training (e.g. to help synthesise research and carry out more rigorous literature reviews) is critical for building their capacity to source and critically appraise research. For example, Gerrish & Percy (2014) found that nurse clinicians (*n*=14) and healthcare managers (*n*=7) in the UK, developed a number of KT skills following their participation in a workshop including the application of KT frameworks to research projects in which they were involved, as well as skills in evidence appraisal and evaluation. Similar findings were reported by Jansen & Hoeijmakers (2013) from their evaluation of a research skills workshops for public health practitioners (*n*=14) in the Netherlands; a series of structured sessions were found to result in closer collaboration amongst KUs, as well as increased research knowledge and skills and greater confidence and competence in using research findings – all of which are positive KT-D outcomes. The kinds of research skills which were developed, included developing research proposals and critically appraising scientific research for practice and policy purposes. However, the authors identified two crucial facilitating factors in this regard – namely a supportive organisational environment and researcher supervision/mentoring. Therefore, additional supports were required to supplement the learning from the workshops.

There are a number of questions raised in the literature around the duration and ‘sustainability effect’ of the skills acquired in training workshops. For example, while

Yostand colleagues (2014) found that while a group of Canadian nurse workshop attendees (*n*=51) developed knowledge and skills to access, interpret and apply evidence, the use of this evidence in their decision-making declined in the longer term. However, by contrast, health and community service providers and women's advocates (*n*=75), also in Canada - who attended workshops alongside researchers - developed strong personal connections and engaged in the sharing of research findings with policy makers following the workshop; notably, these positive KT-D outcomes were still observed at 3-month and 6-month follow ups (Wathen et al., 2011). Therefore, studies have shown that capacity-building workshops can produce effective KT-D outcomes but a supportive organisational culture and ongoing engagement with researchers can help to maximise these positive outcomes. Furthermore, KT training workshops have been introduced into postdoctoral training for nurses (Santecroce et al., 2018). This demonstrates an attempt to promote a culture of KT and evidence utilisation amongst practitioners early in their careers.

4.5.4 Role-based KT-D Strategies for Practitioners

Accessing external expertise such as knowledge brokers - as in the case of the policy makers - can also assist practitioners in clinical decision-making. For example, Russell and colleagues (2010) completed a Canadian study of a sample of child physiotherapists (*n*=122) who employed a knowledge broker, demonstrated self-reported and sustained (12-mth) increases in knowledge about evidence-based tools. However, some of the same issues apply here as with training workshops, in the sense that a number of supportive or facilitating factors already need to be in place for optimal effectiveness, such as positive organisational attitudes and culture.

4.5.5 Arts-based KT-D Strategies for Practitioners

Arts-based KT-D has been explored more in practice than policy settings. For example, Gray and colleagues (2003) developed a dramatic production based on a series of ‘human interest’ vignettes about cancer research, which was subsequently presented to a sample of Canadian nurses and care staff (*n*=26). Following the production, participants reported having developed new levels of understanding and awareness of the existing evidence as well as having used research findings to engage service users. In addition, a US-based study by Lapum and colleagues (2014) involved transforming interviews and journal entries on the experience of surgery and recovery, into an exhibition of poetry and photographs. Subsequent focus groups (*n*=34) and on-the-spot interviews (*n*=26) with practitioners and educators, found that the exhibition produced valid and meaningful representations of the research, encouraged self-reflection, and helped to convey the perspectives of the patients clearly to the health care professionals. However, whilst these studies illustrate more novel and creative ways of promoting positive KT outcomes, albeit only in practitioner contexts, the approaches require a considerable investment of time and resources which may pose an important barrier to many KPs.

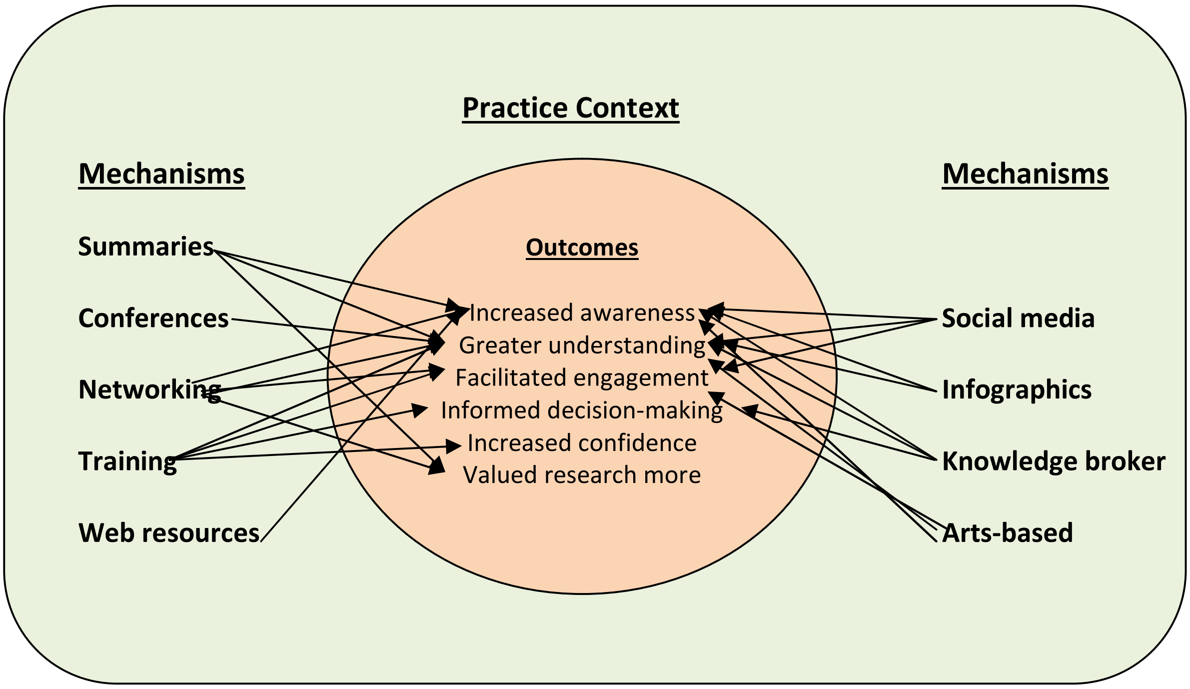
4.5.6 Summary of the Practice Context

A number of mechanisms similar to those described earlier in section 4.4 -were identified in relation to the health practice context - and generated six key outcomes (Figure 4.9).Thus, research summaries, web resources (e.g. websites, Youtube and emails), social media, infographics, podcasts, knowledge brokers, and dramatic productions have all been found to increase the awareness of, and access to, evidence amongst health practitioners. The use of infographics, social media and knowledge brokers are also important in promoting a better understanding of research evidence, as are other approaches such as research summaries, meetings, arts-based approaches, capacity-building/training and conference presentations. In addition, training workshops, meetings and social media helped researchers and practitioners to engage with each other. Knowledge brokering and skills training workshops can also help to guide decision-making for health practitioners. Lastly, practitioners tended to value research more when it was presented at meetings or through research summaries.

In summary, as with the policy context, increasing awareness, understanding and engagement are the primary KT-D outcomes achieved amongst practitioners. The collective evidence suggests that networking KT-D strategies (e.g. meetings and communities of practice), training workshops and social media, were most effective in terms of promoting these outcomes (similar to the policy context).However, research summaries, knowledge brokers, and arts-based approaches also play a role and appear to be particularly effective for KPs who engage with practitioners. Furthermore, the use of graphics and imagery in the form of infographics and arts-based methods, appear to be favoured more by practitioners than policy makers. Further research might explore variations amongst practitioner subgroups, given the wide range of professional roles, backgrounds and disciplines.

Figure 4.9

CMO Configurations for the Practice Context



4.6 The Research Context

Researchers are both the creators and users of evidence and while there has been less focus in the extant literature on the researcher's perspective, there are, nonetheless, some interesting insights as to how they prefer to access evidence. These are summarised below– based on 21 studies (see also Figure 4.9).

4.6.1 Educational KT-D Strategies for Researchers

As indicated earlier, peer-review publications are traditionally an effective educational tool by which academic researchers share their findings and impart knowledge and especially amongst academic audiences (Hanneke & Link, 2019). However, Phipps and colleagues (2012) found that researchers also have a preference for plain language research summaries when accessing evidence - most probably reflecting demands on their time. Nonetheless, there are few evaluations in the literature that explore how researchers utilise research summaries to source evidence. This might be due to the fact that researchers are viewed more as KPs than KUs.

4.6.2 Technological KT-D Strategies for Researchers

Web-based dissemination efforts by researchers have also been shown to improve and speed up access to information for others working in the research field (Ho et al., 2004). As described within the policy context, social media can help to increase engagement between researchers and other KUs (e.g. policy makers) (Tripathy et al., 2017). Further evidence suggests that researchers are also increasingly utilising social media (as well as Youtube and infographics) not only to share and access evidence, but to connect with KUs both within and outside of academia (Bumberger, 2012).

4.6.3 Networking KT-D Strategies for Researchers

In terms of accessing evidence, conference presentations are an effective and long-established means of sharing knowledge within the academic community (Grimshawet al., 2012). These illustrate well how researchers are both the contributors and the recipients of evidence. As highlighted throughout this chapter, personal contact and networking between KUs and KPs are crucial for increasing the likelihood of achieving KT-D goals (McVay et al., 2016). This also helps to promote trust between KPs and KUs and can lead to future research collaborations (Boydell et al., 2017; Grimshaw et al., 2012; Kothari et al., 2014).

There is some overlap here, between the findings pertaining to a policy and practice context and those from a research perspective. For instance, a deliberative dialogue workshop created mutual understanding between KUs (n=35) and encouraged post-workshop collaborations in a study conducted in Burkina Faso (McSween-Cadieux et al., 2018). Likewise, a community of practice established for maternal health researchers (n=221), helped to facilitate exchanges and collaboration with KUs (Langlois et al., 2016). Short and long-term workshops/secondments also helped to develop professional relationships between researchers and KUs (i.e. policy makers and practitioners) (Uneke et al., 2018a; 2018b).Thus, researchers, as well as KUs, can benefit considerably from networking KT-D strategies.

A recent study by Crowley and colleagues (2018) showed that the use of web conferencing can be useful in encouraging dissemination to researchers, while researchers can also derive considerable benefit from participating in capacity-building workshops to develop dissemination skills (Haynes et al., 2018). However, capacity-building interventions for health researchers appear to be less well-developed and researched than programmes/initiatives for other KUs, such as policy makers (Cairney et al., 2016). However, there has been an increasing number of studies exploring this topic in recent years and this may be due, at least in part, to the increasing emphasis on the importance of KT planning by researchers and the collaborative effort needed for effective dissemination (Cambon et al., 2017).

A number of studies have demonstrated the benefits of training workshops for researchers. A recent study undertaken in Australia, reported positive findings from KT-D capacity-building efforts for researchers, including increased levels of self-reported confidence with regard to promoting awareness of, and engagement with, their research findings/outcomes (Tait and Williamson, 2019). These are important outcomes for researchers (Figure 4.9). One evaluation conducted by Jones and colleagues (2015) found that Australian researchers rated a training course highly for usefulness, and that it increased their understanding and confidence in KT theory and planning, as well as building researchers' skills. In addition, academics (*n*=8) working in health research in Canada who attended a two-day workshop, reported increases in their individual understanding of KT, whilst also indicating that the event had helped to foster the learning experiences of other group members (Bhogal et al., 2011). A research project also undertaken in Canada and involving a four-day KT capacity-building event for early career health researchers (*n*=30), was found to facilitate interpersonal relationships between participants and future KT training opportunities (Kho et al., 2009).

More specific skills can also be acquired through these kinds of training initiatives as demonstrated by Gerrish & Percy (2014) who found that UK-based academics developed post-workshop KT skills such as using KT frameworks and applying these to their research, something that it appears, is not routinely a part of most research endeavours. Some of these KT training initiatives included a range of KPs and KUs. Indeed, an interesting study by Park et al., (2018), involving the participation of clinicians, researchers, health care managers, and policy makers (n=62) in a 'three-element' KT training initiative - based on several tailored in-person workshops, coaching and an online training platform - led to increased understanding of, and confidence in, using KT (e.g. in project objectives and planning) as well as knowledge sharing with colleagues, up to 24 months after the workshop. This again highlights how longer-term (rather that one-off) supports can facilitated positive KT-D outcomes and also how researchers with different disciplines and backgrounds may learn from each other.

4.6.4 Role-based KT-D Strategies for Researchers

Little research has examined role-based KT-D strategies for researchers, but similar to the capacity-building workshops, harnessing external expertise can be useful in supporting and guiding researchers on how to effectively communicate and share their research findings with intended KUs. This role would typically include the provision of external public relations or communications expertise and would normally require an investment of resources which would have to be factored into a research funding application. This may pose a significant barrier for many researchers, but nonetheless, there is some evidence to show that knowledge brokers can help researchers to understand how best to approach and engage with other KUs, such as decision makers (Cvitanovic et al., 2017).However, the limited evidence from the wider literature makes it difficult to draw any firm conclusions in this regard.

4.6.5 Arts-based KT-D Strategies for Researchers

Lastly – and as with practitioners above, some KPs have successfully used arts-based approaches to better communicate their research aims and key messages. For example, Lapum and colleagues (2014) transformed interview data and journal excerpts from patients into poetry and photographs. These poems and photographs were displayed to a sample of health professionals including student researchers, and this method encouraged more meaningful representations of the research, greater self-reflection, and helped to more clearly convey the patient perspective to health care professionals and researchers. Again, as with other KT-D strategies e.g. research summaries, there were few studies in the literature evaluating the researchers' experience of art-based methods.

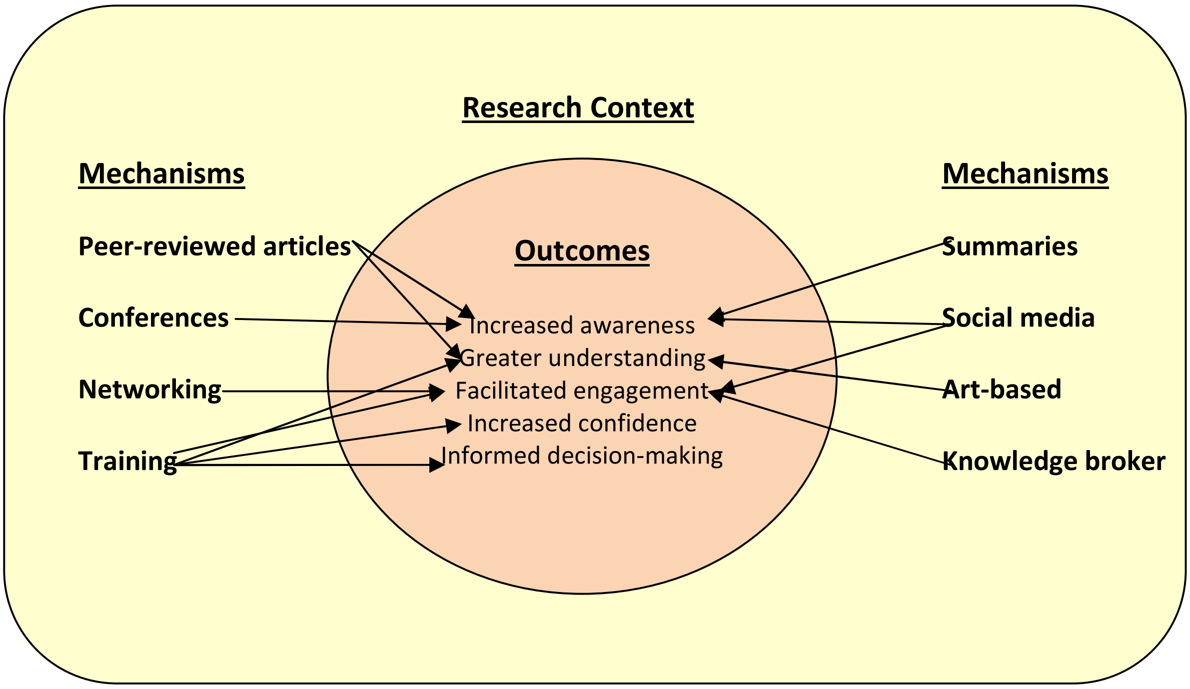
4.6.6 Summary of the Research Context

In summary, five key KT-D outcomes were identified as important for researchers (Figure 4.10). Conference presentations, research summaries, peer-reviewed journal articles and social media are the most common ways used by researchers to increase awareness and impart knowledge of their research findings/evidence. Participating in dissemination training workshops also provided researchers with a greater understanding of how to more effectively disseminate evidence. Networking KT-D strategies, as might be expected, helped to enhance engagement and relationships between researchers and other KUs, as did the use of social media and training (and to some extent also knowledge brokers). Training also helped to build confidence and promote knowledge sharing.

Finally - and as with both the policy and practice contexts - increasing awareness, understanding and engagement are the primary KT-D outcomes identified from reviewing the literature. The most commonly reported means of achieving these (in no particular order) included peer-reviewed papers, networking, training workshops and social media.

Figure 4.10

CMO Configurations for the Research Context



4.7 The Service User Context

As with researchers, the use of KT-D strategies with service users (in particular with children and families) or the general public/service users has been explored much less than with policy makers and practitioners. There were 7 studies included in this synthesis that explored the general public/service users. This is, in itself, interesting given that much research is aimed at this KU group. However, this appears to be changing within the health sector and there are now an increasing number of studies that include service users as an integral KU and as central to KT-D strategies aimed at building awareness and maximising the impact of research (Davis, et al., 2012; Ocloo, et al., 2016). For example Sharpe and colleagues (2013) worked closely with nursing staff and patients to create culturally appropriate brochures for clinic use with an American-Indian sample of women (*n*=32).This echoes the increasing recognition, within family-focused services and supports, of the need for public and service user involvement in service development and evaluation (Katharine Howard Foundation, 2018), as well as an increasing acknowledgement of the importance of engaged research where all stakeholders – including service users - are encouraged to participate in various stages of research design and execution (Campus Engage, 2016; INVOLVE, 2020). Some of the KT-D strategies relevant to service users are discussed below (Figure 4.11).

4.7.1 Educational KT-D Strategies for Service Users

Mass media campaigns (on television, radio, and in newspapers) have led to increased awareness of health messages amongst service users and the general public (Wakefield et al., 2010). An excellent example of the use of educational KT- strategies and the benefits of engaging with service users/the general public, is described by Nyirenda et al. (2016) who describe an interactive health-talk radio programme discussing topics such as drugs and health behaviours presented on a Malawian national radio station (n=477), developed through participatory community consultations. The researchers found that this approach increased exposure to, and knowledge of, medical research and health whilst also dispelling misconceptions in resource poor settings. Other strategies, such as research summaries also appear to be an effective means of sharing evidence with service users and particularly if presented in plain and simple language (Schipper et al., 2016).

4.7.2 Technological KT-D Strategies for Service Users

Most of the social media studies in the literature that were targeted at the general public and/or patients aimed to increase awareness and engagement with health information. For example, Kim and Vender (2014) found that public health patients engaged well with patient-centred groups on Facebook. Likewise, a review of 145 posting from 17 Facebook groups discussing concussion (that primarily included North American males) revealed how the groups were primarily used for peer support (Ahmed et al., 2010).Therefore, Facebook appears to be useful for engagement between service users rather than with other KUs or KPs. Moorhead and colleagues (2013) described the benefits of other social media sites (such as Twitter)for service users that included increased access to information. However, Hand and colleagues (2016) found that practitioners – who use social media to source information for their own work - are reluctant to communicate with patients via social media, particularly due to privacy concerns. This might impede engagement between service users and other KU groups and researchers.

4.7.3 Networking KT-D Strategies for Service Users

As with the other key KU groups, networking KT-D strategies with service users/the general public can help to create mutual understanding between KUs and produce more relevant and tailored evidence (Katharine Howard Foundation, 2018; Ndlovu et al, 2016).For example, an interesting study by Klitz and colleagues (2008) – involving a panel discussion between 18 public health patients (mainly from Europe (n=17)) , and practitioners - showed that the arthritis patients had a better understanding of a document outlining care recommendations whilst this event had also helped to inform and disseminate the recommendations. In addition, palliative care researchers in the UK carried out a collaborative with individuals who had a cancer diagnosis (*n*=8) to design and conduct research. The outcomes included new knowledge and skills and increased confidence for the individuals whilst also improving the value of the research through the combined perspective (Froggatt et al., 2015). Therefore, networking KT-D strategies can produce mutual benefits for both researchers and service users.

4.7.4 Arts-based KT-D Strategies for Service Users

Arts-based KT-D strategies (as in the case of practitioner and research contexts) can be a useful, albeit little-used approach with service users, most probably because of the potentially significant resource implications. For instance, former heart surgery patients and family members found that their attendance at an exhibition of research poetry and photographs (at a qualitative research conference in the United States and in a hospital in Canada) had encouraged helpful self-reflection (Lapum et al., 2014). Another interesting example, described by Sinding and colleagues (2006), involved presenting a drama on breast cancer research to a public audience (*n*=396); the researchers reported that almost all of the attendees benefitted from seeing the drama, would recommend it, and that the content helped to normalise the condition. Thus, despite the small number of studies in this regard, there are signs from the literature that these approaches can not only promote KT-D but may also have spin-off benefits in terms of how the general public/service users might perceive research.

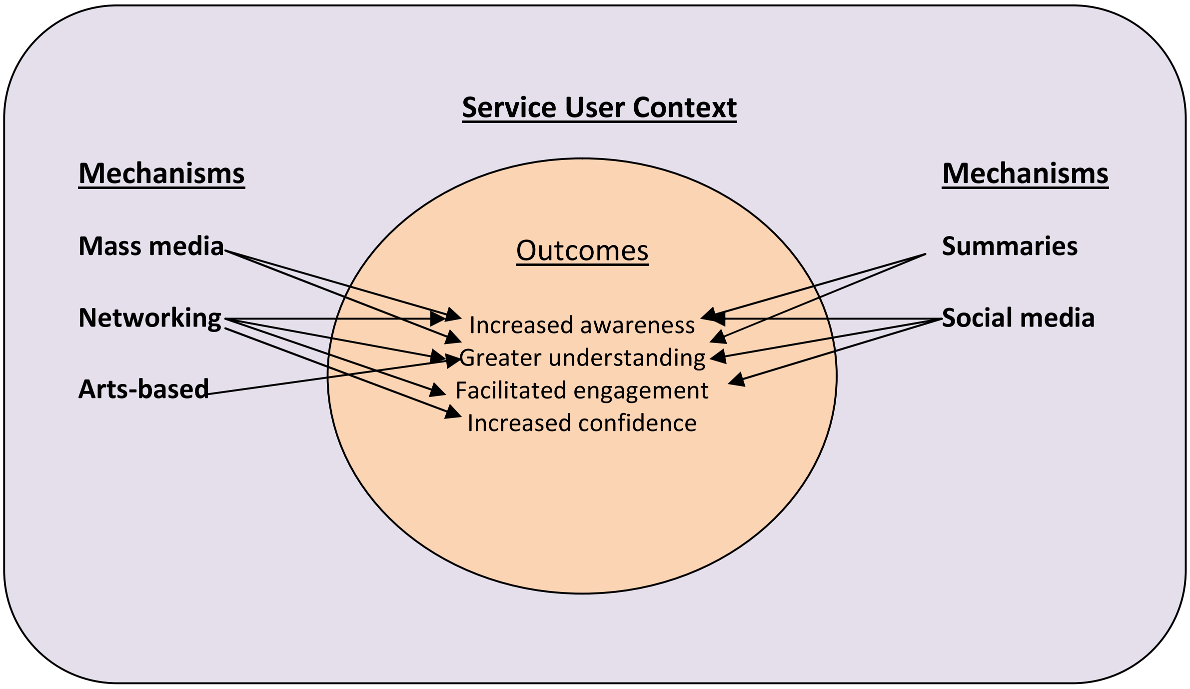
4.7.5 Summary of the Service User Context

The collective findings here suggest that, as with all other groups, the three KT-D outcomes are greater awareness and understanding of research as well as engagement with researchers. With regard to the first of these, research summaries, mass media, and networking have been reported to be helpful mechanisms. All of the strategies discussed here have been reported to be helpful in terms of enhancing understanding of research evidence, whilst engagement with service users/the public is facilitated by both face-to-face interaction and social media.

To summarise, across the contexts of this evidence synthesis, increasing awareness, confidence, understanding and engagement are the primary KT-D outcomes that have been achieved from reviewing the literature. Mass media methods were more effective for this KU group than with practitioners. Social media, research summaries and networking KT-D strategies produce a number of KT-D outcomes as found within the other contexts.

Figure 4.11

CMO Configurations for the Service User Context



4. 8 Conclusion

This realist-informed evidence synthesis was undertaken to better understand, within the relevant contexts, the mechanisms that lead to observed outcomes that support the effective dissemination of public health research to a range of KU audiences. One of the benefits of the realist approach is that it helps to provide a more global view of effective KT-D strategies and a pattern of their potential utility across different contexts. In this way, it helps to provide interesting contextualised understandings of "what works" to enhance public health research dissemination and also what apparently does not work for KU groups.

However, there are also limitations with utilising the realist methodology. There can be challenges in defining 'mechanisms' and distinguishing them from 'context', both of which are tightly interlinked, or other mechanisms may also be in action in these very contexts (Edwards et al., 2019). For instance, existing KU relationships can act as both a context and a mechanism; encouraging collaboration can be both a mechanism and outcome; and improved enhanced engagement may be an outcome while also providing context for further collaboration. It is also difficult to interpret how executing several KT-D strategies within a research study may interact with each other and influence the outcomes (Salter & Kothari, 2014). Many outcomes are overlapping and not mutually exclusive and several mechanisms can also produce a variety of outcomes. However, it is useful for a KPs to learn about the efficiency of certain strategies that may address several outcomes. In addition, as the researcher (SO'C) was the lead appraiser of the articles included in the synthesis, this may have impacted the studies included. Nonetheless, consultations with the supervisory team and the use of the CASP appraisal tool helped to enhance the quality of the findings included.

As already mentioned - and perhaps unsurprisingly - increasing awareness, understanding and engagement are the primary KT-D outcomes identified in the literature which have successfully been achieved with KU groups across all contexts. As mentioned, these outcomes can overlap but within this synthesis, ‘increased awareness’ specifically refers to a KT-D strategy gaining the attention of KUs while ‘increased understanding’ describes a noted advancement in knowledge following exposure to a KT-D strategy. The evidence, when considered as a whole, indicates that KT-D networking strategies and social media are the most effective ways of achieving these outcomes (Figure 4.12). Networking strategies were also the most commonly explored KT-D strategies in the literature and in this evidence synthesis, This reflects the need for better collaboration and communication with KUs to encourage dissemination as already described in Chapter Two (Oliver & Cairney, 2019). Training workshops, as part of KT-D networking strategies, appear to be a particularly important means for policy makers and practitioners, of enhancing their understanding and relevant skills development.

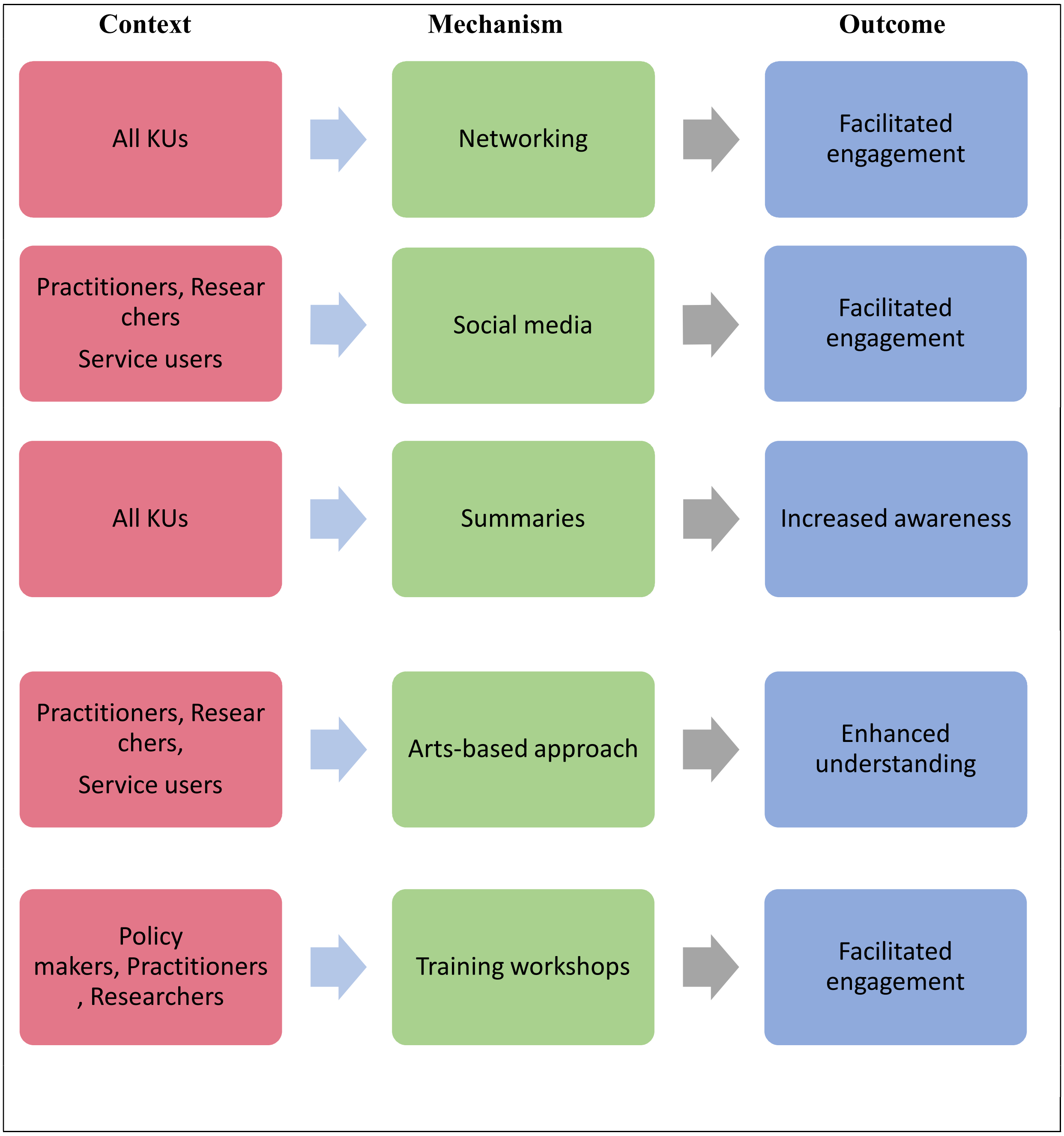
A key question is the extent to which the findings reported here, apply across cultures and jurisdictions. A lot of the studies included in this synthesis were carried out in Canada which strengthens their position as a leader in KT further. However, overall, the findings suggest that similar CMO configurations and patterns were found across low, middle, and high-income countries (e.g. from Burkina Faso to the United States). This suggests that researchers can potentially increase the reach of their research across multiple jurisdictions when they use effective KT-D / targeted strategies for specific KU groups. Also, some of these articles related more to clinical health than public health but, as highlighted by Sibley and colleagues (2017) in Chapter Two, KT-D intervention outcomes tend to be similar across health areas. In terms of practitioner KUs, the impact of KT-D strategies on public health nurses was most commonly investigated. There are limited studies available that explore a variety of public health practitioner roles such as social workers and psychologists. The findings also suggest that some KT-D mechanisms appear better suited to some contexts than others. Peer-reviewed articles are the mainstay in academia, although these are aimed mainly at academic audiences. Importantly however, research summaries are increasingly used by researchers; these also appeal to all KU groups. Infographics appeared to work best in terms of reaching practitioners and service users, whilst policy makers favoured mass media approaches. Arts-based approaches, although more limited, appear to reach all KUs apart from policy makers while knowledge brokers were also utilised effectively across contexts besides service users.

As outlined earlier, the key CMO configuration that emerged across contexts, related primarily to how networking KT-D strategies (meetings, conferences, seminars) facilitated engagement and relationship-building amongst KUs and KPs. However, the type of networking strategy or interaction can differ across KU groups. Specifically, deliberative dialogues appear to provide a useful means of enhancing communication primarily in the policy setting. As might be expected, communities of practice are more commonly found in the practice setting and provide a useful way of connecting KUs in this context. However, there is limited evidence on the efficacy of deliberative dialogues and also little empirical guidance available in the literature on how researchers might manage communities of practice with, for example, a wide range of KUs (Oliver & Cairney, 2019). This can make it difficult for KPs to execute the strategy effectively.

Overall, the collective evidence suggests that networking KT-D strategies that focus on cultivating meaningful interactions and building enduring partnerships between KUs and KPs, can be effective (e.g. Hanneke & Link, 2019).

Figure 4.12

CMO Configurations across Contexts



In addition, nurturing more established relationships between KUs and KPs can be a useful mechanism to improve dissemination outcomes whilst also enhancing the effectiveness of other KT-D strategies such as research summaries (Brownson et al., 2018; Hawkes et al., 2016). Therefore, inter-dependencies and relationships can also exist between the various mechanisms. However, genuine collaboration can be difficult to facilitate and time consuming while enabling KU input into decision-making can also pose challenges. Furthermore, staff turnover can impact KU relationships in the sense that a lack of continuity can cause delays whilst also introducing potential interpersonal issues that were not there previously perhaps (Jessani et al., 2020). However, a relatively recent positive development is the use of webinars and web conferencing to address time and resource constraints for both KUs and KPs (Crowley, et al., 2018); in fact, this is now even more relevant in the context of the current pandemic and the unprecedented increase in remote working (e.g. Kylili, 2020).

Capacity-building workshops were highlighted here across all contexts and the evidence suggests that these play an important role in helping to increase skills, knowledge, competence, and empowerment in accessing research evidence, especially amongst policy makers and practitioners. However, these also have considerable benefits for researchers who may have little expertise in executing varied forms of KT-D. In addition, the use of educational materials in the form of research summaries was found to be an effective means of increasing awareness, promoting engagement, and/or enhancing understanding for all KU groups. Notably, policy briefs –that are developed to target policy makers specifically - were not found to be any more useful for policy makers than general research summaries aimed at all KU groups. Thus, researchers might consider developing one version of a research summary which could effectively be used to target a number of different KU groups, thereby reducing time and resources. Indeed, traditional peer-reviewed journal articles are limited in terms of increasing research visibility for most KUs.

Social media is another effective and increasingly popular KT-D strategy which was used across all contexts. However, mass media (e.g. newspaper articles, radio segments, and TV interviews) appeared to be more successful at raising awareness of research evidence amongst policy makers and service users but less so with regard to practitioners and researchers. This may be due to, amongst other things, a lack of researcher capacity to engage with the media and indeed, this is where knowledge brokers come into their own. Indeed, a key message from the findings reported here, is that knowledge brokering services (to researchers, practitioners and policy makers) can play a key role in enhancing the understanding of research, whilst also building KU and KP confidence in accessing and disseminating evidence as part of the decision-making process; these also play an important role in terms of helping to promote engagement between KUs (policy and practice) and KPs. These experts provide a useful 'communicative bridge' by helping KUs to articulate their needs, expectations and levels of competence in accessing or disseminating research (Darker et al., 2018). However, this is a resource-heavy and time-consuming KT-D strategy which may not always be possible to execute. In addition, there needs to be clearer guidance and more rigorous evidence as to the role of a knowledge broker as the term is used and interpreted very broadly within the literature (Bornbaum et al., 2015). It is also possible that research projects engage with an individual/organisation that act as a type of informal knowledge broker without formally defining this as such. For example, some early intervention and prevention researchers in Ireland work with the Centre for Effective Services (CES) - an intermediary organisation that helps link the research community with policy makers. The lesser known arts-based KT-D strategies may also offer considerable potential in terms of disseminating evidence, although much more research is needed to assess their overall effectiveness (Greenwood, 2019). Indeed, these types of strategies require creativity, skills and resources which are important considerations for KPs.

It is not always a straightforward process to deliver and execute KT-D strategies and available funding and resources are a key consideration (Hawkes et al., 2016; Tricco et al., 2016). Some of the KT-D strategies identified and recommended here, can be expensive and time-consuming to implement (Dew & Boydell, 2017). For example, the development of effective infographics requires time, effort and money to create and publish and, moreover, not every research team will have the skill set required to do so (or access to an experienced infographic designer) (Martin et al., 2019).Social media, on the other hand, is likely to become a more prominent way of sharing evidence (in line with the general public use) and is usually free. Linking social media applications and websites is also a useful strategy to further promote KT-D outcomes; for example, this might involve connecting a webpage to social media, adding a Twitter handle on conference presentations, or including an infographic on a Twitter post (Eljiz et al., 2020; Tripathy et al., 2017). This can 'trigger' the KUs to source further information through a range of KT-D strategies. For instance, Huang et al. (2018) found that promoting research articles using both infographics on social media and a website, increased article engagement and abstract views. However, as social media is a relatively new form of dissemination, there are concerns regarding information reliability and especially in an era of 'fake news' (Giustini et al., 2018). A possible way to navigate this issue is by utilising social media to highlight research and link to a more reputable information source (e.g. research website or peer-review article).

In addition, there are some mechanisms that might not produce the expected outcomes or which may be interpreted differently in a given context due to external influences such as individual beliefs or organisational culture. For instance, individual beliefs about the value of research are considered to be an important mediator of research dissemination, particularly in a policy context; in other words, the greater the value placed on research, the greater the demand for evidence amongst policy makers (Haynes et al., 2018). Therefore, the effectiveness of any particular strategy can depend on the KUs' attitudes toward research. Thus, KPs need to invest time and effort early in the research process to build positive relationships with KUs.

Another important factor which can also constrain or enhance research dissemination, irrespective of individual capabilities, is organisational capacity. Available infrastructure and resources (e.g. library access and other supports) and the underlying research-orientated culture in organisations, research teams or policy departments, can have a significant impact on attitudes and behaviours in relation to research utilisation (Langlois et al., 2016; Peirson et al., 2012). As mentioned earlier, both policy makers and practitioners reported enhanced KT-D outcomes when there was follow-up support on offer (Brownson et al., 2018).For example, a university's goal of greater media visibility - and also the support which they provide in terms of communications supports, media skills training etc.- can influence the media efforts of academic researchers (Marcinkowski et al., 2014). These organisational issues also appear to be as relevant in low and middle income countries, such as India, and Nigeria (Dagenais et al., 2013; Hawkes et al., 2016; Peirson et al., 2012), once again illustrating the generalisability of the many factors that can influence the effective use of KT-D strategies. In addition, these organisational/institutional influences can be more difficult to investigate and tackle as they tend to be embedded within organisations (Edwards et al., 2019). Nonetheless, it has been recommended that contextual factors be investigated through assessing the barriers and facilitators to dissemination that stakeholders experience (e.g. Graham & Tetroe, 2009; Langlois et al., 2016; O'Connor et al., 2020). This can help to determine what kind of KT-D is most useful in any given context, as demonstrated by the KT-D case study which was carried out by the ENRICH programme (see Chapter Six).

In summary, the evidence presented here sheds light on the KT-D strategies and factors that have been shown to have had an impact within the policy, research, practice, and service user domains in order to increase the dissemination of public health evidence. Whilst the literature focuses more on policy-makers and practitioners (e.g. Edwards et al., 2019), other KU groups are increasingly being seen as important to investigate.

The findings in this chapter help to highlight a number of universally effective, potentially generalisable KT-D strategies, as well as ‘domain-specific’ strategies within each group. However, apart from networking KT-D strategies, it is difficult to identify one specific mechanism or strategy that is superior in increasing the dissemination of research. Likewise, not all strategies need to be executed to achieve successful results. Nevertheless, a combination of strategies is likely to be most appropriate and achieve multiple positive outcomes as strategies interact synergistically to shape research dissemination. Many KT-D strategies that have been investigated are complex and evolve over time (e.g. social media); arguably therefore, promoting research dissemination is a work in progress (Haynes et al., 2018).

Overall, these results may be used to guide health researchers when developing KT-D plans or executing KT-D strategies in order to disseminate their research findings more effectively with a specific KU group or across a range of audiences; efficient and targeted dissemination equals better impact and use of resources. These KT-D outcomes can also encourage potential KT-I outcomes in the future such as impacts or changes in policy and practice. In conclusion, ensuring that KUs have the capacity to access research in decision-making is a key priority – and more funding and resources are needed to buttress evidence accessibility and applicability (Haynes et al., 2018; Oliver et al., 2014).

The next chapter critically reviews the role that evidence has played within policy and practice in Ireland over the last two decades.

CHAPTER FIVE: DOCUMENTARY ANALYSIS

5.1 Introduction

The second phase involved a documentary analysis, the aims of which were twofold: (1) to explore, track and critically review how policy and services relating to child and family mental health and well-being (particularly in the early years) in Ireland, have evolved over the past two decades – since the first comprehensive national policy for children in Ireland was developed (in 2000); and (2) to ascertain the extent to which research evidence has played a role in informing or influencing these developments. An understanding of what underpins decision-making around supports for children and families in Ireland, can help to bridge, at least in part, the research-policy-practice gap and can inform KT-D in this context.

5.2 Method

Documentary analysis is a form of qualitative research which is often used to complement other methodologies, such as those outlined in the current research (Hickey et al., 2015). Documents are reviewed and interpreted to try to add meaning to a specific topic under investigation. Documentary analysis is considered an efficient and effective way of gathering data because documents are a usually accessible and a reliable source of data, whilst it also addresses the concerns related to reflexivity inherent in other qualitative research methods (Bowen, 2009). However, it is important to note that documents may not provide all of the necessary information required to answer a research question and, for example, advocating for the use of evidence-based research in a policy document, does not imply implementation in frontline services (O’Leary, 2014). Therefore, it is important to triangulate the findings from a documentary analysis with other approaches, as in the present phase.

5.2.1 Inclusion and Exclusion Criteria

According to Bowen (2009), the quality rather than quantity of documents is paramount. Therefore, the documents selected for this phase were based on the researcher's (SO'C) judgement regarding the trustworthiness of the source, (including discussions with the supervisory team) and relevance to the research question. As highlighted in Chapter Three, it was a limitation that the researcher was the sole reviewer of the documents. However, the documents reviewed in the research were considered trustworthy as there were limited variations available e.g. national children's policies. Most of the relevant national policy documents considered for inclusion were published from 2000 onwards as this was when the first comprehensive national policy for children in Ireland was developed. In order to ensure the credibility of sources, the selection criteria were limited to those documents readily available either online and those which were being held by the ENRICH team. All non-English language documents, and those not relating to an Irish context, were excluded.

5.2.2 Search Strategy

A range of documents was sourced through searches of governmental and key stakeholder websites. Policy documents were retrieved from the webpages of government departments with responsibility for child and family welfare. Other identified documents were relevant to the research objective and/or were compiled by reputable organisations that liaise with government departments, such as the Children's Rights Alliance or The Atlantic Philanthropies. The searches were conducted between July 2016 and July 2020. The search was limited by the fact that some documents may exist, but are not available online, whilst others may have been missed. However, every attempt was made to be as inclusive and as thorough as possible.

Overall, 27 documents were included in this analysis including:

- key national policy documents (*n*=11)
- organisational reports (*n*=11)
- relevant website information and links (*n*=5)

5.2.3 Analysis

A Document Analysis Form (DAF) (Appendix 2) was developed by the researcher based on the research question and previous frameworks (e.g. Fleming, 2018; National Archives and Records Administration, 2017). As informed by the literature, the DAF included a checklist of relevant items (e.g. the purpose of the document, what informed its development). Each document included for review, was first skim-read in line with the inclusion criteria and research question. A thorough review of the documents that were selected for inclusion was then conducted using the DAF to extract relevant information (if available).

5.3 Results

This section is divided into three parts, the first of which provides a broad overview of the development of policy and initiatives relating to children and families during the 1990s in Ireland. Subsequent parts explore and critically discuss how Irish child and family mental health policy and service provision have evolved chronologically since 2000.

5.3.1 Child and Family Policy and Service Provision in the 1990s: A Brief History

During the 1980s, the Irish government began to take a more proactive approach than in previous years, to support child well-being within the family unit. For example, a dedicated Task Force on Child Care Services was established in the 1970s by the then Department of Health (DOH) to examine and make recommendations on all aspects of children's services (particularly children at risk) and to inform long-awaited child legislation and related services (Devaney & Gregor, 2017). The subsequent Task Force Report recognised, for the very first time in the State, that "the welfare of children in general is inseparable from the well-being of families and therefore social policy should begin with families" (Department of Health [DoH]1980, p. 38). This report also reported a lack of inter-departmental cooperation and this was reflected in the service delivery for children.

This report was influential in shaping the *Child Care Act* (DoH, 1991) - a key piece of legislation launched at the start of the '90s to protect the welfare of children. This Act was also influenced by similar children's legislation such as *1989 Children Act* in the United Kingdom (Featherstone, 2004). The *Child Care Act* highlighted for the first time the value of family supports in promoting child welfare. However, as noted by Gilligan (1995), this Act lacked clarity and detail around what constitutes family supports and services. Therefore, this shows how both national and international evidence were informing the development of child policies and there was an emerging focus on promoting child well-being within the family unit, it is unclear how these policies aimed to shape frontline services.

By 1992, the now well-known *UN Convention on the Rights of the Child* (UNCRC) was ratified by Ireland; this involved most countries around the world pledging to advocate for children's rights (Children's Rights Alliance, 2010). This global commitment to meeting the needs of children was realised in Ireland through a range of relevant policy documents and initiatives as well as the establishment of several key organisations, and bodies, many of which are still in existence today. For example, in the mid-1990s, the Children's Rights Alliance (CRA) was established to campaign for the rights of all children in Ireland through laws, policies, and services and to review the Government's progress in relation to policy promises (www.childrensrights.ie). This made the State more accountable for their actions in relation to nurturing children across the country. Around the same time, the Commission on the Family was set up (1995-1998) by the Minister of Social Welfare to provide a comprehensive review of family life in Ireland. Their final report titled '*Strengthening Families for Life'* (Department of Social, Community and Family Affairs [DSCFA], 1998) gave a key recommendation therein to support these families particularly in disadvantaged communities by substantially increasing expenditure and resources (McKeown, 1999). This was a welcome proposal because as the Commission acknowledged at the time: "there is almost no state investment in the care of children in the years before entry into primary school" (p. 63).

Following this report, in 1998, the Irish Government launched Springboard -an initiative that included the setting up of 15 family support projects and 100 family and community centres in disadvantaged areas throughout the country (McKeown, 2001).This commitment was a direct response to a recommendation from the report of the Commission on the Family - an excellent example of how a document can directly inform the provision of services. Importantly, the DoH also changed its name around this time in 1997, to the *Department of Health and Children* (DHC), indicating a seismic shift in the Government's commitment to children and the importance of assigning this separate responsibility within the Department (O'Dwyer, 1998).

One of the key publications launched subsequently by the DHC, was *Best Health for Children - Developing a Partnership with Families* (DHC, 1999), which focused, for the first time in 30 years, on child health services in Ireland. A central plank of this policy emphasised the need for prevention and early intervention (PEI) parenting support to optimise child well-being outcomes. However, one of the most significant policy advancements and a key milestone for children and families in the 1990s, was the publication of *Children First* in

1999.This document highlighted, for the first time in an Irish context, that "early intervention and support should be available to promote the welfare of children and families" (DHC, 1999, p. 23). The comprehensive National Guidelines for the Protection and Welfare of Children contained therein were underpinned by international research and domestic data on reported child abuse cases, and constituted an important step for family support services and organisations charged with safeguarding children. At the same time, the Family Affairs Unit was established within the DSCFA in order to help integrate family policy and to undertake research in this area with a view to promoting an evidence-led approach.

Thus, throughout the 1990s, there was a growing emphasis in Ireland on the importance of the early years and family life. Decision-making in relation to child welfare was primarily based around international practices and evidence. By the late 1990s, the implementation of large-scale international PEI programmes, such as Sure Start in the UK (e.g. Glass, 1999), and Head Start in the USA and Australia (e.g. Burchinal et al. 2009), provided an important impetus for research. This led, over a number of years, to the development of a strong evidence base that showed that the experiences in the first three years of life are critical to children's long-term development (e.g. Barnett, 1995). However, at this stage Ireland was not emulating the efforts of many other countries in terms of producing high-quality evidence on child and family well-being.

5.4 A Chronological Overview of Policy and Practice Developments Relating to Children and Families in Ireland

5.4.1 2000 – 2004: Early Developments

As outlined above, it is clear that by the late '90s, the Irish government was beginning to prioritise child well-being and positive family life. However, a real and meaningful shift in policy and practice thinking did not take place until the turn of the century when a succession of national policy documents and initiatives were developed, all of which underscored the importance of evidence-based interventions for children and families. This was consistent with other international policies at the time, such as *Every Child Matter* (2003) in the UK, *Promoting Safe and Stable Families Amendments of 2001* in the United States, and the *Children and Young Persons (Care and Protection) Act 1995* in Australia.

The most significant of these Irish policies, was the *National Children's Strategy: Our Children - Their Lives* (DHC, 2000) which was the first comprehensive national children's policy to clearly express a commitment to the 'whole child' by empowering families and communities through integrated service delivery and a 'whole-of-Government' approach. The publication of this ten-year Strategy was a major step in progressing the implementation of the UNCRC and put Ireland on more of an equal footing with other developed countries in terms of child welfare. The development of this strategy drew on international evidence relating to child health, well-being, and development as well as extensive consultation with cross-government departments, statutory and voluntary agencies, academics, and with children themselves. Following the findings from this consultation process, the strategy promised a major expansion of, and investment in, PEI services, thereby illustrating how decision-making around funding and service provision for children was, for the first time, directly informed by practice-based evidence. However, although this document refers to the use of international evidence, the specific research studies that influenced the policy are not clearly articulated within the document.

The *National Children's Strategy* stated unequivocally and more explicitly than ever before that robust evidence and knowledge help to support policy makers and practitioners to optimise outcomes for children. For instance, this policy had three national goals for children with Goal 1 focusing on including the voice of the child in services and supports. Goal 2 of this policy was that “children’s lives would be better understood; their lives would benefit from evaluation and research on their needs, rights and the effectiveness of services” while developing an evidence-based approach to decision-making at all levels. However, the strategy did acknowledge that at the time, there was little empirical data and a limited research-based understanding of children’s lives in Ireland. Therefore, in order to build the knowledge base and increase the availability of research findings, policies, and reports on children and families in Ireland, a Research Development Advisory Group and a National Children’s Research Dissemination Unit were established (DHC, 2000). The Advisory Group comprised child researchers, policy makers, service providers and international experts to advise the allocation of funding; prioritise research questions in relation to children; and develop education and training in children’s research. Likewise, the Dissemination Unit promoted access to research findings on children disseminated through a database and website in order to provide access to evidence for all audiences. Thus, in addition to striving to achieve the national goals, the strategy also indicated a commitment to communicating emerging findings relating to children and families more effectively (Hayes, 2002). This was also one of the first times that the importance of utilising a KT-D approach when communicating evidence to a wide range of stakeholders, was highlighted.

Alongside these policy developments, child and family services in Ireland were also in an expansionary phase at the beginning of the millennium. In the preceding decades, these services primarily focused on child protection, but the emerging international evidence highlighted the need for more broadly-based family support structures (Canavan et al., 2000). The evaluation of the Springboard projects (implemented in the late ‘90s) demonstrated considerable improvements in child and parent well-being outcomes such as less disruptive and happier children and parents being more self-confident (McKeown, 2001). These kinds of findings filled an important gap in Irish-based knowledge and evidence on what works to meet the needs of vulnerable families and, in turn, were used to inform and strengthen policies and service provision in this regard.

Central to the process of promoting and co-ordinating evidence-based child and family policy and services, was the establishment of the National Children's Office (NCO) in 2001 that also oversaw the implementation of the National Children's Strategy. One of the key roles of the NCO was to support the development of research capacity in the area of children and to improve the commissioning, production, and dissemination of research and information on children and their well-being (CRA, 2011).

The first major publication from the NCO was the *Ready, Steady, Play! The National Play Policy 2004-2008* (NCO, 2004).At the time, only a limited number of studies about play and children had been published (Webb et al., 1999). Still, the available international evidence from, for example, European data from the World Health Organisation (2005)and Canadian findings from Waddell and Godderis (2005), identified the benefits of providing play spaces for children. Consultations with children also led to the development of this play policy and its implementation was realised through the building of playgrounds nationwide. Following this policy, over €28 million of Government funding has been spent on improving play infrastructure and play events for children in Ireland. This is an excellent example of how evidence directly influenced decision-making in relation to child well-being in Ireland and, in turn, helped to improve an important aspect of children's lives.

In summary, the period of 2000-2004 saw a dedicated interest in supporting children and families in Ireland in a structured and evidence-based way. The implementation of the *National Children's Strategy* cemented Ireland's standpoint in relation to promoting child well-being. Moreover, as outlined later in this chapter, the emphasis on consultations with children during policy development and the use of research evidence in decision-making became central to policies and service provision in subsequent years.

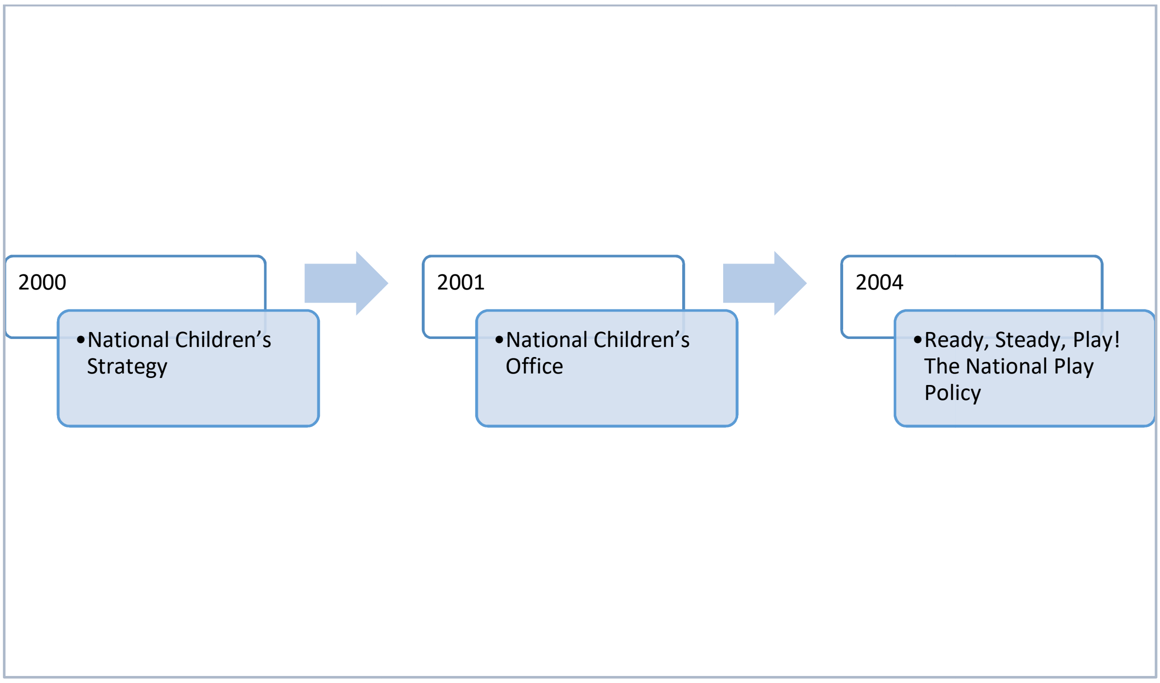
5.4.2 2005-2009: Creating a National Evidence Base

During the mid-to late-2000s, Ireland was starting to realise Goal 2 of the *National Children's Strategy*, which involved building a robust domestic evidence base that reflected the needs and experiences of children and families across the nation. For example, the publication of a *National Set of Child Well-being Indicators* (NCO, 2005) was important in tracking and monitoring how the lives of children in Ireland were changing over time and in providing a useful benchmark for comparison with other countries in terms of their progress and the supports and services available to them. Notably, the Office of the Minister for Children (OMC) was also established within the Department of Health and Children in 2005 to advance the focus on children's services and the implementation of the *National Children's Strategy* (DHC, 2007).

The largest research project funded as a result of the *National Children's Strategy* was the now well known national longitudinal study called 'Growing Up In Ireland' (GUI). This study was commissioned in 2006 with government funding (and a contribution from The Atlantic Philanthropies [AP]) of €35 million (GUI, 2020). The aim of this study was to build an evidence base in relation to cohorts of children, young people, and families and how they grow and develop over four-year periods. The study follows the progress of 8,000 9-year-olds and 10,000 9-month-olds and is still ongoing today (www.growingup.ie).

Figure 5.1

Key Publications and Developments for Children and Families from 2000-2004



The development of national research initiatives such as GUI reflected a growing recognition of the importance of high-quality evidence in this area. The State acknowledged that, prior to GUI, "*the absence of research about the lives of children in Ireland led to a reliance on international material*" (The Irish Times, 2018). Most other developed countries had been running similar longitudinal studies decades before GUI was initially announced in 2002. For example, Britain began its first such study as far back as 1946 with the British National Birth Cohort Study (Wadsworth, 2009), and the European Longitudinal Study of Pregnancy and Childhood was initiated in the 1980s (Piler et al., 2017).

Contemporary longitudinal child cohort studies helped to inform the GUI such as Growing Up in Scotland (https://growingupinscotland.org.uk) launched in 2005 and Growing Up in Australia (https://growingupinaustralia.gov.au) set up in 2003. Nonetheless, there was a cross-government consensus in Ireland that the findings from the GUI would positively influence future planning, investment, policy, services, and the allocation of Department resources for children and families. This was considered the best way to improve the lives of children in Ireland is to learn about their experiences. The findings from the GUI have been used to inform the development and implementation of child-related policies and services which are discussed later in the chapter.

Another significant milestone around this time was the establishment of the Prevention and Early Intervention Programme/Initiative (PEIP/PEII) for 2006-2013 – partly funded by AP. This programme drew on international evidence supporting PEI measures for child development and well-being (e.g. Tremblay, Barr, and Peters (2004) and the emerging findings from the GUI. This programme was implemented throughout Ireland and evaluated positively (e.g. McGilloway et al., 2013). Collectively, this work demonstrated that Ireland was forging a very clear evidence-informed path in how it was investing in, and establishing, child and family services.

There were other child and family policies and initiatives that were launched during this period too, that further reinforced how the country was prioritising child well-being. *A Vision for Change – Report of the Expert Group on Mental Health Policy* (DHC, 2006) – the first ever national mental health strategy in Ireland - proposed, amongst many other things, a comprehensive person-centred model of mental health service provision. This was based on considerable international evidence which showed that the early implementation of family support programmes promoted better mental health outcomes for children deemed to be at risk (e.g. families from low socio-economic backgrounds) (Cheng et al., 2007; Hoagwood, 2005; Johnson, et al., 2000). Thus, while a national evidence database was being developed, international data were still considered crucial in guiding decision-making.

In terms of education, *Síolta, the National Quality Framework for Early Childhood Education* (Centre for Early Childhood Development and Education [CECDE], 2006) brought together a useful summary of international and national evidence - coupled with consultations with a broad range of stakeholders - to identify and recommend best practice in early education provision. For instance, a key recommendation therein was the provision of quality play experiences. Since the publication of *Síolta*, many practice settings have applied the Framework to better meet the needs of young children (aged 0-6), including as part of the PEIP (CECDE, 2005).

Towards the end of the decade, in 2008, the OMC was renamed the Office of the Minister for Children and Youth Affairs (OMCYA)to reflect its expanded role in policy and service development for children and young people up to the age of 24 (CRA, 2008).The Centre for Effective Services (CES) was also established this year with funding from AP and the government, as an intermediary organisation to produce evidence-based early years research and promote a PEI approach across child and family services in Ireland. The CES also disseminates existing Irish and international evidence in varied formats in order to build stakeholder capacity to use research amongst, for example, Government Departments, public bodies, service providers, and practitioners (CES, 2020). Therefore, it was recognised that high-quality evidence needs to be communicated effectively.

In addition, in 2009, an evaluation of the AP's Children and Youth programme (Paulsell et al., 2009) in Ireland was published and found to be key to building evidence as well as improving service provision in Ireland. This report found practitioners valued an evidence-based approach to service delivery; and that overall there was an increased focus on PEI locally and nationally. Some of the evidence-based initiatives included in this programme were Lifestart Parenting Programme, Preparing for Life and

Ready, Steady, Grow and their efficacy informed future initiatives (The Atlantic Philanthropies, 2015).

In summary, there were significant knowledge gaps in the 1990s and early 2000s in relation to the needs of children in Ireland (CECDE, 2003; McKeown et al., 2004). Ireland was lagging behind other countries in terms of producing evidence and this was, in turn, impacting negatively on services and supports for children and families. However, by the late 2000s, a national evidence base to support children and families was being created akin to other developed countries, particularly with GUI and the PEIP, and there was a much greater focus on promoting high-quality research using robust methodologies. However, at this stage, there were still limited rigorous evaluations of PEI supports within an Irish context to support policy decision-making (CRA, 2009).

5.4.3 2010– 2014: Next Steps –Collaboration and Large-Scale Evaluation

The subsequent five years from 2010-2014, saw an increasing drive for developing and utilising evidence in policies and services to support children and families across Ireland. However, there was much greater focus, during this time, on conducting large-scale evaluations to determine the efficacy of PEI initiatives and this was due in no small way to the research funding provided by AP. Around this time, there also appeared to be increasing recognition of the value of networking and collaboration amongst stakeholders to optimise outcomes for children and families (e.g. Bowen & Graham, 2013).

Table 5.1

Key Publications and Developments for Children and Families from 2005-2009

2005
• National Set of Child Well-being Indicators (NCO, 2005) • Establishment of the Office of the Minister for Children
2006
• A Vision for Change – Report of the Expert Group on Mental Health Policy (DHC, 2006) • Síolta, the National Quality Framework for Early Childhood Education (CECDE, 2006) • Commissioning of Growing Up in Ireland • Establishment of the Prevention and Early Intervention Programme2006-2013
2008
• The OMC was renamed the Office of the Minister for Children and Youth Affairs • Establishment of the Centre for Effective Services
2009
• Aistear: The Early Childhood Curriculum Framework(NCCA, 2009) • Evaluation of the Children and Youth programme (Paulsell et al., 2009)

For example, the Prevention and Early Intervention Network (PEIN) was formed in 2010 by the Northside Partnership - and funded by AP again - to bring together the expertise of a range of stakeholders from the PEI sector in Ireland (e.g. social workers, psychologists, programme managers). This collaborative effort helped to: develop and disseminate learning; shape policy and practice; build relationships amongst stakeholders; and influence public discourse (PEIN, 2019). This network was also successful in advocating for the establishment of a PEI Unit in the Department of Public Expenditure and Reform (DPER) and the inclusion of PEI in the first national policy framework for children and young people called *Better Outcomes, Brighter Futures* (discussed in more detail below). This illustrates very well the impact of successful collaboration on decision-making around children and families.

Furthermore, in 2010, the 'Supporting Parents in their Parenting Role' Special Interest Group (later called the Parenting Network) was created to influence policy and practice in supporting parents. The Network aims to: connect researchers, practitioners, and policy makers (all of whom are represented); develop appropriate means of disseminating and promoting information on parenting and child well-being; and support research skill development (Katherine Howard Foundation, 2019). The Network has organised and hosted a number of conferences and events over the years, whilst it has also lobbied government with regard to supporting parents in their parenting role (e.g. through a series of policy and position papers).

By 2011, a decision was made to create a stand-alone Department of Children and Youth Affairs (DCYA), which incorporated the functions of a number of policy areas on children and provided a key infrastructure through which evidence could be at the centre of policy and practice around children's lives (CES, 2011). Since the DCYA was established, several policy developments emerged including The *National Strategy for Research and Data on Children's Lives, 2011-2016*and*Better Outcomes, Brighter Futures 2014-2020.* Common to both policies is a consistent reference to promoting child well-being through the utilisation of high-quality evidence.

The first of these policies, the *National Strategy for Research and Data on Children's Lives, 2011-2016* (DCYA, 2011) was developed by the Research Unit within the DCYA to provide structured guidance on data collection techniques and the dissemination of research on children. Specific strategies identified in this document to facilitate the utilisation of knowledge on children and families, include: building capacity for stakeholders to interpret research; providing timely research material; and creating connections between researchers and service users (Buckley & Whelan, 2010; Roche et al., 2011). These recommended strategies (e.g. research summaries, networking strategies) align well with the findings of international KT-D research which was being conducted at the time (e.g. Dunne, 2011; Graham, 2010; Tabak et al, 2012). The development of this strategy also took into account a range of international findings from Europe (Eurostat, 2010) and the UK (Iwaniec, 1998), as well as national data and consultations with stakeholders, including children, to help contextualise the Irish experience (Hanafin & Brooks, 2005; OMCYA, 2010). As with the *National Children's Strategy*, this highlights the importance of including the child's voice in research and in informing service provision. This document again reflected a continuing commitment on the part of the Irish government to promote child and family well-being and, in particular, to encourage the appropriate use and production of evidence-based research relating to children.

The policy developments since the launch of the *National Children's Strategy* were realised through explicit investment in the development, implementation and evaluation of community-based PEI initiatives in Ireland (Devaney et al., 2013; McGilloway et al., 2012;Morawska et al., 2010). For example, many parenting programmes which were evaluated in Ireland had a strong international evidence base, including the Incredible Years Parent, Child and Teacherseries, Lifestart, and the Triple P-Positive Parenting Programme (Furlong et al., 2012; Miller, 2015).The first of these, the Incredible Years series, included components designed to promote parent sense of competence and well-being and encourage positive infant health and development and underpinned the models of the ENRICH research programme (Reid & Webster-Stratton, 2008).

The findings from these evaluations led to the development of a large-scale PEI initiative which involved the delivery of these, and other evidence-based programmes. This was called the Area Based Childhood (ABC) programme (2013-2017) (DCYA, 2013) which received funding of approximately €30 million from the DCYA and AP and was designed to target child development and well-being, educational disadvantage, and parent supports. This programme again exemplifies a strong commitment to learning from research and scaling out of evidence. Indeed, this initiative was considered a "milestone in one of the biggest investments made by a philanthropic funder [Atlantic Philanthropies] in driving systems change towards evidence-informed practice anywhere in the world" (CES, 2013, pg. 13). This was a significant leap forward for a country that had been lagging behind on an international scale in terms of evidence-based policy and services only a decade previously. The evaluation of the ABC programme (overseen by the CES) examined outcomes for children and families, the implementation process, as well as cost-effectiveness and aimed to inform future research, commissioning of services, resource allocation, and investment.

The key findings from this evaluation included improved relationships between parents and children; improvements in child social and emotional well-being; enhanced understanding amongst practitioners and service managers in the value of evidence (Hickey et al., 2018). Additional funding was allocated to this initiative in 2018, which exceeded the Government's original funding commitments, signifying the perceived value of, and strong interest in, the emerging evidence.

Around this time, *Right from the Start* (DCYA, 2013), a report was published from an Expert Advisory Group of academics, and representatives from government and organisations that work in early years services and supports. Recommendations within this report included increasing investment in the early years and strengthening child and family supports. This document also specifically advocated for evidence-informed decision-making as "dissemination and knowledge exchange helps to ensure that once this knowledge is generated, it can be translated and mobilised into policy-making and practice development (p. 28)"

This period also saw a second major development in child and family policy, in the form of *Better Outcomes, Brighter Futures2014-2020*(DCYA, 2014a), the first overarching national policy framework to be developed for children and young people aged 0-24 years. Many other countries had already developed and prioritised similar policies promoting PEI, such as the *National Framework for Protecting Australia's Children (2009)*, Canada's *Comprehensive Mental Health and Addictions Strategy* (Government of Ontario, 2011) and *Getting it right for every child* in the UK (Scottish Government, 2008). This was the first Irish policy document within which parenting was explicitly identified as the first of six key 'transformational goals'. This policy was explicitly informed by the PEIP and GUI findings, national evaluation of parenting programmes such as Preparing for Life (Doyle, 2010) and the Incredible Years series (McGilloway et al., 2012), as well as international evidence from the US (Center on the Developing Child at Harvard University, 2007), France (OECD, 2012; 2013), and the UK (Allen, 2011; Coles et al., 2016). These studies had been progressively pointing to the benefits of investing in the early years and the effectiveness of expenditure on child-related services to improve outcomes and reduce inequalities in society.

Thus, PEI initiatives are now considered an optimal and cost-effective way of enhancing outcomes for children and families and reducing long-term dependency on a range of State services (Leijten et al., 2015). This evidence is important in helping to inform Government decision-making and budgetary spending. *Better Outcomes, Brighter Futures* also has an emphasis on stronger implementation and coordination across Government Departments because despite earlier policy developments, it was considered that there were still limited quality supports and services for children (DCYA, 2014).This highlights once again, the importance of collaboration whilst also indicating a process of reflective learning and more sophisticated thinking when compared to previous policy developments and strategies.

A significant shift in frontline service organisation and delivery also occurred in 2014 with the establishment of Tusla - or the Child and Family Agency - a dedicated State agency responsible for improving well-being and outcomes for children (Tusla, 2019). Tusla operates under the Child and Family Agency Act 2013 (DCYA, 2013) which came into being partly in response to reports at the time, on child protection failings, including inconsistency and fragmentation of service provision. The work of the agency is driven by the evidence-based and child-centred policies mentioned above, but with a clear focus on specifically improving services relating to child welfare, early intervention services, and family and locally-based community supports. Most of Tusla's service delivery is based on *Children First* legislation and guidelines; this again illustrate show policy was, and still is, informing child and family practice and frontline services in Ireland.

Tusla also undertake in-house research to inform Departmental decision-making and they provide resources such as a parenting webpage – Parenting24seven -in order to share evidence-based information with a wide range of stakeholders on what works best for children and families at different stages of childhood (Tusla, 2019). Notably, they ran an 'Empowering Practitioners and Practice Initiative' with the CES around this time in order to build the research use capacity of practitioners by making up-to-date evidence available for use in their work with children and families (CES, 2019). In consultation with social workers, this initiative produced a toolkit that included, for example, evidence-informed resources and summarised research findings on children and families (Crowe, 2019). This reflects a continued impetus to improving research utilisation amongst stakeholders.

This period saw a dedicated and very active commitment to children and their well-being in Ireland, particularly through *Better Outcomes, Brighter Futures* and the implementation of the large-scale ABC programme. There was, in tandem, an increasing dependence on high-quality evidence to inform decision-making in relation to children and families (e.g. Devaney et al., 2013; Furlong et al., 2012; Miller, 2015).Reassuringly, a commitment to enhancing the capacity to use and communicate evidence, whilst also encouraging greater collaboration amongst stakeholders to maximise outcomes, was also high on the agenda at this time.

5.4.4 2015 – 2019: Sector Growth and Expansion

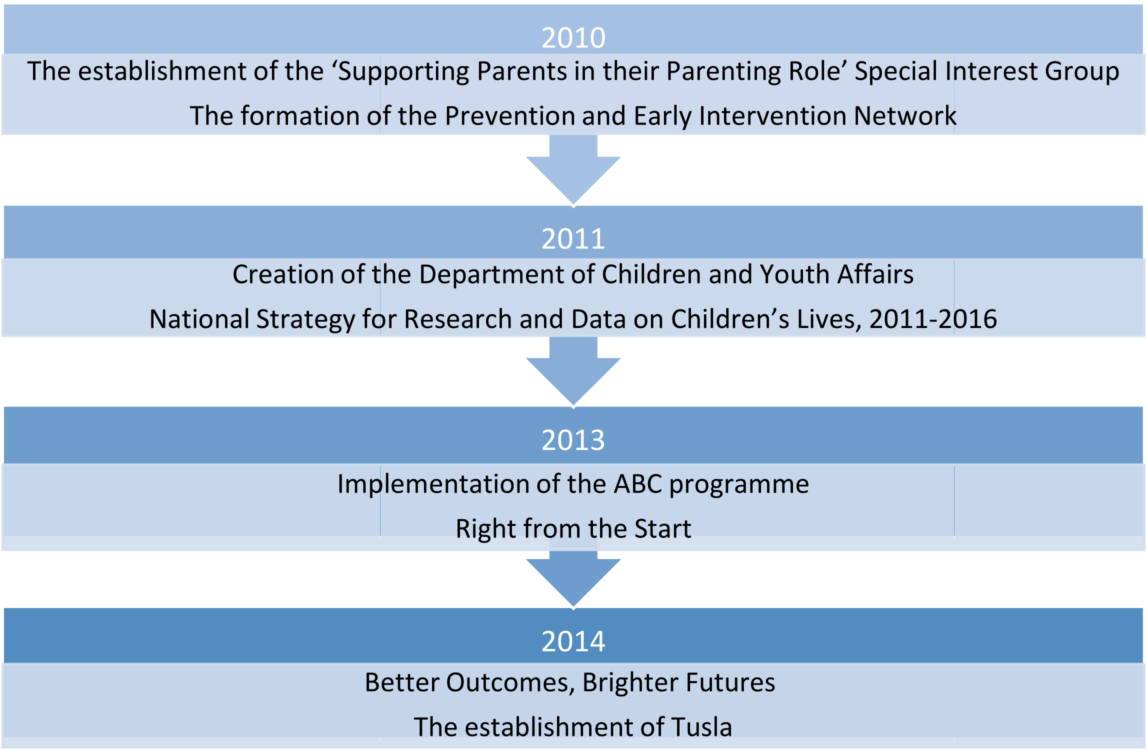
The final period under review (2015-2019) was one whereby concerted attempts were made to maximise the learning over previous decades in terms of evidence use and production, dissemination, and collaboration.

Research evidence was continuing to inform ongoing initiatives during this period. By 2016, the ABC Programme funding was due to end, but this was extended until 2018,as the emerging findings had shown improved outcomes for children and families. Further still, based on the positive findings, the DCYA expressed its intention to mainstream the ABC Programme objectives through local partnerships and developments at a national level (CRA, 2016). This demonstrates the broader impact of the findings.

However, although evidence-based recommendations were encouraged to help children thrive, the Government also required that PEI initiatives be cost-neutral or that they incurred savings for the Exchequer (CRA, 2015) Thereby, this indicates, perhaps unsurprisingly, that other factors – and especially those relating to costs - can impact the decision-making process (Van de Goor et al., 2017).

Figure 5.2

Key Publications and Developments for Children and Families from 2010-2014



In terms of producing and disseminating evidence, the DCYA also set up a stand-alone Research and Evaluation Unit (REU) to collaborate with key stakeholders in order to support research and capacity building. The remit of this unit included improving knowledge and data relating to children's lives and promoting the translation and application of knowledge to support the development of evidence-based policy development and service delivery (DCYA, 2016).Despite this however, the CRA (2017) found that, at this time, progress was still slow in terms of sharing evidence-based learning within child and family services. The annual Department review also had noted that there was little progress made on the implementation of the Children First guidelines since their launch in 1999, despite their utilisation by Tusla (CRA, 2011). However, the reason behind this slow progress is not discussed within the documentation.

In 2017, there were further positive steps to promoting early years research and capacity including the establishment of a Prevention and Early Intervention Unit (PEIU) in the DPER – and supported by the PEIN. The PEIU evaluates PEI programmes for children through research and stakeholder consultations and informs policy decisions in relation to public spending for initiatives that aim to improve child outcomes (Irish Government Economic and Evaluation Service, 2019). For example, some of their research has explored the development of PEI within public policy (Kennedy, 2020). The Quality and Capacity Building Initiative (QCBI) was also set up this year also in collaboration with Tusla to enhance the capacity and skills development of stakeholders to access, appraise and apply evidence-informed approaches to PEI policies and programmes using a central database, and online learning platform for policy makers, providers, and practitioners (DCYA, 2018). However, there is limited evaluation of the QCBI to date.

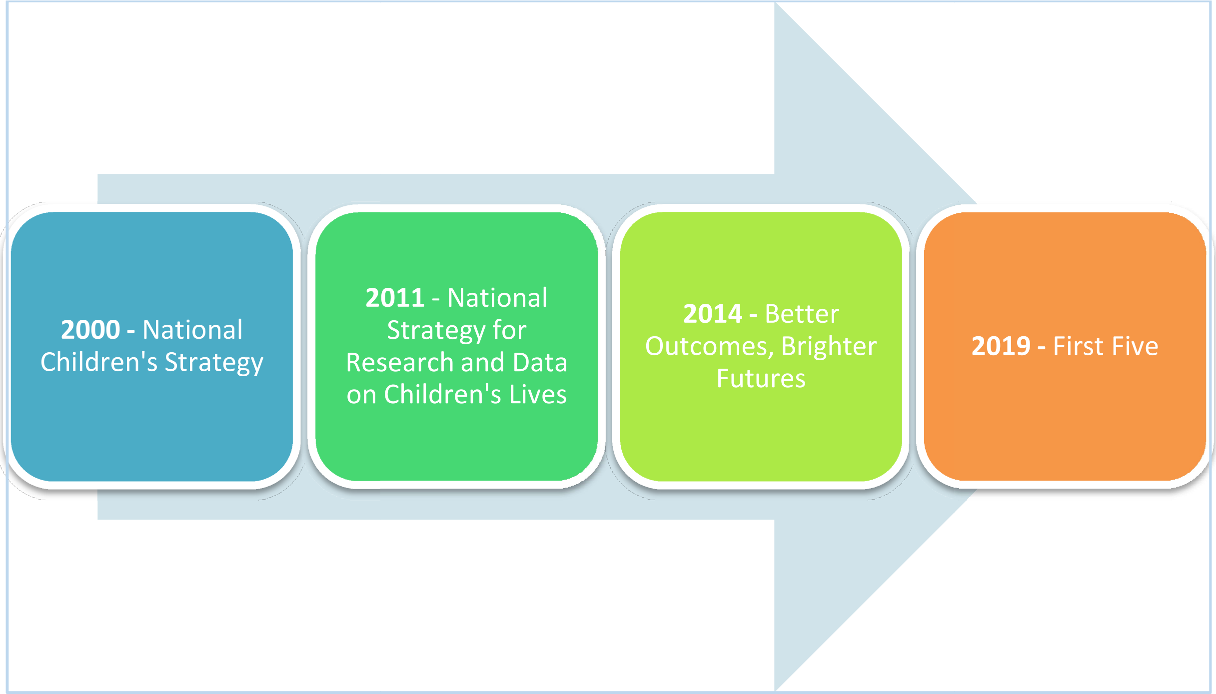
By 2018, the learning from the national evaluation of the ABC Programme had started to feed into service innovation and development in terms of parent and family supports e.g. Parents Plus, Triple P, Strengthening Families; community-based ante and postnatal care and education, e.g. Preparing for Life, Up to 2; promoting social and emotional development among children, e.g. the Incredible Years suite of interventions (Hickey et al., 2018).These regional community groupings/collaborations of child and family services were continuing to adapt and develop their service offerings on the basis of emerging evidence. Further research on their new and enhanced services/service models (including the ENRICH research programme of which this current research is a part (Hickey et al., 2018; Leckey et al., 2019) showed initial positive outcomes in parenting, children’s learning, and emotional development.

At the same time, more relevant policies were being implemented by other government Departments during this period that were intended to impact child and family mental health and well-being (amongst other things). For example, *Sláintecare* (DoH, 2018) is a ten-year programme which aims to transform health and social care services across Ireland. Some of the key goals of this programme are improving the experience and outcomes for service users. The programme highlights (as in previous policies)– and as one of numerous objectives relating to population health in general - the importance of PEI for mental health, and spawned initiatives to enhance child well-being and infant mental health, including the Nurture - Infant Health and Well-being programme and the National Healthy Childhood Programme. *Sláintecare* is significant in that it represents one of the first instances of cross-party political consensus on the future of health and social care services in Ireland. This suggests that a whole-of-government and collaborative approach is needed in order to achieve better outcomes for families.

Most recently, the *First 5: A Whole-of-Government Strategy for Babies, Young Children and their Families 2019-2028* (DCYA, 2018) was launched as the first-ever cross-Departmental strategy in Ireland, building on the advancements that have been made for young children in previous years and informed from previous policy documents including *Right from the Start* (DCYA, 2013).More specifically, this strategy drew heavily on the learning from the GUI study and the ABC programme. For example, Objectives 2 and 6 of this Strategy explicitly recognise the impact of parents' behaviour and mental health on an infant's psychological well-being, development, and relationships, particularly in the first 18 months of life (Greene et al., 2014). The strategy also incorporates a clear recognition that parents benefit from high-quality, evidence-based information and services to support child development and positive family relationships and was influenced by international evidence on, for example, the First 1000 days (Kattula et al., 2014).In addition, this Strategy focuses on developing a comprehensive national infrastructure for research and data that can be used to inform national policy and practice and could be utilised on an international stage. This is a significant accomplishment as Ireland had lagged behind many other countries for decades. A Parenting Support Policy Unit was also established recently by the DCYA (in 2019) as part of this Strategy to co-ordinate policy direction and activity specifically relating to parenting support. At the time of writing, the implementation of the First 5 is in its infancy, but it is ultimately aiming to further support children and families with the best possible strategies, processes, and practices.

Figure 5.3

A Timeline of Key Government Policies Relating to Children and Families since 2000



Finally, in 2019, funding – again from AP - was allocated to Tusla’s Partnership and Family Support Programme, the next phase of the ABC Programme and the QCBI Innovation Fund to evaluate and build on existing data and evidence (CRA, 2019). This programme aims include improving and measuring outcomes for children and families and to be aware of the latest research about what works well for families. In addition, the DCYA has compiled an online evidence resource to collate information on the impact of evidence-based programmes both internationally and in Ireland, thereby further advocating for a KT-D approach.

In summary, this period showed a more comprehensive approach to evidence utilisation than in previous years, with a focus on the production of relevant high-quality evidence disseminated in appropriate forms to stakeholders that have the capacity to understand and apply the findings. The evaluation of the ABC programme had a significant impact on the direction of future services and investment whilst there was also an increasing focus on data sharing/linkage and cross-Department collaboration.

Table 5.2

Key Publications and Developments for Children and Families from 2015-2019

2016
• The creation of the Research and Evaluation Unit
2017
• Establishment of a Prevention and Early Intervention Unit in the DPER • Establishment of the Quality and Capacity Building Initiative
2018
• Slaintecare(DoH, 2018) • First 5: A Whole-of-Government Strategy for Babies, Young Children and their Families 2019-2028 (DCYA, 2018)
2019
• Tusla's Partnership and Family Support Programme • Parenting Support Policy Unit

5.5 A Critical Analysis of the Role of Research Evidence in Informing Child and Family Policy/Practice in Ireland

The first section of this chapter tracks how policy and services relating to child and family (particularly in the area of PEI) in Ireland evolved over the past two decades. This second major section of the chapter critically examines the extent to which, research evidence has helped to inform the progression of policy and practice in Ireland relating to child and family well-being during an approximate 20-year period from 2000-2019. Three key themes emerged from this analysis (Figure 5.2), each of which is discussed below.

Figure 5.4

Key Themes Identified from the Documentary Analysis

Theme 1	• Increasing emphasis on evidence-informed PEI policy and services
Theme 2	• Successes and limitations of evidence-informed policies and services
Theme 3	• The role of KT-D in policy and practice development

5.5.1 Theme 1: Increasing Emphasis on Evidence-Informed PEI Policy and Services

The first theme identified from this documentary analysis is increasing policy and service commitment and focus on evidence-informed PEI. While different countries have adopted various approaches to PEI policy and service provision, a common thread among developed nations is that policy decisions are child-centred, and the early years, in particular, are currently high on the global policy agenda (Jessani et al., 2020). According to Hayes (2002) "all policy impacts, to a greater or lesser extent, on children" (p.7).Correspondingly, there is an increasingly accepted global understanding that knowledge gained from integrating the best available research findings into policy and practice, is the most effective way to meet the needs of populations, reform services and allocate funding (Barwick et al., 2014).

During the earlier period described here (2000-2004), international evidence relating to child and family well-being (e.g. from other European countries, USA, Canada, and Australia) was used to guide and inform policy decision-making rather than national findings (The Irish Times, 2018). However, by the mid-2000s and in line with other countries, Ireland began to develop a national research database to achieve a better understanding of children's lives, particularly following the launch of the *Children's Research Strategy* (2000). The legally binding global agreement of the UNCRC (1992) may have also acted as an important impetus for Ireland to pursue better outcomes for children.

While international evidence, standards, and practices are important and can be used as a useful benchmark, arguably, the findings from research conducted in Ireland provide – or were seen to provide - better guidance on domestic/national issues. This can also help to inform resource allocation so that decision-making is based on evidence of both need and effectiveness in an Irish context. As the years progressed, there was a greater focus in Ireland, on promoting high-quality research on children and families, using robust methods and rigorous large-scale evaluations, to provide evidence which helps to improve and refine service provision and practice (CRA, 2019). Thus, it is clear that Ireland has displayed an increasing commitment to producing evidence to support children and families over the past two decades.

How the policies outlined in this chapter are developed and implemented (or not) is of utmost importance in determining subsequent outcomes for children and families. Ideally, decision-making should be informed by solid evidence of what works from rigorously conducted evaluations coupled with the experience and expert judgement of service providers

(DPER, 2018). Indeed, in both 2013 and 2014, the Irish Government specified that child and family initiatives should be informed by national and international evidence, best practice, and the needs of the children and the community (CRA, 2014). However, there is no obligation on the State to ensure that policies and services are evidence-based and informed. Historically, the 'scientific perspective' has not always driven social policy on families in Ireland or elsewhere (McKeown et al., 2004). According to the DPER (2018), the development of services and policy decisions for families and children, is often shaped by a broadly similar set of ideologies, including fiscal priorities, political will, public opinion, and electoral considerations rather than empirical evidence.

As mentioned above, fiscal priorities can influence policy and practice decision-making. Ireland experienced economic prosperity from 2000-2007 during what became known as the 'Celtic Tiger' years when there may have been more revenue available and investment in early years services (CRA, 2009). However, this period was followed, in 2008, by a global recession which resulted in a redistribution of resources and a shift in priorities from long-to short-term savings (CRA, 2010). During this period of recession, public health spending on mental health and wellbeing was lower in Ireland than international standards and there was a lack of primacy given to PEI and family support despite the vast amount of evidence outlining the long-term benefits of this expenditure (CRA, 2009). Indeed, the GUI findings demonstrated that economic strain caused by the 2008 downturn negatively affected parental mental health and relationships, with consequent knock on effects of quality of family life and parenting (Nixon et al., 2019). The UN Human Rights Council (2018, para. 4) has stated that 'inadequate investment, especially in the most vulnerable and marginalised, can perpetuate the intergenerational transmission of poverty and inequality, leading to irreversible negative impact on children's development.' Therefore, the impact of reduced funding and services can impact on children and families outcomes.

In summary, although the policies from the last two decades have emphasised an evidence-informed approach, and it does appear that the intent is there, this still may not be enough to ensure uptake. Several other factors can influence service provision even with the availability of high-quality evidence base. Therefore, despite official recognition of the importance of – as well as increased generation of knowledge – there remains gaps in the extent to which evidence is used to guide policy and practice.

5.5.2 Theme 2: Successes and Limitations of Evidence-Informed Policies and Services

As highlighted, the need for child and family services to be evidence-informed has been increasingly highlighted in Irish policy. Nevertheless, it is vital to consider the extent to which this has been achieved in reality? Indeed, the analysis revealed both successes and limitations in this regard.

It is certainly the case that a number of policies, reports and initiatives developed over the past two decades were crucial to fostering PEI and enabling a better future for children (and their families) in Ireland. The most significant policy documents appear to be the recent *Better Outcomes, Brighter Futures 2014-2020* and the *First 5 (2019-2028).*Both of these contain an explicit commitment to evidence-based parenting supports, amongst other things, in order to improve child and family outcomes. It is also clear that these policies have been informed by learning from previous policies and reflect the commitments outlined originally in the *National Children's Strategy* published at the start of the millennium.

An analysis of the available documents (*n*=27) suggests that most significant and impactful PEI initiatives during the approximate 20-year period under investigation were the GUI study (2006-present) and the PEIP (2006-2013) – both launched in the same year - and the ABC programme (2013-2018) (e.g. Hickey et al., 2018) (Figure 5.6). The intent to develop these programmes initially demonstrated a commitment from the Government to try and promote better outcomes for families and children in Ireland. These programmes produced high-quality evidence as to what works best to support children and their parents in Ireland. The findings from these evaluations helped to build a significant national evidence base which, in turn, appeared to inform the development and implementation of policies, services, and interventions, and which helped to guide funding decisions where possible.

Figure 5.5

Pivotal Year of Initiatives for Children and Families in Ireland

The importance of the role of funding cannot be overlooked in relation to the advancements made in evidence-based service provision for children and families in Ireland. As highlighted in Chapter Two the availability of funding is also a key driver in promoting the dissemination of evidence that can inform service provision (e.g. Tripathy et al., 2017). As outlined earlier, AP identified PEI in Ireland as a key research area (alongside Northern Ireland and the United States) for investment over a 10-year period (2004-2014) (The Atlantic Philanthropies, 2020). Over $200 million was invested in 39 interventions and 52 evidence-based services to promote the well-being of children and families in Ireland – one of only eight countries worldwide where significant investments were made in health, education and equality. It is highly unlikely that Irish-based initiatives/services and research in PEI would have progressed as much in the absence of such substantial, pivotal and strategic funding. AP funding was also important in informing developments and strategies at government level, and in some cases, the Irish Government matched the AP funding or allocated additional funding to further explore initiatives that were showing promising results. In this way, AP acted as a sort of 'champion' for PEI in Ireland and as a reputable organisation, they influenced the government in their decision-making. According to Darker and colleagues (2018), this external influence is a key facilitator to promoting evidence dissemination and uptake.

In addition, there have been significant strides made over the last couple of decades that reflect the commitment to evidence within the early years field, including: PEI-themed conferences (e.g. National Early Childhood Research Conference 2019); increased opportunities for postgraduate training and education in this area (e.g. MEd Early Intervention at Trinity College Dublin); the establishments of several children's research centres (e.g. Centre for Mental Health and Community Research www.cmhcr.eu); and the publication of a biennial State of the Nation's Children Report (e.g. DCYA, 2014b). All of these led over time, to the development of a culture of research utilisation and evidence-informed PEI in Ireland which is consistent with international trends, thereby demonstrating that Ireland is committed to promoting early years evidence on the world stage (CES, 2013).

On the other hand, there are also notable flaws and gaps (such as budgetary) in terms of implementing policies and programmes relating to children and families over the past few decades (CRA, 2010). For example, whilst the DCYA was responsible for the co-ordination of child policy-making in Ireland, the responsibility for different policy areas relating to children was co-located within a number of Government Departments (Hayes, 2002). For example, the Early Years Education Policy Unit is co-located between the Department of

Education and Skills and the DCYA. According to Bennett (2008), the disjointed co-location of key early years policy units has led to ‘a fragmentation of services and a lack of coherence for children and families’ (p. 2). On a more positive note, however, more recent policies, such as *Sláintecare* and the *First 5*, focus on increasing cross-government cohesion in order to address these shortcomings. This reflects an understanding of the importance of collaboration and engagement to maximise outcomes.

In terms of reviewing documents (e.g. policies and reports) relevant to PEI in Ireland, only the most prominent and accessible documents were included here. It is important to note that any such document which fails to mention evidence-based priorities, does not necessarily suggest that these are not reflected in subsequent policies or practices. Arguably however, a failure to acknowledge an issue could reflect a lack of priority on evidence. By the same token though, advocating for the use of evidence-based research in a policy document does not necessarily imply that this will be used when implementing or informing real-world frontline services (Bowen, 2009). An in-depth review of initiatives that were promised but subsequently not implemented was outside the remit of this analysis. However, in these cases, the usefulness of the recommendations in policy documents is questionable when the intended reforms are not implemented in practice.

5.5.3 Theme 3: The Role of KT-D in Policy and Practice Development

This documentary analysis attempted to track the development of KT-D in policies and services for children and families (and the role of evidence therein) during the 20-year period of interest. The available evidence that was included in this chapter primarily reflects the field of KT-I, i.e. how evidence has been implemented into policy and practice. There is limited information in the literature regarding how the specific evidence was disseminated to policy makers or practitioners in order for the implementation process to follow. Nonetheless, it would appear that the dissemination method was successful in the cases where the research findings were used to inform decision-making.

As highlighted in Chapter Two, an important facilitator for disseminating evidence within policy is ensuring that the findings are relevant to the policy makers' needs (Haynes et al. 2018). It is clear from the documentary analysis that PEI and the early years is a key research area and continues to be of relevance to the Government. Therefore, research in this field is more likely to gain interest and awareness by the nature of the topic.

There have been several indicators over the past two decades that there is increasing focus on the value of effective KT-D and related strategies. A number of governmental Units and groups have been established that are dedicated to promoting and sharing research. For instance, as mentioned earlier, the setting up of the CES – as a knowledge broker - in 2008 was critical for enhancing KT-D in Ireland in relation to early years research by linking KUs and producing research summaries aimed at policy makers and practitioners (CES, 2020). Likewise, the creation of the REU in the DCYA toward the end of the last decade was based around the promotion of KT-D. Infrastructural resources such as websites (e.g. https://www2.hse.ie/my-child)and knowledge hubs (www.whatworks.gov.ie) were developed to increase access and availability of research evidence - on children and the early years - for a wide range of KUs. Conversely, a database called *Current Research Information Systems* was put in place in Ireland in the early '00s to provide a searchable, publicly accessible source of all university-based research in Ireland, but this was discontinued following budget cuts during the recession (Doyle, 2020). This also shows how a lack of funding can impact both service provision and evidence dissemination.

Nonetheless, a fundamental KT-D strategy that is continually developing and has helped to increase the utilisation of evidence and promoted an evidence-based approach in

Ireland was enhancing collaboration amongst relevant stakeholders such as the PEIN or academic collaborations with community-based organisations (e.g. the ENRICH programme). As highlighted earlier, increased cross-government engagement is also being encouraged to promote evidence uptake e.g. cross-party support for a Plain Language Bill (NALA, 2020). Evidence and policy formation has also been informed through research consultations with service users (e.g. Children and Young People's Services Committees) to help plan and co-ordinate services for children and young people based on their needs (CRA, 2011). These collaborative efforts also took broader forms through European Union and international agreements e.g. with the United Nations (CRA, 2010). In addition, the CES (2018) acknowledged that KUs need the skills and capacity to interpret, analyse and apply evidence relating to the complex field of child and family welfare. This was reflected in, for example, the QCBI, which focuses on building the capacity of stakeholders to access, interpret, and utilise data and evidence.

In summary, the role of effective dissemination underpins this documentary analysis in terms of enhancing the capacity for evidence to inform policy and practice decision-making in Ireland – that ultimately aims to improve outcomes for children and families.

5.6 Conclusion

This documentary analysis has attempted to monitor and appraise the evolution of Irish public policy and service provision from 2000-2019. During this time, there have been significant reforms in Ireland, in terms of legislation, policies and service provision directed towards the support and welfare of children, particularly at the start of life. These were consistent with an increasing global focus on promoting the well-being of children within the family environment and reducing inequality and disadvantage (Garcia et al., 2019; Hickey et al., 2018).

According to Field (2010), the dissemination and use of robust evidence and the uptake of scientific knowledge, were key aspects of achieving evidence-informed solutions to policy-making in Ireland. As stated by the DCYA (2019), "since 2000, a shift to evidence-based policy-making has driven investments in knowledge about improving the lives of children and families" (pg 7). Therefore, building a national knowledge base has continued to influence policy and service delivery and policy formation. However, as might be expected, the available funding, economic climate, and governmental priorities also impact the development and sustainability of early years services.

According to Bowen (2009), policy and service success or progress can be considered in relative rather than absolute terms, by comparing developments what has been done previously or elsewhere. As outlined above, Ireland was behind other countries in the earlier years, in terms of domestic research, policies, and initiatives geared towards improving children's lives. Arguably therefore, one of the most impressive achievements in an Irish context is how, according to PEIN (2019) – within a relatively short period of time - Ireland progressed so far as to become a world leader in the design, implementation, and evaluation of evidence-informed services that aim to support children and families. This appears to have been accomplished by learning from the experiences of other countries and producing high-quality national evidence – as well as from significant investment and resources.

It is also important to note that policy developments were informed by, and built upon, previous versions, whilst incorporating emerging and growing evidence accruing from national and international research. The strengths and weaknesses of relevant government departments were also highlighted in the annual performance reviews undertaken by the CRA were also acted upon in subsequent policy documents. Such accountability and transparency were important for improving future initiatives and, ultimately, outcomes for children and families in Ireland.

In summary, this analysis provided a broad view of the extent to which it appears that evidence was used in decision-making to inform practice (and subsequent policies).Nonetheless, it would appear that research evidence –and the process of dissemination - has played an increasingly significant role, to date, in decision-making processes relating to child and family well-being policy and practice in Ireland.

CHAPTER SIX: KT-D CASE STUDY

6.1 Section One: KT-D Case Study Paper

As outlined earlier in Chapter One, a KT-D case study was carried out as part of this research, the overarching aim of which was to increase visibility and understanding of, and engagement with, the ENRICH research programme and its emerging findings, through a series of KT-D strategies targeted at KUs within child and family services in Ireland. This work was published in the *Journal of Children's Services* and that paper is replicated here (in line with the journal formatting guidelines), including additional methodological detail, and forms the bulk of the chapter.

Additional supplementary information is provided at the end of the chapter to help further contextualise this element of the research and to summarise the additional work which was undertaken (e.g. the LinKT project), but which was not reported in the paper due to word count restrictions. Further illustrative quotes from the one-to-one interview and focus group data - and relating to the key factors that influence dissemination - are also provided in Appendix 10.

‘Disseminating Early Years Research: An Illustrative Case Study’

O’Connor, S., McGilloway, S. Hickey, G, & Barwick, M. (2021)

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Abstract

Purpose This paper outlines a knowledge translation (KT) case study undertaken as part of a multi-component research programme aimed at evaluating new parenting supports in the earliest years. The study aimed to: (1) explore the influencing factors relating to research use in an early years context; and (2) to use the findings, at least in part, to execute an integrated KT plan- in order to promote stakeholder engagement, greater research visibility, and to enhance the understanding of findings emerging from the research programme.

Design/methodology/approach A mixed-methods study was embedded within a large-scale, longitudinal research programme. In the present study, a national survey (N=162) was administered to stakeholders working with children and families throughout Ireland. A series of one-to-one interviews were also undertaken (n=37) to amplify the survey findings. Also, one focus group was carried out with parents (n=8) and one with members of the research team (n=3). Several dissemination strategies were concurrently developed, executed, and evaluated, based partly on survey and interview findings, and guided by the Knowledge Translation Planning Template (Barwick, 2008; 2013; 2019).

Findings The main factors influencing the dissemination of evidence, as identified by the stakeholders - were: a lack of resources; an under-developed understanding of research use and dissemination; insufficient collaboration and communication; and conflicting stakeholder priorities. Despite these challenges, the research programme was found to benefit from a multi-component KT plan to achieve the outlined dissemination goals.

Practical implications The KT planning process allowed the research team to be more accountable, introspective, and to work more efficiently. This helped increase the likelihood of more targeted and successful dissemination of the research findings, delivering a better return on research investment.

Originality/value This is the first study of its kind (to our knowledge) to provide important insights for stakeholders in Ireland and elsewhere about how to improve the dissemination process. Effective KT planning can ultimately help to bridge the research-policy-practice gap and enable the effective translation of high-quality evidence in the early years sector to enhance outcomes for families in the shorter and longer-term.

Introduction

There are significant investments and continuing global interest in evidence-based parenting programmes and their impact on outcomes for children and families (e.g. Hickey et al., 2018; Hutchings et al., 2017; Leijten et al., 2015). As a result, many governments have developed policies advocating for the use of evidence-based parenting programmes including, for example, Better Outcomes, Brighter Futures in Ireland, Every Child Matters in the UK, and the National Framework for Protecting Australia's Children. Despite the allocation of considerable funding internationally to expand knowledge in evidence-based research, it is not always effectively shared or implemented as intended in child and family services (Powell et al., 2017).

The field of implementation science has produced a growing body of international literature on how research is disseminated to a wide range of stakeholders (including practitioners, policymakers, and service users) and the barriers and facilitators to implementing research in order to bridge the 'knowledge-to-action' gap (Milat et al., 2011). The process of disseminating and implementing research evidence is commonly known as 'knowledge translation' (KT) (Canadian Institute of Health Research [CIHR], 2004). KT efforts aim to maximise the outcomes from research by ensuring stakeholders 'are aware of and use research evidence to inform their health and healthcare decision-making' (Grimshaw et al., 2012, p. 2).

Dissemination interventions or strategies comprise a broad range of isolated or multi-faceted processes and practices used to achieve particular dissemination goals and which, ideally, involve engaging with multiple stakeholders throughout a research study (Barwick, 2016; Oliver et al., 2014). There is considerable literature on the effectiveness of dissemination strategies that aim to enhance research use; however, to date, there is no gold standard approach for selecting the most appropriate strategies (Stevens et al., 2014; Yamada et al., 2015). Varying dissemination goals, stakeholders, and contexts can all require different strategies – for example, conference presentations can effectively share knowledge within the academic community but interactive workshops help to support behaviour change amongst practitioners (Edwards et al., 2019; Grimshaw et al., 2012). There is consensus that a multi-method approach (i.e. targeting several stakeholders using a variety of strategies) is thought to be associated with more successful dissemination as the more sources from which evidence emanates, the more likely it is to be heard, seen, and acted upon (Kernohan et al., 2018; Li et al., 2018).

Public health researchers recognise the importance of engaging with stakeholders and communicating their research evidence beyond academic publications targeted at researchers.

However, most admit to using opportunistic and haphazard dissemination practices in the later stages of the research, usually based on strategies utilised in the past, and often neglecting non-academic stakeholders (Kernohan et al., 2018). Few researchers engage in KT planning to tailor, track and evaluate the impact of related strategies (Lombardi, 2018; Ngamo et al. 2016). Prospective and considered KT planning is likely to ensure more structured and effective research exposure and engagement which can ultimately increase research utilisation and impact (Barwick, 2016; Cambon et al., 2017).

In terms of research impact, there is a growing emphasis on assessing the effects of evidenceon policy, practice, and society, aside from knowledge uptake and implementation (Geddes, Domnett and Prosser, 2018). For instance, many health research funders (e.g. the Health Research Board [HRB] Knowledge Exchange and Dissemination Scheme in Ireland and the CIHR Planning and Dissemination grants in Canada) are now encouraging and even requiring investigators to demonstrate how they can share their findings in practical and usable ways (Barwick, 2016). The increased popularity of assessment schemes, such as the Research Excellence Framework or the Knowledge Exchange Frameworkin the U.K., evaluate impact in terms of the reach (the measure of accessibility) of research with intended stakeholders, as well as the significance or usefulness of the findings (Kings College London and Digital Science, 2015). Thus, the influence of research findings can be assessed, at least in one way, by recording the number of individuals/organisations who accessed, understood or interacted with a piece of evidence (insofar as this can be evaluated) (Hill and McAlpine, 2019).

Ultimately, health research evidence cannot have a positive impact unless it is effectively communicated to the intended stakeholders. The dissemination process can be maximised through executing a context-specific KT plan early in a research project (Barwick, 2016; Cambon et al., 2017).

Aims and objectives

The overarching aim of this research was to undertake a detailed case study that involved developing and executing a KT plan embedded within the context of a five-year research programme undertaken to assess the implementation and effectiveness of two wraparound-inspired service models designed to promote child and family well-being in the early years (Hickey et al., 2020; Leckey et al., 2019). For example, one of these models involves the delivery of a number of service elements (e.g. baby massage and paediatric first aid) to 106 parent and baby dyads during the first two years of life. The research was conducted in collaboration with multidisciplinary service providers such as public health nurses, family support workers and social workers.

The specific objectives of the current study were to:1) identify and outline the factors that influence dissemination effectiveness according to the perspectives, preferences, and needs of a range of stakeholders from an early years context in Ireland; 2) use some of the findings from the above to inform the KT plan for the research programme; and (3) to evaluate, insofar as possible, the selected dissemination strategies using key impact indicators.

Method

This mixed-method KT case study undertaken during the third and final phase of the research comprised a number of separate but related activities including (i) a stakeholder analysis; (ii) an online survey of key stakeholders (designed to provide an understanding of access, attitudes, skills, and the influence of evidence); (iii) a series of interviews and focus groups with key informants to supplement and amplify the survey findings, but with a specific focus on contextual factors that can inhibit and encourage evidence dissemination; (iv) the design and execution of several dissemination strategies informed by stakeholder input; and (v) the ongoing evaluation of dissemination strategies to provide an understanding of evidence use and to determine whether stakeholders benefitted and how.

Participants and settings

The term 'stakeholders' in the context of this study, collectively describes knowledge users (KUs) and knowledge producers (KPs)/researchers (individuals or groups) who are interested in disseminating research evidence to influence policy and/or practice, or who may be impacted by evidence(Graham et al., 2018). The stakeholders who participated in Phase Three of this study were invited to take part in key informant interviews, focus groups and/or a survey using a mix of purposive and snowball sampling. We identified and recruited from the following KU and KP groups within the health and social care sector (primarily child and family services) in Ireland: (1) policymakers; (2) practitioners; (3) researchers/Principal Investigators; and (4) parents.

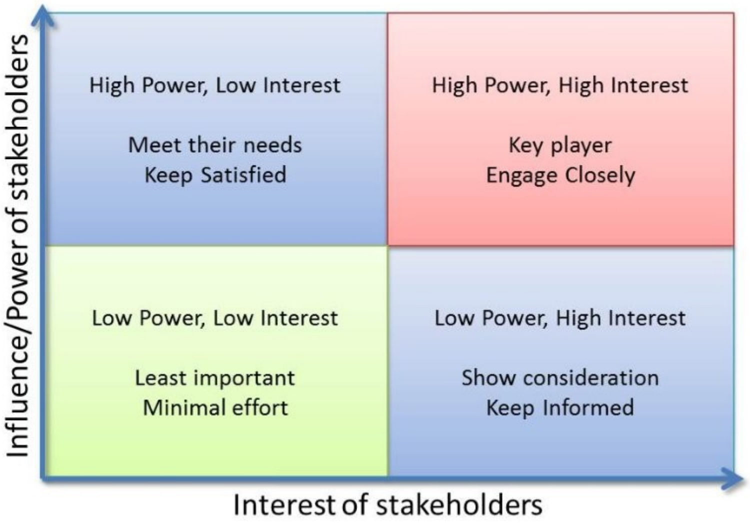
The policy maker category consisted of employees of government departments who work in or influence policy or programme development for child and family welfare and health. The practitioners included professionals who have direct contact with children and families in their main roles (e.g., service providers, managers, public health nurses and social workers). A small number of representatives from intermediary organisations e.g. CES and funding agencies also took part in the survey/interviews. Many KUs and KPs were recruited using existing relationships which had been fostered as part of the ENRICH research programme. For the parent focus group, the researcher (SO'C) liaised with a service provider who was collaborating with the ENRICH research team, in order to identify parents - whom they knew from the service - that might be interested in taking part (but who were not part of the ENRICH programme). For the Parent Advisory Panel, 20 parents that took part in the ENRICH programme were purposively selected by the ENRICH team (based on the team's judgement regarding their likelihood to participate). More specific information on participants and settings is provided in the relevant sections that follow.

Procedures

A stakeholder analysis was carried out to identify stakeholders to participate in the survey, key informant interviews and focus groups (Figure 6.1). The stakeholder analysis involved the development of a quadrant matrix that prioritised and mapped a list of stakeholders identified by the research team. These stakeholders were then grouped based on their relative influence and/or interest in the area of research use in child and family sector (Eden and Ackermann, 1998). For example. Principal Investigators, healthcare managers or policy makers were considered most influential. Other KUs such as parents, members of a research team or service providers could be classed as having a high interest in the area. Most efforts were focused on stakeholders mapped in the high interest, high power group.

Figure 6.1

Stakeholder Analysis using the Power Versus Interest Grid (Eden and Ackermann, 1998)



The inclusion and exclusion criteria for participation were as follows:

Inclusion Criteria for Policy Maker, Practitioner and Researcher KU Groups

- Participants must be employed within their role for at least six months upon initial contact.
- Participants are aged 18 or over.
- Participants must work with children and families or have extensive knowledge of how research findings inform policy and practice within the context of child and family services.
- Inclusion Criteria for the Parent KU Group
- For the Parent Advisory Panel, parents must have participated in the ENRICH programme.
- For the parent focus group, the parents must not have taken part in the ENRICH programme and have a child under the age of 10.

Exclusion Criteria for all KU Groups

- Participants who have insufficient English language competence to complete the surveys/interviews/focus groups.

Following the stakeholder analysis, and review of the inclusion/exclusion criteria, the researcher (with the support of the ENRICH research team) generated a list of stakeholder email addresses via Google searches (prior to the enforcement of the General Data Protection Regulations, 2018). Prospective stakeholders were invited via email to take part in the study. Prior to their participation, participants were required to confirm that they consented to take part in the research and that they had read the information sheet (Appendix 3a) attached in the email which detailed the purpose of the study, the rights of participants, and how the collected data will be used. Fully informed written consent was sought from all stakeholders and they were also assured that any identifiable information would be removed. Stakeholders were also invited to circulate the survey to their colleagues or other relevant stakeholders whom they considered might be relevant. This was a useful way of collecting more data, although it was difficult to ascertain the overall response rate. Non-respondents were sent two reminder emails in the month following the initial email in order to maximise the response rate.

Measures and Procedure

Quantitative data collection measures

The KT-D case study comprised two quantitative elements (undertaken during 2016 - 2019) – a questionnaire-based survey and an evaluation of the executed dissemination strategies.

Research dissemination survey. A 68-item self-report online questionnaire-based survey (Appendix 4a and 4b) was administered using Qualtrics Survey Software (www.qualtrics.com). The survey included a mix of 5-point Likert scale questions (e.g. 1, “strongly agree”; 5, “strongly disagree”), multiple-choice answers, and open-ended questions, all of which were based on the review of the literature reported in Chapter Two. Information was collected on: demographic background (e.g. job title); understanding of evidence; attitudes towards research; organisational culture of research dissemination such as available supports; experience with accessing, interpreting, interacting with, and disseminating evidence; and thoughts/views about barriers and facilitators that shape evidence dissemination. For instance, survey items included for practitioner and policy makers KU groups were ‘Using research is a priority in my workplace?’; ‘I don’t have time for research’ and ‘I don’t feel capable of applying research evidence’. An example of an item customised for the researcher KU group included ‘Over the last 5 years, my research reports were read and understood by the practitioners and professionals concerned’. The choice of survey items relating to the last of these, was guided by the research questions and by identifying and assessing two existing measures in the literature (Canadian Foundation for Healthcare Improvement, 2014; Landry et al., 2001), after which two subscales were adapted and incorporated into the survey. These showed good internal consistency with Cronbach alphas ranging from .82 to .94. A list of commonly executed KT-D strategies (e.g. research paper, research summary, database, grey literature, conference/workshop presentation, e-newsletter, video, webinar, social media, group discussion, and networking) was also provided and respondents were asked to select which they prefer to use to access or disseminate evidence.

With regard to survey set-up, the Qualtrics algorithms were configured so that specific survey items were displayed only to those who identified themselves as working in practice, policy, or ‘other’ (e.g. “Which of the following have you used to access evidence?”) and certain survey items were presented to those who identified as working in research/academia (e.g. “Which of the following have you used to disseminate your research?”). The survey took approximately 20 minutes to complete.

Dissemination strategy execution and evaluation measures.

The Knowledge Translation Planning Template (KTPT) (Barwick, 2008; 2013; 2019). The KTPT (Barwick, 2008; 2013; 2019) (Appendix 8) was used to guide the planning, description and evaluation of the ENRICH programme KT-D plan. This is a free evidence-informed and widely used planning tool for research dissemination that guides users through 13 core components of KT-D planning that include:

- Identifying the project partners

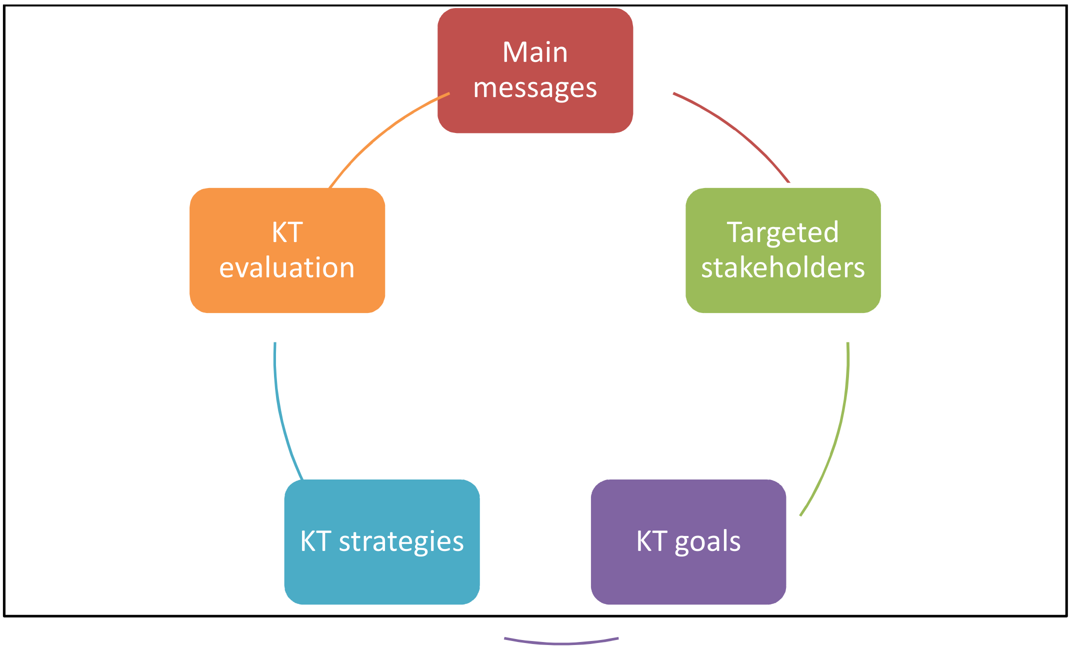
- Degree of partner engagement
- Partner roles in KT-D planning
- KT-D expertise on the team
- Targeted KUs
- Research findings presented as main messages
- KT-D goals, such as building awareness or interest
- KT-D strategies to be used to meet the KT-D goals
- KT-D process, such as integrated or end of grant strategies
- Indicators of KT-D impact and evaluation metrics
- Resources needed to actualise the plan
- Related budget items to include in funding proposals
- Details of how the KT-D strategies will be implemented.

This tool is applicable to health research and across sectors to support effective and evidence-informed translation of research to KUs. All 13 components of the KTPT were considered as part of this KT-D plan, with particular focus on the following: 1) identification of main messages; 2) targeted KUs; 3) KT-D goals; 4) KT-D strategies, and 5) indicators of KT-D impact and evaluation metrics (Figure 6.2). As such, evidence-based KT-D strategies and evaluation measures were summarised and discussed in terms of their effectiveness in engaging with relevant KUs and achieving a series of KT-D goals.

KT-D strategies refer to a broad range of processes and practices which can be executed in isolation or combination and are designed to promote research dissemination and foster collaboration among KUs and KPs (Rabin, 2008). The dissemination strategies for the current study (e.g., research summaries, media, educational material, training, and events) were selected to align with the KT-D goals and preferences of the KU groups and, in line with recommendations from elsewhere (Grimshaw et al., 2001; Seers et al., 2013), were primarily focused on programme visibility, understanding and KU engagement.

Figure 6.2

Core Components of the KTPT (Barwick, 2008; 2013; 2019) for this Knowledge Translation Plan



These strategies were informed by: (a) the KTPT planning tool (Barwick, 2008, 2013, 2019); and (b) evidence on their effectiveness (Oliver et al., 2014; Powell et al., 2017).

The case study was conducted in line with an iKT approach by virtue of the fact that the dissemination strategies were implemented (within available resources) on an ongoing basis. Thus, certain strategies were employed throughout the duration of the programme (e.g. social media and collaborative meetings) whilst others were implemented at specific junctures (e.g. presentations, newsletters and capacity-building training events). A description of the dissemination strategies that were implemented by the ENRICH team is included in Chapter Six. The use of an emergent approach ensured that, as the case study progressed and was increasingly informed by participant input, the dissemination strategies were updated accordingly and attempts made to target them more effectively in response to the ongoing findings. Table 6.1 below shows the timeline for when the KT-D strategies for the ENRICH programme were executed.

The evaluation of the dissemination strategies used standard indicators such as reach (e.g. the number of conference presentations and publications), usefulness (e.g. user satisfaction), and use (e.g. intent to apply in the workplace setting) rather than indicators of practice change or policy (Barwick, 2016). Activity from the research project webpage, e-newsletters, and social media accounts was captured using online tracking analytics (i.e. Google Analytics, Mailchimp reports, Facebook Insights, and Twitter Analytics) which measure, for example, citation counts, article views, downloads, and social media mentions. A number of brief evaluative anonymised feedback forms (Appendix 5) were also developed and distributed at the end of any knowledge-sharing and training events which were carried out in the course of the research programme These pen-and-paper measures were tailored for each relevant strategy and included 5-point Likert-scale structured questions and open-ended questions relating to the perceived quality or usefulness of the strategy; stakeholders' knowledge status pre- and post the strategy; levels of satisfaction with the strategy; any intent to use or adapt the knowledge following the event, and any other feedback about the event.

These measures were completed anonymously, took approximately five minutes to complete and were collected and collated once the strategy was complete.

Table 6.1

Timeline for the Implementation of the ENRICH KT-D Strategies

KT-D Strategy	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Knowledge-Sharing Events		**2**	**2**	**1**		
Presentations	**5**	**14**	**6**	**4**	**3**	**1**
Publications	**1**	**1**	**1**	**2**	**5**	**1**
E-newsletters		**2**	**1**	**1**		
Social Media		**1**	**1**			
Webpage	**1**		**1**			
KT Skills Training				**3**		
Implementation Manual					**1**	
Parent Advisory Panel				**1**		
Knowledge Hub					**1**	

Note. This table refer to the total number of outputs from the ENRICH programme. Social media and webpage totals reflect the year that these accounts were set up abd were then maintained for the remainder of the research.

Quantitative data Storage and Analyses

The survey responses were automatically collected and stored in a secure password-protected database on the Qualtrics server and were exported to SPSS (Version 25.0) at the close of the survey. All data were anonymised and any potentially identifiable data removed. All data were 'cleaned and screened' and descriptive statistics generated in the first instance to explore demographic information, barriers and facilitators to research dissemination and other relevant information. A number of Chi Square analyses were then conducted on the survey data to identify any significant differences relating to KT-D experiences and views across the participant groups (the small policymaker subgroup was combined with those who classified themselves as working in 'other' areas for the survey analysis (n=38)). Evaluative feedback forms were analysed using Microsoft Excel and described using means and frequencies. Details on presentations, publications, e-mailing lists and sign-in sheets from research programme events were logged (where possible) by the ENRICH research team including when and how often they were executed, and the number and type of KUs targeted for each strategy.

Qualitative Element

The qualitative element of the study involved a series of one-to-one interviews and focus groups with a range of participants.

Participants and Settings

Following a request at the end of the online survey, seven participants volunteered to take part in a one-to-one interview with the researcher (SO'C). In line with Dicicco-Bloom & Crabtree (2006), 80 other prospective interviewees who were identified from our initial stakeholder analysis, were invited via email to take part in key informant interviews based on their ability (and willingness) to provide more in-depth input on experiences of KT-D within the context of child and family services (e.g. senior managers/policy makers/Principal Investigators/ parents). Forty-one percent (n=33) of these stakeholders agreed to take part in the research. The service provider collaborator kindly asked the prospective participants if they would be willing to participate in the study and provided them with an information sheet (see Appendix 3b). This focus group was carried out in a Family Resource Centre while parents were waiting for their children to complete a behavioural support service.

A total of 37 people, in total, agreed to participant in this part of the research (research n=7, practice n= 7, policy n=12, other (e.g. funder, intermediary organisation) n=3, parents n=8) – as part of Parent Advisory Panel). This was considered to be an acceptable number in line with Guest, Bunce, and Johnson (2006) who argue that theme saturation often occurs after around 12 one-to-one interviews within homogeneous groups. It was also judged that any additional interviews would be unlikely to contribute further insights into the analysis (Strauss & Corbin, 1998).

Measures and Procedure

Interviews/focus groups. The researcher developed a series of semi-structured interview schedules and focus group topic guides tailored for each KU/KP group respectively (see samples in Appendix 7a and 7b). Interview questions were informed by the research aims and previous literature and the findings were used to supplement and amplify the survey findings. The interviews aimed to capture detailed individual experiences and contextual factors relating to evidence dissemination, including general decision-making processes. The focus groups also allowed for a more in-depth assessment of research dissemination and to assess the views of particular KU or KP groups (e.g. parents). All interview/focus group measures were designed to ensure that all relevant topics were addressed whilst also allowing scope for participants to raise any other emergent issues. Prompts and probes were used when necessary to elicit further clarification or additional information.

Prospective key informant participants were sent an initial email including an information sheet (Appendix 3b) which detailed the purpose of the study, the rights of participants, and how the collected data will be used. They were also offered the opportunity to view a copy of the interview schedule prior to their participation. One focus group was carried out with parents who did not participate in the ENRICH research progamme (*n*=8) and one with the ENRICH research team (at Maynooth University) (*n*=3). The parent focus group aimed to understand parents' perceptions of research evidence relating to children and families. The research team focus group offered an opportunity for the team to discuss the programme's KT-D progress and experiences, the perceived usefulness of the dissemination strategies employed, and any perceived barriers or facilitators to their execution.

Three in-person key informant interviews were carried out at the participants' workplace; the remaining interviews were conducted by telephone (in a private room at Maynooth University) due to time and resource constraints. These were found to offer a more efficient means of carrying out the interviews without affecting the rapport between the researcher and interviewee nor the quality of the information provided. In addition, those working in policy indicated a preference for this approach due to their limited time. Both focus groups and interviews ranged in length from approximately 20 to 45 minutes and were all carried out by the researcher, audio-recorded (with consent), and transcribed verbatim. All participants were asked to provide their written informed consent to take part in the interview/focus groups (Appendix 6b). The purpose of the interviews/focus groups was explained to all participants as well as other issues around anonymity, confidentiality, and withdrawal from the research (see Section 3.6 for further information). Participants were also offered a transcript of their interview and asked to provide any comments/feedback and to add or remove any information if they so wished.

Parent advisory panel. A parent advisory panel of eight parents who took part in the larger ENRICH research programme, was convened through consultations within the ENRICH team regarding which parents may be likely to participate. Fifteen parents were contacted and invited to participate and those parents who agreed to participate were provided with a tailored information sheet and completed a consent form prior to their participation. This advisory panel was utilised to gather feedback on three dissemination strategies (i.e. an academic paper, research summary booklet, and the webpage), to assess their usefulness for parents/families, and to learn how best to communicate research to these stakeholders. No demographic information was specifically collected in the interviews but all of the panel participants were female.

Qualitative Data Storage and Analyses

Qualitative data (including data generated through open-ended questions from the research utilisation survey and key informant interviews/focus groups) were stored and analysed using MAXQDA software (Version 12.0). A standard thematic analysis was conducted using a deductive approach - informed by Braun and Clarke (2006) - established a priori in line with the research aims, previous literature and survey findings. An ongoing process of reading line-by-line and reviewing transcripts was carried out to identify common and divergent views, summarised with illustrative quotes organised around the theme of influential factors. Codes and emergent themes from the data were refined as necessary. Data saturation was considered to have been achieved at the point when no new themes were identified from additional interviews that would alter the interpretation of the results. All of the data were coded and analysed by the primary researcher with ongoing consultation about the themes rationale with three team members experienced in qualitative research. Respondent validation was employed by informing the interviewees of the primary factors identified from the survey results. Reflexivity was facilitated by debriefing the stakeholders following the interviews/focus groups and the researcher also repeated statements back to interviewees during the interviews to clarify understanding.

All of the interview and focus group data were transcribed verbatim and thoroughly checked and edited for clarity. All data were retained as written electronic files and stored securely on a password-protected computer. The qualitative analysis software MAXQDA (version 12.0) was used to facilitate data storage and analysis. Audio-files were destroyed after transcription and all transcripts were anonymised through the allocation of a unique identification code and any potentially identifiable data removed.

A standard thematic analysis was conducted on all qualitative data using a deductive approach in line with the six stages described by Braun & Clarke (2006).

1. Firstly, each interview/focus group transcript was read and re-read line-by-line and initial keywords were noted to develop a sense of familiarity with the data. This stage provides the foundation for the subsequent analysis.

2. Once familiar with the data, the second stage involved generating initial codes - highlighting data that appear meaningful to the research aims. These codes provide an indication of the thoughts, attitudes, and experiences inherent in the text.

3. Thirdly, these codes were analysed and sorted into potential themes and subthemes. As part of the deductive approach, themes and sub-themes were pre-selected a priori based on the research aims, literature, and the survey findings, but emergent themes

were also incorporated into the analysis and reporting (Barnett-Page & Thomas, 2009).

4. In the fourth stage, codes, key themes, and sub-themes were reviewed and refined as necessary by re-reading the original data.
5. The fifth step involved further ‘refining and defining’ of the themes and subthemes within the data, ensuring to include common and divergent data and a range of perspectives within the analysis. Supportive illustrative quotes were selected and used to validate and summarise the interpretation of the major themes (Barnett-Page & Thomas, 2009). Data saturation was considered at the point when no new themes were identified through additional interviews from each key informant group that would be likely to alter the interpretation of the results.

The final stage involved identifying connections between themes and developing an overarching framework relating to the research questions and literature, organised around inhibitors and facilitators to the translation and utilisation of research evidence.Both quantitative and qualitative data were collected concurrently, analysed separately initially and then synthesised and integrated. The triangulation of findings helped to ensure overall rigour in the analysis process. All of the data were coded and analysed by the primary researcher with ongoing consultation about the themes rationale with three team members experienced in qualitative research. Respondent validation was employed by informing the interviewees of the primary factors identified from the survey results. Reflexivity was facilitated by debriefing the stakeholders following the interviews/focus groups and the researcher also repeated statements back to interviewees during the interviews to clarify understanding.

Results

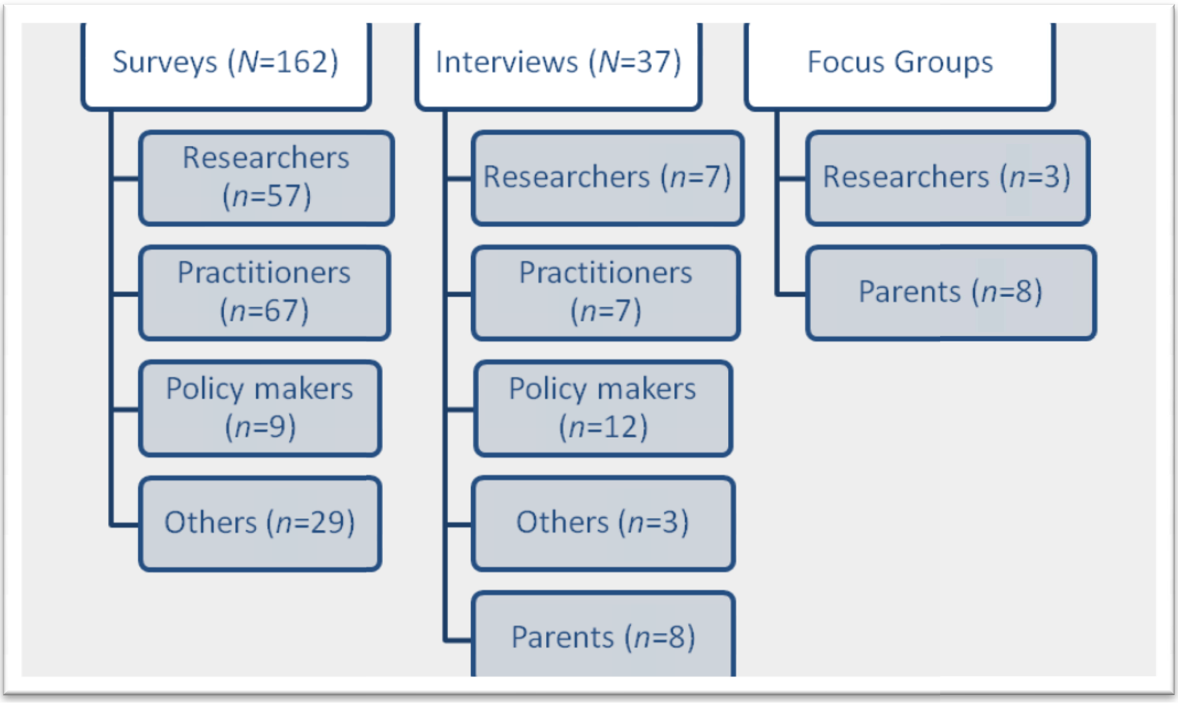
Participant characteristics

A total of 433 participants were contacted and invited to take part in the survey, 37%(162/433) of whom responded, It was felt by the researcher and supervisory team that the survey was less suitable for the parent KU group and that richer data would be obtained through qualitative methods. The national survey sample consisted of 162 stakeholders working in research/academia (*n*=57), in practice - as a practitioner/service provider/ manager (*n*=67), in policy (*n*=9) or in 'other' fields such as community development and intermediary organisations (*n*=29) (Figure 6.3). For purposes of analysis, the small number of policy stakeholders was combined with those identified as working in 'other' areas (*n*=38). Most participants were female (84%, 137/162) which is likely due to high representation of women in this sector and were aged between 50 and 69 years (M = 61). One third of participants had over 10 years' experience of working in their roles (53/162) and most were working in Dublin (n =55). [The specific names of the organisations in which participants worked, are not named in order to preserve participant confidentiality].

A total of 37 one-to-one interviews were subsequently carried out with researchers (*n*=7), practitioners (*n*=7), policymakers (*n*=12), 'others' (e.g. funders, intermediary organisations) (*n*=3), and parents - as part of a Parent Advisory Panel (*n*=8). Policymakers were more likely to respond to a request for an interview than a request to complete a survey, and therefore, were targeted chiefly using this approach. Additionally, two focus groups were carried out, respectively, with a group of parents who did not take part in the research programme (*n*=8) and with some members of the research team (*n*=3).

Figure 6.3

Breakdown of the Stakeholder Groups that took part in the Surveys/Interviews/Focus Groups



Reassuringly, there was a high degree of overlap between the findings from both the survey and the qualitative interviews/focus groups. Thus, these are summarised in Figure 6.4. More detailed findings will be reported elsewhere. The dissemination strategies and their evaluation are described thereafter.

1. Key factors influencing research use in an early years context

Many contextual elements can influence how research evidence is shared and used amongst the intended stakeholders. The following factors were highlighted as the most influential in the early years setting, and informed the development of the KT plan and the dissemination strategies.

Resources & Accessibility. Overall, a lack of resources to facilitate access to and dissemination of research was identified by the majority of stakeholders, including researchers (*n*=44), practitioners (*n*=38) and policy/others (*n*=27), as a primary factor influencing the use of research.

"Money is the issue, and the control of money and all the other issues are subsequent to that" (Practitioner [P] 2).

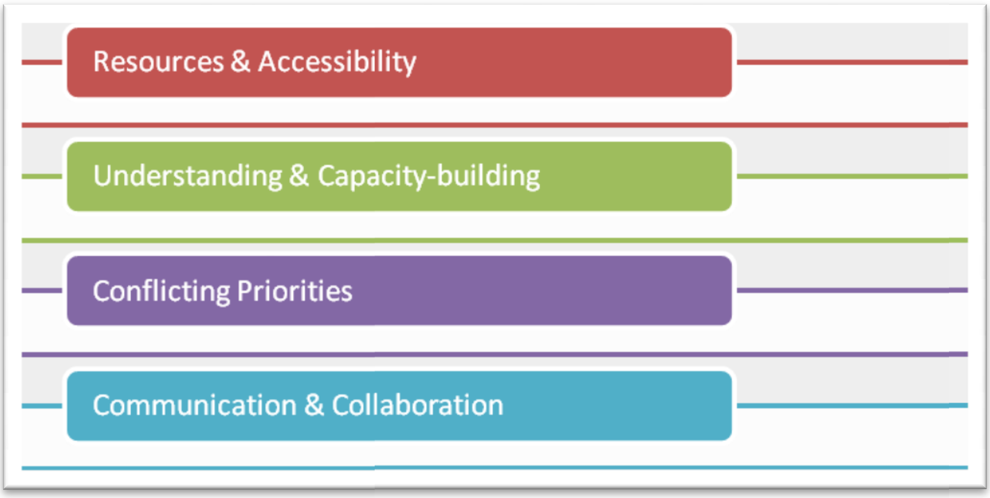
One key informant noted that *"the biggest barrier is knowing [research evidence] is out there at all"* (Policy Maker [PM] 11) whilst a large proportion of practitioners (*n*=44) and policy/others (*n*=21) identified accessibility to expensive academic journals as problematic. All stakeholders described not having the "luxury of time" in the working day to access, digest and disseminate research evidence in a timely and varied manner. To engage in more dissemination would require more resourcing to allow staff the ability to access evidence through paywalls on academic journals, attend conferences, and attend capacity-building training. Also, the research team acknowledged that: *"having a dedicated person looking after KT has made a huge difference to this project" (Research Focus Group [RF]).* This shows the value of investing in KT.

Understanding & Capacity-Building. The capacity of stakeholders to interpret research findings and to engage in a variety of dissemination methods were also viewed as a barrier by practitioners (*n*=37), policy/others (*n*=29), and researchers (*n*=22) respectively.

"[Practitioners] have no understanding of the power of evidence" (PM1).

Figure 6.4

Key Factors Influencing Research Use within an Early Years Context



The inclusion of technical jargon and statistics in journal articles and conference presentations was perceived to limit access to evidence for non-academic stakeholders. Enhancing stakeholder research appraisal skills through training supports was further identified as imperative for practitioners (n=36) and policy/others alike (n=21). Importantly, it was felt that there is a lack of support and training available in academic institutions to build researcher capacity to engage in dissemination. Therefore, any non-academic dissemination is perhaps seen as less important within academia and, yet, it is crucial for engagement and impact and should be fostered.

"We don't have the university's blessing to really pursue all those other kinds of knowledge translation activities which we should be doing" (RF).

Likewise, the research team acknowledged that engaging in effective and meaningful dissemination requires a different skill set to what they are trained in. Academic writing contradicts much of the KT literature that encourages dissemination through key point summaries, but *"academic writing by its nature is not concise"* and *"woe betide you if you leave a detail out in an academic publication" (RF).*

For the same reason, two key interviewees recommended KT training be incorporated into postgraduate programmes to educate researchers on how to disseminate findings in diverse ways *"so researchers coming out of that process have those skills starting off"* (Researcher [R] 21) and to strengthen their capacity for dissemination over the longer term.

Conflicting priorities. Respondents reported that roles, responsibilities and conflicting pressures could also influence how research is used in the early years sector. Practitioners described researchers and policymakers as being "at a distance" from frontline issues and indicated that decision-making around early parenting supports was more likely to be dictated by short-term political demands than evidence-based research. Researchers, on the other hand, were perceived to be more focused on securing funding and producing publications for career development, which is *"distinct from what is actually needed in the field"* according to one research respondent (R6).

"[Researchers] care whether the research is cited again in another journal and lets just all keep each other in a job, citing each other's work, but does the research work actually care whether practitioners read their research" (R6).

Indeed, the academic infrastructure was considered to be an important barrier to dissemination. It can be difficult for researchers to strike a balance between producing time-consuming traditional research papers and engaging in more varied dissemination within the allocated time for a research project (i.e. before funding runs out). The research team acknowledged that researchers need to be very committed to complete the dissemination process, which often tends to go considerably beyond the end date of the actual project. Thus, it was seen as imperative that funders and academic institutions shift to measuring scholarship by recognising dissemination and impact (particularly the value of relationship-building) in addition to the more traditional publications and citations.

"You spend an inordinate amount of time planning and designing and speaking to collaborators and you have nothing to show for it. If engagement is done well, we should be able to, theoretically anyway, do more effective knowledge translation" (RF).

However, a huge push in Ireland and elsewhere toward engaged research was also recognised. Grant schemes (such as the aforementioned HRB Knowledge Exchange and Dissemination Scheme) that build in resources to encourage and incentivise proactive dissemination, were commended as having helped to *"change the whole interface of research"* (R24). These kinds of incentives were viewed as important for further development in KT and embedding it throughout a research project.

Communication & Collaboration. A reliance on one-way linear communication was also considered to be a substantial barrier to dissemination by all stakeholder groups. One key informant stressed that researchers need to be more transparent and engage with the stakeholders that contribute to their research findings:

"For God's sake researchers - get it together and feedback and show people how important they are and what changes their involvement has created for the better rather than saying thanks for your input" (R24).

Therefore, a key strength of this study was the inclusion of parents in the evaluation process to help determine how best to communicate research findings to these stakeholders. One parent from the Parent Advisory Panel noted:

"It was kind of nice to see just the results because I really felt like I benefitted from doing the group" (PT [Parent] 5).

The survey found practitioners and policy/others working in an early years setting most commonly accessed research findings through research papers (n=55/ n=29) and grey literature (such as reports, summaries, and newsletters) (n=54/ n=31). Conferences and workshops were also commonly used by both practitioners and policymakers alike as a means of sourcing evidence. Although stakeholders regularly access evidence through traditional papers, there appears to be a yearning to move away from this type of text-heavy and formal dissemination:

"Nobody is going to read documents that are 50 pages long. Those days are gone" (RF).

The use of varied and creative means of communicating evidence (e.g. summaries, infographics or online resources) - presented in an accessible, easy-to-read and 'digestible' vital facilitator at every stage in the dissemination process. One key informant policy maker noted:

"What attracts me to a piece of work is that the summary of the document clearly outlines what the evidence is about, what kind of programme it is referring to, how it links to a policy area that I am working on" (PM15).

Parents, on the other hand, expressed a strong preference for face-to-face communication with a trusted party (e.g. another parent, or a nurse) when accessing knowledge on parenting practices. The use of social media was also highlighted as a useful way to draw attention to research findings as the *"phone is at your fingertips" (Parent Focus Group [PF]).* Websites deemed trustworthy (such as the NHS or HSE) were also utilised by parents to access information on child and family health and well-being. However, perhaps unsurprisingly, most parents in the focus group were not keen on academic publications for accessing information:

"You might only want a tiny piece of information out of that and you have to scan through pages and pages and pages just to get to the outcome or the conclusion" (PF).

In terms of collaboration, a sizeable proportion of researchers (*n*=56), practitioners (*n*=53) and policy/others (*n*=35) surveyed or interviewed identified insufficient collaboration and a lack of cross-sector interaction as a major barrier to the sharing and utilisation of research evidence. All stakeholder groups alluded to the need for relevant parties to engage in more meaningful engagement to promote and facilitate effective dissemination through, for example, round table discussions as it is *"hard to beat personal interaction"* (PM11). Interestingly, despite claims by researcher participants (*n*=36) of feeling disconnected from policy makers, the latter indicated their desire to be more included in research dissemination – "*maybe you are reaching out and we are not hearing*" (PM11). Therefore, it is important for researchers to continually prioritise engaging and communicating with policy makers throughout the research process, by sending summaries and reports to the relevant departments and inviting representatives along to knowledge-sharing events, as advised by several key informant policy makers.

On a more positive note, and despite an identified need for further collaborative efforts, it was indicated by several researchers and one practitioner that there are positive efforts within early years networks in Ireland to support the development and engagement of stakeholders – "*[practitioners]meet once a month and it is kind of a peer learning group"* (P28). It should be noted that, according to the research team, the current early years focus can create competition when trying to communicate research findings to policy makers within *"a very crowded field" (RF).* Nevertheless, the importance of communicating findings and engaging with all target stakeholders cannot be underestimated.

2. Dissemination strategies – execution and impact

The influential factors identified from the quantitative and qualitative data were used, in part, to inform the development and execution of a series of dissemination strategies by advising the research team on the type of strategies to target particular stakeholders.

Each strategy is described in relation to core components of the KTPT (Barwick, 2008, 2013, 2019) - the stakeholders, the message, the dissemination goal, the strategy and the impact indicator (reach and usefulness) (Table 6.2). The primary goals of each dissemination strategy were to promote stakeholder engagement and increase programme visibility. A secondary aim was to enhance the understanding of findings emerging from the research programme. Importantly, the execution of these strategies was constrained by the available budget and resources.

Knowledge-sharing events. Survey respondents and interviewees highlighted free interactive knowledge-sharing events as an effective means of communicating evidence and promoting informal discussions amongst stakeholders about the findings. The research team organised six knowledge-sharing events over five years. These were attended by a wide range of stakeholders (M=23), primarily researchers (M=7) and practitioners (M=20). All event attendees who provided feedback (n=43 out of 105) reported the information was helpful and, on average, 96% reported the event increased their understanding of the research programme.

Conference presentations. Stakeholders stated they regularly accessed evidence by attending conferences. As expected, the research team also presented their findings at 23 national and international conferences in both poster and oral presentation formats. In terms of reach, these conferences targeted primarily researchers, although practitioners and policy makers were also represented. Overall, these events provided a useful opportunity for interaction and relationship-building with all stakeholders, albeit with a principal focus on researchers. Also, the Principal Investigator of the research programme was an invited speaker at several events, which further enhanced external interest in, and awareness of, the research.

Table 6.2

Core Components of the KTPT (Barwick, 2008; 2013; 2019) applied to the KT Plan

Strategy	**Stakeholder group**	**Impact indicators**
Knowledge-sharing events	Practitioners Researchers	Reach (number of events and attendance) Usefulness (satisfaction, intent to use),
Conference presentations	Researchers	Reach (number of presentations and location)
Publications	Policy makers Practitioners Researchers	Reach (number of publications) Usefulness (online engagement)
Grey literature	Policy makers Practitioners Researchers Parents	Reach (number of newsletters distributed/downloaded) Usefulness (online engagement)
Webpage and social media	Policy makers Practitioners Researchers Parents	Reach (number of followers) Usefulness (online engagement, social media coverage)
KT skills training	Practitioners Researchers	Reach (attendance) Usefulness and use (knowledge change generated, intent to use)

Publications. Most of the stakeholders in this context still primarily access evidence through published peer-reviewed literature. At the time of writing, the research team had published their work in several different outlets (*n*=7) (both traditional journals and non-academic publications) targeted to a range of stakeholders (additional papers are in submission/preparation). Some of the publications were aimed specifically at stakeholders in the child and family sector in Ireland (e.g. Children's Research Digest as part of the Children's Research Network), whilst the remainder were aimed at an international readership (e.g. BMC Health Services Research which had an impact factor of 1.843 in 2017), so overall, there was varied targeted reach.

With regard to usefulness, Altmetric data were available for three of the publications and revealed they had a good attention score relative to other articles from the same journal published within the same time period, with two in the top 25% compared to other research outputs scored. From the perspective of most of the Parent Advisory Panel, (again as expected) the sample academic paper was not as well-received as other formats because it was considered more time-consuming to read and difficult to understand:

"I had to read a couple of times to understand, you couldn't scan over it" and it was *"full of research language, cold actually, clinical" (PT4).*

Grey literature. The findings from the survey, interviews and focus groups indicated a need for research findings to be summarised in brief, user-friendly and visually-appealing formats. Therefore, the importance of grey literature is apparent when engaging with any stakeholder group. In response to this, the research team produced (to date) four project e-newsletters, four summary booklets, and various reports to disseminate the research findings at various junctures throughout the programme. The e-newsletters were distributed to researchers (M=46.5) and practitioners (M=50.3) primarily, and also to policy makers (M=11.25). Tracking data revealed the e-newsletters were opened by all stakeholder groups, with, on average, a 38.3% open rate, including two clicks on to the research webpage and five additional subscription requests to the newsletter. The tracking data increased with every issue, which indicated a growing engagement with, and interest in, the research. Interestingly, the open rate was higher than average according to the benchmark of 21.33% (Mailchimp, 2019).

Summary booklets were distributed through the project webpage, e-newsletters, social media, and at knowledge-sharing events. A sample booklet summarising the aims and findings of the research findings received an overwhelming positive response from all members of the Parent Advisory Panel, who found it to be a colourful and comprehensive yet concise account of the research:

"*It was easy reading and you weren't puzzled either, it gave a good explanation of how the research panned out and the scale… I felt there was a lot of information in the small amount of reading" (PT5).*

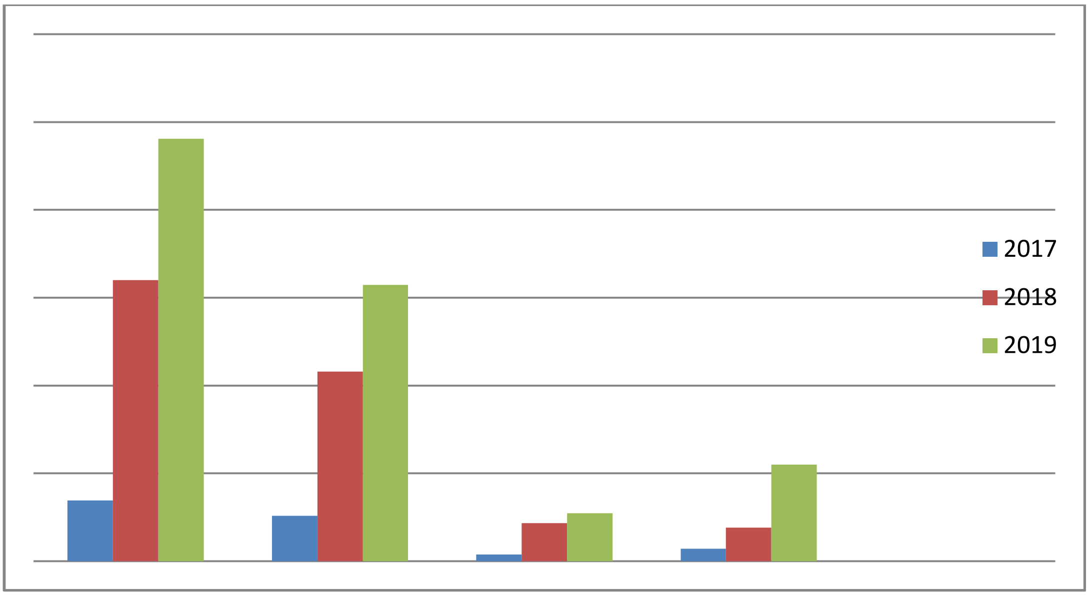
Project webpage. The research webpage is part of a research centre website that shares research findings as well as other news from the programme. Google Analytics reach indicators show how website traffic and engagement increased over time (Figure 6.5). Many users accessed the website through social media links, which shows the benefit of linking dissemination strategies to further promote the visibility of the research. Within the website, the research programme webpage was one of the most popular pages. The greatest number of weekly visitors to the website coincided with a highly publicised launch of the research programme's findings, which was featured in radio and newspaper media outlets at a national level.

In terms of benchmarks for webpage reach, it has been suggested that there is no ideal number of visitors; effective reach merely depends on whether the targeted stakeholders are engaging with webpage content (Andrews, 2016). The number of visitors did increase over time, which suggests increased engagement. Also, the average time spent on a webpage is an indication of the interest and value of the content to the user. The average time spent on the this research webpage was 2.28 minutes, which is marginally higher than the 2.11 minutes typically spent on higher education websites (Grzymkowski, 2019). All stakeholders stated the need for an online presence to share research findings and, more specifically, the Parent

Advisory Group found the programme's webpage easy to navigate, visually-appealing and useful as a *"one-stop shop for all reports" (PT2).* However, the website content was reviewed, amended, and abbreviated using more key point summaries and visually-appealing text boxes (through consultations with the research team) due to feedback suggesting it was a *"bit text-heavy"(PT3);* and this may negatively impact on the likelihood of parents accessing evidence through this forum.

Figure 6.5

Website and Research Programme Webpage Impact Indicators



Note:*'Sessions' measure unique and individual visits to the website

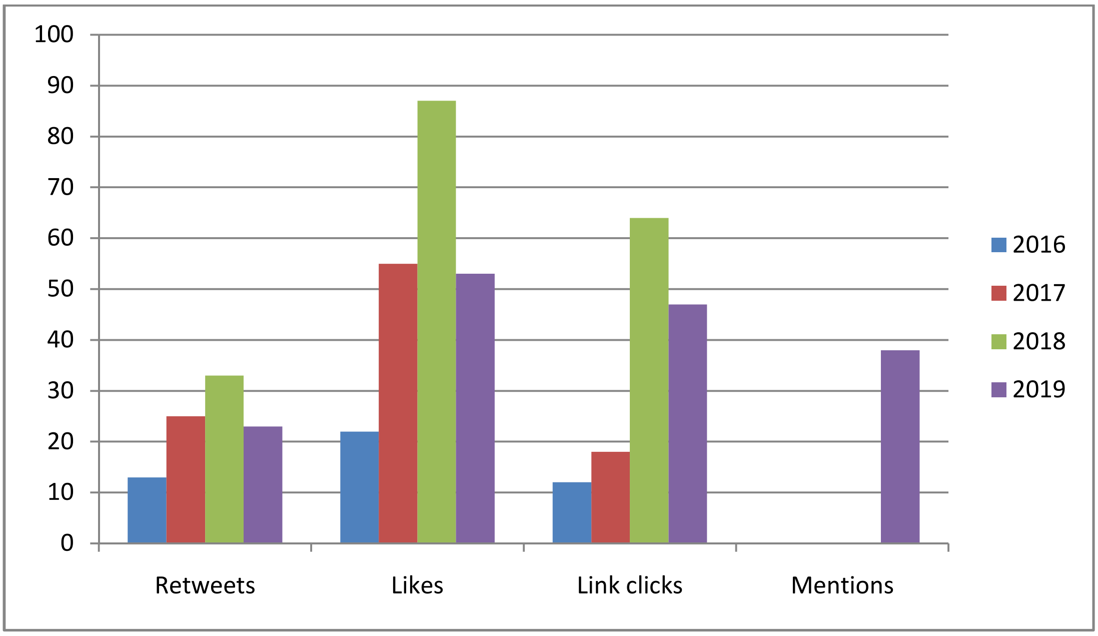
Social media. The use of social media to share knowledge was also encouraged by stakeholders. A research Twitter account was created at the end of Year 2 (when the research had become more established) and a Facebook page was created in mid-Year 3 (based on the survey data) as a way to share research updates, relevant early years content, and to interact with stakeholders nationally and internationally. In the final three years of the programme, Twitter followers nearly doubled from 370 to 602. By comparison, a large-scale longitudinal research study in Ireland called ‘Growing Up in Ireland’ –running for over 13 years - had approximately 1000 followers at this time (Growing Up In Ireland, 2017).

Twitter analytics provide summary reports of activity and engagement (Figure 6.6). Impressions, or the number of times a tweet appears in other users’ timelines or search results, increased by 4000 after the first year. Impressions are considered a low-level indicator of engagement, while ‘likes’ (a user agrees with a post), ‘retweets’ or ‘shares’ (a user shares a post with their followers), and ‘comments’ indicate higher engagement (Neiger et al., 2012). The ‘engagement rate’ refers to the number of times a Twitter user interacts with a tweet and here, the rate was above 1% throughout the programme which is considered to be very good (Mee, 2019).This form of social media has proved to be a useful means of promoting the research programme and encouraging interaction with stakeholders.

By the end of Year 4, the research Facebook page had attracted only 23 followers and increased to 47 by 2019. In the final three years of the programme, Facebook tracking data revealed 3.5 page views, on average, and an increase in the number of people reached (how often a post appeared on other users’ timelines), from 20 to 150. With only 46 engagements recorded from 2017-2019 characterised as posts with direct interactions including all clicks, comments, likes, and shares, Facebook yielded a low level of reach and engagement for the research programme. Facebook and Twitter engagement differs in ways that may impact dissemination of research findings. For instance, Twitter enables users to engage through the use of hashtags (Zhang and Ahmed, 2019).

Figure 6.6

Impact Indicators from the Research Programme Twitter Account



KT skills training. Most of the stakeholders and members of the research team highlighted the need for KT training, which they reported as often a low priority in academia. The research team organised three KT skills training courses during the research programme, aimed at enhancing dissemination capacity, understanding, and skills in how to disseminate findings using videos, plain language, and how to engage in KT planning. KT training was advertised and promoted to the wider researcher and practitioner community through social media and email. The KT skills training was attended by a total of 40 stakeholders, primarily researchers. All of the attendees who completed feedback forms found the events useful and indicated they had improved understanding of KT and how to communicate research using accessible language and videos; 92% of workshop participants reported improved dissemination skills following the training. Furthermore, 85% stated they would recommend the training to their colleagues and all intended to apply the knowledge and skills that they learned. The perceived value of the training was reflected in these terms and in their intent to develop a comprehensive KT plan using the KTPT (Barwick, 2008, 2013, 2019); 73% of participants reported they had never previously developed a KT plan for a research project.

The research team found the KT skills and capacity-building workshop informed the rest of the dissemination process:

"I wish we had done the KT training earlier" (RF).

Importantly, the team also acknowledged how their understanding of the dissemination process and the value of KT planning evolved throughout the research programme:

"*I think that every single project should have a special KT piece and you should be thinking about it from the very beginning" (RF).*

Discussion

The objectives of this study were to identify factors influencing dissemination effectiveness according to the perspectives and needs of a range of stakeholders in an early years context and to use these findings to inform a series of dissemination strategies as part of a KT plan for a research programme.

The factors identified in this early years context mirror those identified in the wider health literature. For example, the availability of appropriate resources – particularly funding and time to access and deliver research – are considered paramount to achieving effective dissemination, particularly in health research(e.g. Margaryan et al., 2011; Tricco et al., 2016). The provision of free, accessible, jargon free, and varied options for communicating research (that are less time-intensive) were consistently recommended by the stakeholders in this study. The importance of promoting awareness and visibility of the research findings was emphasised. Indeed, research is perceived to be a waste of time, funding, and resources for researchers if it gathers "digital dust" online (Green, 2019; Stevens et al., 2014). Also, capacity-building initiatives that – crucially - promote understanding amongst all stakeholders are deemed to be essential for improving research availability and accessibility (Cairney et al., 2016). The research team greatly benefitted from the KT skills capacity-building workshop but notably, this training was only made available through extra dissemination funding secured by the research team. These kinds of grants reflect a growing interest in and support for KT in Ireland and should be encouraged by all funding bodies to enhance research dissemination.

Threaded throughout the findings is a sense of disconnect and lack of meaningful engagement amongst stakeholders, particularly between researchers and policy makers, that has also been reported elsewhere in Europe, North America and Australia (Armstrong et al., 2013; Cambon et al., 2017; Oliver et al, 2014). Genuine and regular face-to-face interactions, as opposed to tokenistic interactions that simply satisfy funder requests, are vital to enhance research quality and increase the likelihood of research being understood (Kernohan et al., 2018). This kind of integrated KT approach - rooted in engagement and collaboration throughout the research process - can ultimately maximise research impact (Gagliardi et al., 2016). The research team felt the focus on KT helped them to be more proactive in collaborating and relationship-building with stakeholders and the KT plan helped the team become more aware of how to reach out to and engage with stakeholders through inviting them to knowledge-sharing events and by preparing user-friendly documents. However, the collective findings reported here suggest that all stakeholders must invest time, effort and commitment to achieve the long-term potential of collaborative relationships for future public health research.

Many of the barriers to research utilisation reported by stakeholders are related to the organisational contexts in which they work, such as inadequate facilities, supports, and administrative constraints (Elueze, 2015). The qualitative data suggested the academic world, in particular, does not always foster an environment that encourages effective dissemination. For instance, the research team highlighted the struggles of trying to balance varied dissemination strategies with other research tasks and duties alongside an ever-present pressure to produce traditional academic outputs. The wider political and social context also influences research use (Darker et al., 2018). In Ireland, a current strong focus on early intervention and prevention (including parenting supports) has, in turn, led to an increased interest in evidence-based programmes and related research. This is an important facilitator for promoting awareness of this research programme.

The use of the KTPT (Barwick, 2008, 2013, 2019), in particular, was central to achieving optimal results and indeed, a number of authors have advocated for the use of a guide to orient a KT plan, particularly for the development and evaluation of dissemination strategies (Barwick, 2016; Cambon et al., 2017; Lombardi, 2018). The use of an evidence-based planning tool, in this instance, allowed the research team to be more accountable, introspective, and transparent, to work more efficiently and, arguably increased the likelihood of more targeted and successful dissemination of the research findings. KT planning also allowed the research team to justify the resources spent on dissemination strategies, which can result in a more cost-effective programme. For example, the research summaries were favourably received by all stakeholders and were relatively low cost to disseminate, thereby indicating it doesn’t require a huge financial investment to share evidence.

In terms of the early years context, this case study contributes to and supports the growing international evidence base around the effectiveness of multi-faceted dissemination interventions (Yamada, 2015; Park et al., 2018). Web-based resources, such as videos, websites, social media, and e-newsletters, are increasingly used to build and strengthen awareness, reach, and engagement with research evidence amongst widespread stakeholders (Van Eerd and Saunders, 2017), and they were also well regarded by the stakeholders in this study in both the quantitative and qualitative elements. There was a marked increase in research engagement and visibility over time, particularly from the more ‘non-academic’ dissemination strategies such as the interactive knowledge-sharing events, grey literature, Twitter, and KT skills training. The project Twitter account achieved good engagement indicators and reached a large number of followers when compared to the Facebook page, which informs future KT plans. The Facebook account did not appear to be a feasible part of the KT plan as the reach and engagement indicators were poor. This corresponds with Twitter being the most popular free platform for academic research that tends to be used more for professional purposes than Facebook (Zhang and Ahmed, 2019).

According to the survey responses, policy makers and practitioners access evidence most often through peer-reviewed publications. In contrast, the qualitative data revealed research summaries were preferred by all stakeholders. This suggests that perhaps traditional papers are more readily available for these stakeholder groups but they are not the preferred means of accessing evidence. Nonetheless, journal articles were still considered useful as part of a comprehensive dissemination intervention, satisfying current academic responsibilities. As long as traditional dissemination continues to be valued as strongly as it is in academia, researchers must continue to produce these outputs but could incorporate a proactive dissemination approach, e.g. including infographics on conference presentations or publishing journal articles in an open access format.

The findings from this study also confirm the value, (but also the constraints), of measuring research impact in terms of indicators such as reach and usefulness. With increased pressure to demonstrate impact from funders, it would be useful for researchers to monitor research-related online data, such as social media or altmetric data. However, it is not always feasible to evaluate or monitor every dissemination strategy (e.g. usefulness indicators from presentations) in terms of the dissemination goal. In the current study, data protection regulations prevented the collection of individual evaluative data such as details on each visitor to the webpage. Also, it is not always possible to track third party reach data (e.g. external websites sharing the research findings). However, overall these impact indicators were a useful way of assessing dissemination efforts.

There are limitations to this KT plan. Some of the dissemination strategies can be costly and/or labour-intensive to develop and maintain. Importantly, in terms of online dissemination, the level of stakeholder engagement and impact mirrored the amount of content and time that the research team invested in developing these dissemination strategies. These strategies, whilst broadly effective, require ongoing management and innovation which can present challenges for researchers in terms of leadership, dedicated time, financial resources and skills capacity, particularly when there is still an emphasis within academia on traditional forms of dissemination. It was not always feasible to target all KU groups with the KT-D strategies that were preferred by them; for example, more parents could have been invited to knowledge-sharing events. Thus, any KT plan developed must be manageable within reasonable limits.

Although there are other dissemination case studies in the literature (e.g. Dew & Boydell, 2017; Home et al., 2015), this is the first study of its kind (to our knowledge) which provides a useful snapshot into the “how” aspect of the dissemination process, which could be transferable to future research programmes in Ireland and beyond. The findings suggest that research teams should use evidence-based KT planning tools (such as the KTPT; Barwick, 2019) to guide a comprehensive and feasible dissemination strategy that works best for their research project instead of approaching dissemination haphazardly. This case study illustrates the importance and value of KT planning, working together with stakeholders (including parents) throughout the research process to enhance dissemination (e.g. Fitzpatrick, 2012; Wathen & MacMillan, 2018). This is more likely to produce visible and impactful evidence, potentially deliver better returns on research investment and help researchers to leverage additional funding (Green, 2019). This 'real world' example of the efforts of researchers to communicate their findings and promote their research early in the programme helped to build a broader understanding of the contextual infrastructure and the factors influencing evidence dissemination, albeit with some limitations. These kinds of approaches should ultimately help to more effectively bridge the research-policy-practice gap and enable more effective translation of high-quality evidence in the early years sector in order to enhance outcomes for children and families in the shorter and longer-term.

6.2 Section Two: Supplementary Contextualising Information

As outlined above, the case study reported here, was designed to provide a contextual assessment of the barriers and facilitators that affect KUs and KPs in an early years settings. This knowledge was then used to help tailor KT-D strategies and to execute a KT plan as part of the ENRICH research programme in order to facilitate effective and timely dissemination as recommended by a number of authors (e.g. Barwick, 2016; Grimshaw et al., 2012).

Importantly, from the analysis of the survey data, the vast majority of the practitioners (84%, *n*=56) and policy makers (76%, *n*=29) who took part in the survey, believed that research evidence plays an important role in improving services for parents and children. This shows that both of these KU groups – for the most part – value the use of evidence in decision-making around child and family service provision. This in an important finding because it suggests that stakeholders in an early years setting are very open to accepting and using evidence where possible. However, it is also worth noting that 16% of practitioners (*n*=11) and 24% of policy makers (*n*=9) did not consider the use of research evidence to be important in the delivery of parent and child services. Further exploration of this could have provided important insights into the factors influencing this opinion.

In addition, the analysis further explored if policy or practice KU groups access evidence or experience certain barriers/facilitators to dissemination in different ways. However, there were no significant differences (as shown by a Chi Square analysis) between the groups. Thus, the vast majority of stakeholders in early years settings in Ireland, regardless of background/discipline, can benefit from the effective dissemination of relevant evidence, albeit in tailored ways. A range of KT-D strategies was used throughout the ENRICH research programme, including those described in Chapter Four related to networking (e.g. knowledge sharing events, presentations), educational (e.g. peer-review publications, grey literature) and technological (e.g. webpage, social media) approaches. Further information is provided below in Table 6.3.

As already indicated, midway through the lifetime of the ENRICH research programme, the team secured additional funding through the HRB Knowledge Exchange and Dissemination Scheme (KEDS) in order to engage in additional KT strategies (referred to as the LinKT project) (Table 6.4). The securing of this grant, in and of itself, was a good example of a 'usefulness' impact indicator (e.g. Sullivan et al., 2007). This usefulness/quality indicator was assessed on the basis of: feedback received from international peer reviewers; work already completed on the ENRICH programme and the KT sub-study; and the feasibility and merit of the future KT plans outlined by the research team in their KEDS grant application.

Table 6.3

KT-D Plan used Throughout the ENRICH Programme

KT-D Strategy	KT-D Message	KT-D Goal	KU	Outcome
Knowledge-Sharing Events	Update on the research progress; networking opportunity	Generate awareness; increase understanding, knowledge	Primarily researchers and practitioners	Events were helpful; increased understanding and awareness.
Presentations	Create opportunities for interaction and relationship-building with all stakeholders; co-presented with community partners at a conference	Increase awareness and interest	Researcher primarily, practitioners and policy makers.	Enhanced external interest and awareness. Capacity-building Team members invited to speak at events.
Peer-Review Publications	Publish academic peer-reviewed papers	Generate awareness and interest; increase engagement	Stakeholders in the child and family sector	Impact factors with varied targeted reach. Altmetric data show good attention and engagement
Grey Literature	Develop a project newsletter and research summaries to provide updates on the research progress and news items	Increase engagement; and generate awareness and interest	Researchers and practitioners, primarily, and policy makers	Newsletter- two webpage clicks; several newsletter requests; engagement and interest increased by issue.
Webpage	Share content on the various research projects, staff information, publications links and news updates	Generate awareness and interest; increase engagement	All stakeholders	Website traffic and engagement increased over time.
Social Media	Share research updates, relevant early years content, and to interact with stakeholders nationally and internationally	Increase engagement; generate awareness and interest	Stakeholders nationally and internationally	Twitter followers doubled over time; good engagement rate. Facebook- low level of reach and engagement

This additional funding was critical to enable the research team to enhance their dissemination plan and attendant strategies. For example, the funding allowed for the research team to develop two emotive videos, one animated, (Figure 6.7-based on participants' own stories and in conjunction with a web developer and PR consultant), which were shown at the end-of-project public launch event (and included in the knowledge hub). These provided a relatively novel means of reaching out to different audiences, particularly to policy makers, as the qualitative findings suggested that there was a need for more communication and engagement between researchers and policy makers in early years settings. In fact, Crow and Jones (2018) specified that policy makers preferred research to include emotive stories as it enhances the relevance of the findings. This could perhaps also be said for the parent KU group as parent representatives were also included in these videos.

Figure 6.7

Animated Video Sharing Findings from the ENRICH Programme

However, as some of these strategies (e.g. the Implementation Manual and the Knowledge Hub) were executed toward the end of the research, it was not possible to explore their impact. Nonetheless, both the Implementation Manual (targeted at the practitioners) and the knowledge hub (targeted at all KUs) present research evidence using user-friendly and concise formats which were consistently requested by the KUs who participated in this study. The challenges in assessing the longer-term impact of KT-D lie in the fact that dissemination typically extends beyond the completion date of a project (when the funding has run out) and any temporary researchers who work on research projects often move on upon project completion to work on other projects, or take up new positions elsewhere. However, sometimes researchers - with the support of PIs - will continue (of their own volition) with project-related dissemination beyond their period of employment on a particular project or with a specific institution, in order to maximise the reach and impact of the research both for their own career development and for the potential benefit of wider society.

The findings from this case study demonstrate how the assessment of barriers and facilitators to dissemination in an early years context, helped to inform the development of a structured and tailored KT-D plan. The KT-D strategies executed throughout the ENRICH programme and those implemented as part of the subsequent LinKT project, illustrate the comprehensive research dissemination efforts that were carried out by the ENRICH research team. The fact that additional funding was made available through the KEDS scheme, also reflects a growing interest in, and support for, KT-D in Ireland amongst major funders and this case study provides an excellent example of how KT-D grants can help to enhance research dissemination in public health (and in this case, in an early prevention and intervention context). The next chapter synthesises and critically discusses the findings from this element of the research.

Table 6.4

Additional KT-D Strategies Facilitated by the LinKT Project

KT-D Strategy	KT-D Message	KT-D Goal	KU	Outcome
Implementation Manual	Share "how to" of programme implementation and evidence-based approach	Inform practice; generate awareness	Practitioners and policy makers	Not possible to assess in the timescale of the study
Parent Advisory Panel	Gather feedback on dissemination strategies	Tailor strategies to paren needs; increase researchers understanding	A pool of ENRICH participants	Increased capacity-building efforts and researcher knowledge
Knowledge Hub	Online (free) dashboard within the CMHCR website including two research videos (one animated)	Generate awareness and interest; increase engagement and understanding	All stakeholders	Not possible to assess in the timescale of the study
Scientist Knowledge Translation Training	Two-day course on KT skills and KT planning	Enhance KT capacity and skills	ENRICH team members; researchers and practitioners	Training was useful; improved understanding and dissemination skills; was recommended to colleagues; intendedto apply skills and knowledge
Researcher Training	How to communicate research effectively in accessible language, and through audio-visual means.	Enhance capacity, understanding, and skills in disseminating findings using videos, plain language.	Primarily researchers.	Training was useful; improved understanding and dissemination skills.
Launch Event	Presented the final findings and bringing together stakeholders from the early years sector in Ireland	Generate awareness; increase understanding; enhance engagement	Researchers policy makers practitioners.	Events were helpful; increased understanding; media coverage

CHAPTER SEVEN: DISCUSSION

7.1 Introduction

This research involved three separate, but related phases including: a realist-informed evidence synthesis; a documentary analysis; and a KT-D case study. These were undertaken to address the three central objectives of the research which were as follows: (1) to identify and analyse the underlying contexts and processes which shape the achievement of KT-D goals (through KT-D strategies); (2) identify and critically review key policy and other documentation relating to child and family health and social care in Ireland to explore the extent to which policy and practice in an Irish context have been influenced by research evidence; (3) identify the factors that shape access, awareness, dissemination, and the interpretation of evidence in an early years policy and practice setting in Ireland from the perspective of targeted KUs; and to undertake a detailed case study on the development and evaluation of a detailed KT-D plan for the ENRICH research programme.

This final chapter provides a critical synthesis of the key findings and their implications for both KPs and KUs. The strengths and limitations of the research are also discussed, as well as directions for future research.

7.2 Summary of Key Findings

7.2.1 The Expanding Role of Evidence in Policy and Practice

The findings reported in Chapters Four and Six indicate that the use of both national and international research evidence in the area of PEI, has gained traction during the last 20 years, in terms of informing both policies (e.g. *Better Outcomes, Brighter Futures* and *First 5*) and service provision (e.g. Prevention and Early Intervention Initiative) in Ireland. A range of other factors such as the political and social context (e.g. available funding, political will) can also determine policy and service decision-making, as has been demonstrated with policy and service formation in other jurisdictions such as Finland, Italy, and the UK (Van de Goor et al., 2017). Nonetheless – and as also suggested by Field (2010) - the findings reported here combine to indicate that the availability and dissemination of high quality evidence is a key driver in guiding decisions on child and family supports in Ireland. Thus, it is imperative to explore how best to disseminate research findings that may eventually be implemented to improve population outcomes.

7.2.2 Understanding the Effectiveness of KT-D Strategies

A key aim of this research was to explore the effectiveness of dissemination strategies that are applicable to public health and early years settings. Specifically, the collective findings from the realist-informed evidence synthesis and the KT-D case study (Chapters Four and Six) provide important insights into how best to select appropriate KT-D strategies to effectively increase the visibility, understanding of, and engagement with research. It was interesting to note few variations across the public health and clinical health settings – as suggested by Sibley and colleagues (2017). Furthermore, while it was interesting to note the lack of any differences across KU groups in terms of perceived barriers and facilitators to research access, awareness and understanding, it is important, nonetheless, to understand the *contextual* differences between KU groups in order to better determine “what works” or does not work in this regard.

For example, a number of studies have found Facebook to be a useful tool for increasing research visibility and engagement across contexts (e.g. Kim & Vender, 2014; Martin et al., 2019). However, the Facebook account which was set up for the ENRICH programme had low levels of reach and engagement. Furthermore, the case study reported in Chapter Four, produced somewhat conflicting findings with regard to peer-reviewed publications - the traditional mainstay outputs of academic researchers – which, whilst aimed primarily at academic audiences (e.g. Hanneke & Link, 2019), were also used by the early years policy makers and practitioners who participated in our research. However, these KU groups indicated a clear preference for evidence to be presented by means of research summaries which would arguably, in turn, enhance impact. Indeed, a recent editorial (Buttner et al, 2021) suggests that a focus on academic outputs can be detrimental to clinical health research, thereby suggesting that academic researchers should be better incentivised to embrace impact and to disseminate their research in ways that do not focus only (or largely) on research quantity and metrics. The current emphasis on engaged research (Campus Engage, 2016) should go some way toward addressing, this, but much work remains to be done in this regard and in domains that go well beyond dissemination (and the scope of this research).

Importantly, the KT-D strategies investigated as part of this research were aimed at a wide range of KUs both within early years settings in Ireland and within international public health. Edwards and colleagues (2019) argue that dissemination strategies which are tailored to the knowledge needs of unique KU groups are central to maximising dissemination efforts. Likewise, the findings reported here, provide detailed guidance on which strategies might be adopted by researchers who are keen to disseminate their public health/early years research findings in the most effective ways.

For example, the results of the realist synthesis indicate that networking KT-D strategies and the use of social media provide effective ways of achieving KT-D goals across all contexts (e.g. Van Eerd and Saunders, 2017). Likewise, the KT-D case study showed that networking strategies coupled with research summaries, were effective mechanisms in increasing engagement with, and understanding of, the ENRICH research programme. Indeed, the findings converge to reflect a consensus on the need to share evidence in non-academic language and through concise short documents – as reported elsewhere (e.g. Marquez et al., 2018). These findings further reinforce previous evidence which indicates that a combination of strategies is likely to be most appropriate to achieve KT-D goal(s) and positive outcomes (Eljiz et al., 2020; Li et al., 2018; Park et al., 2018).However, not all strategies that have achieved KT-D goals need to be utilised by KPs to achieve successful results. Thus, it is important for KPs to appreciate the benefits of one KT-D strategy over any other for their specific study and especially in relation to available time and resources. This is where a KT-D plan comes into its own. As highlighted in Chapter Six, the linking of strategies both in terms of content and timing can also help to promote KT-D outcomes (e.g. Eljiz et al., 2020; Tripathy et al., 2017). For example, many ENRICH webpage users accessed the website through social media links on Twitter whilst videos were also included as the centrepiece of conference presentations to enhance understanding and dissemination. Likewise, Huang and colleagues (2018) found that promoting academic articles by means of both social media and a website, helped to increase research engagement and visibility.

Many of the KT-D strategies highlighted in this research are developing over time and particularly in the context of technological advancements. Likewise, the literature reflects a continuously evolving field with respect to definitions, concepts, and ways of measuring and assessing the effectiveness of different KT-D strategies. Even traditional research outputs such as peer-review publications, are becoming more accessible with the increasing emphasis on open access publishing. Therefore, promoting (and also measuring/evaluating) research dissemination is a work in progress (Haynes et al., 2018). In addition, only a small number of arts-based research studies were identified in the realist-informed synthesis reported in Chapter Four, and whilst the initial findings appear promising, further work is needed to assess the merits of these approaches with a range of KUs (Greenwood, 2019).

Furthermore, the global outbreak of COVID-19 in 2020 has resulted in a sudden and significant shift to remote working and communication (Kylili, 2020). Therefore, more traditional research dissemination and KT-D strategies, such as conferences and seminars, moved from in-person to online delivery. Remote communication can be challenging in terms of all KUs and KPs being able to access and share evidence as, for example, parents in the case study expressed a strong preference for face-to-face communication so remote KT-D strategies might impact their effectiveness with this KU group. However, on a positive note, remote communication can also reduce the time, resources, and costs involved in, for example, attending meetings or conferences, which were consistently highlighted in this research as important factors in accessing evidence and indeed, this has also been reported elsewhere (e.g. Crowley et al., 2018). Such remote forms of dissemination may become a more popular means of disseminating knowledge into the future. At the same time, however, recent evidence suggests that the use of research evidence to inform early years supports may become a lower priority for government departments in the aftermath of the pandemic due to the economic downturn and a tendency for decision making to be guided by tighter budgets rather than research evidence (Nixon et al., 2019).

On a related point and perhaps unsurprisingly, a key finding from the case study was that resources - particularly funding and time to access and deliver research - were a crucial facilitator/barrier for both researchers and KUs in supporting the dissemination of evidence; this is also a recurring finding in the literature (e.g. Oliver et al., 2014; Tricco et al., 2016). For example, a systematic review carried out by Haynes and colleagues (2018) described how policy makers lack the time and/or opportunity to access evidence and were also hindered by the costs involved. Funding is required to attend conferences, design and develop websites (for KPs), and/or engage in capacity-building training. Additionally, access to funding is an important consideration and this is well demonstrated by the additional KEDS funding secured by the ENRICH research team which enabled them to organise and deliver, amongst other things, an in-person KT-training workshop (delivered by an international expert in KT) which, in turn, was important in enhancing researcher capacity to disseminate research.

A number of authors - as in the current research - have reported that, traditionally, the dissemination of research into public health practice and policy was carried out in typically passive and linear ways (e.g. publishing papers in academic journals), which usually placed the onus on the KU to source and interpret the findings (Bauer et al., 2015; Eljiz et al., 2020). However, more recent KT-D strategies can also be passively disseminated if they are not effectively executed. For example, KPs could actively use Twitter to disseminate findings instead of simply creating a Twitter page and hoping that it gains followers and creates engagement with little or no attendant investment of time and effort. Likewise, the case study reported in Chapter Six - and similar to the findings of Buick and colleagues (2016) - demonstrate that the level of KU engagement and subsequent impact reflected the amount of time invested by the research team in developing their dissemination strategies. Thus, commitment and time are both central to successful KT-D.

The case study further highlighted that combining elements of an iKT and end-of-grant KT approach seemed to be the most feasible and useful within the context of the ENRICH programme. According to Kothari and Wathen (2013), the benefits of an iKT approach (i.e. working with KUs throughout the research project) include valuing each other’s viewpoint and building strong and potentially sustainable collaborations. For example, the findings reported here demonstrate the added value of establishing a service user advisory group (i.e. a parent panel) during the ENRICH programme. This panel helped to tailor and improve the communication of ENRICH findings to parents, based on feedback received on a series of KT-D strategies (e.g. text on the webpage, assessment of information leaflets). At the same time, the use of an end-of-grant approach - such as publishing ENRICH summary reports - helped the research team to balance funder and career demands. Thus, this approach was found to benefit both the KUs and KPs, whilst also promoting more effective dissemination.

7.2.3 Networking KT-D Strategies and Collaboration

A recurring theme throughout this research was the value of utilising networking KT-D strategies for all KU groups. The CMO configurations outlined in Chapter Four suggest that a number of networking KT-D strategies (meetings, training, seminars) were helpful in facilitating engagement and relationship-building amongst all KUs and KPs in public health and in the case study context. These findings support those of Brownson and colleagues (2018) who point to the efficacy of collaborative efforts in encouraging evidence-based public health practice. The positive impact of networking KT-D strategies also reflects the need for better collaboration and communication with KUs as identified in Chapter Two (e.g. Oliver & Cairney, 2019) and from both the quantitative and qualitative findings in Chapter Six. Indeed, the most commonly used definition for KT specifically highlights the '*complex set of interactions among knowledge producers and knowledge users'* (CIHR, 2014). Further still, and as outlined in Chapter Five, the importance of collaboration underpins the development of early years policy, programmes and initiatives, such as the recent *First 5 Strategy* (DCYA, 2018) - the first-ever cross-Departmental strategy in Ireland. Thus, the importance of interaction, engagement and relationship building for effective KT-D cannot be underestimated and the findings from this research represent an important addition to the literature in this regard.

7.2.4 Measuring KT-D Strategies

As indicated earlier in Chapter Two, researchers often do not measure the impact of KT-D strategies (Dew & Boydell, 2017). The research reported here, provides some interesting insights in terms of assessing altmetrics and exploring other key impact indicators related to research awareness, visibility, and engagement. The findings also highlight some challenges in this regard. For instance, it is not always feasible to evaluate or monitor every single dissemination strategy (e.g. usefulness indicators such as who reads and interprets the information from presentations). Data protection regulations also prevent the collection of individual evaluative data such as details on each visitor to the webpage. Moreover, it is not always possible to track third party reach data (e.g. external websites sharing the research findings).

Nonetheless, the results reported here - in line with those reported by Sullivan et al. (2007) - suggest that reach was the most common, albeit short-term, indicator of impact. This was assessed through, for example, social media tracking, web traffic (both increased over time), and the total number of presentations and publications. The use of this key indicator enabled the ENRICH team to track the visibility of their findings over time, thereby indicating that barriers to assessing the effectiveness of KT-D strategies may be overcome/circumvented when key indicators are prospectively identified and used purposefully to guide dissemination efforts.

As outlined earlier in Chapter Two, other indicators of KT impact relate to the use (medium-term impact) and usefulness (long-term impact) of research evidence as also described by Sullivan and colleagues (2007). The ENRICH team achieved some medium-term impact in the form of securing the KEDS grant, while the KUs also benefitted from a number of stakeholder knowledge-sharing events. The level of engagement with KUs was also monitored throughout most of the ENRICH research programme as was the research team’s relationship with practitioners and policy makers. The former was more established than the latter mainly due to the team’s track record with a number of community-based organisations as part of their previous research (e.g. McGilloway et al, 2012), although this was also helpful in terms of improving relationships with policy makers during the ENRICH programme. Longer-term policy and practice impacts were more difficult to determine, though, in the context of this research as these kinds of impacts are more likely to occur later in the project or well beyond completion. Nonetheless, there were clear indications, within the case study (e.g. quantitative data from the evaluation feedback forms) of an intent to use the findings in this way.

7.2.5 KT-D Planning

A key question within the extant literature relates to which model, theory, framework, or planning tool should be used to help guide the KT-D process (Bauer et al. 2015). The evidence reported here suggests that the ENRICH research benefitted considerably from the application of a KT planning tool/framework - the KTPT (Barwick, 2008; 2013; 2019) - to facilitate and support dissemination. The practical characteristics of a planning tool/framework are relatively easy to apply. Comprehensive KT-D planning involves aligning the main components of the tool so that, for example, the KUs in a research study guide the chosen KT-D goals and the subsequent KT-strategies. According to a number of authors in the field, KT-D planning offers an opportunity for KPs to also determine their KT-D ambitions/goals and align them with their capabilities and available resources (Barwick, 2019; Cambon et al., 2017).

It is also important to consider the context in which a research project is being carried out. As mentioned earlier, the investment of time and effort in developing and maintaining the ENRICH Facebook, despite the good intentions of the research team, turned out to be an inefficient use of available resources. For example, the use of a KT planning tool highlighted the level of technological skills in dissemination, amongst the ENRICH team. Research summaries, in the form of attractively presented and graphically designed Summary Reports, proved to be a more effective alternative to a Facebook page and were favourably received by KUs, whilst also being relatively low cost to produce and disseminate, thereby indicating it does not always require a large financial investment or level of skill to share evidence. The KT-D case study also helped the team to become more aware of how to reach out to, and more effectively engage with, policy makers. The qualitative findings therein showed that some policy makers asked to be invited to ENRICH knowledge-sharing events and this, in turn, increased the attendance of policy maker KUs at the ENRICH end-of-project launch event, although the team also made dedicated efforts to ensure that policy makers were well represented at this event.

Another central theme throughout this research - and one which informed the KT-D plan - was the importance of exploring the contextual factors that might support or impede research dissemination. The qualitative and quantitative data shed some light on the challenges and facilitators to evidence dissemination experienced by both KUs and KPs working in early years settings in Ireland. As recommended by Darker and colleagues (2018), such findings are important in terms of informing the development or adaptation of dissemination strategies which might help to address challenges in a given context. This was also shown in Chapter Five, in that the availability of a national evidence base in PEI in Ireland was perceived to have led to more targeted supports and better decision-making in policy and service provision. These findings are important in indicating the perceived value of PEI research within Irish policy and practice, especially in the context of a high level of interest and investment in this area. This crucial factor underpins the likelihood of evidence being disseminated in the early years setting in Ireland.

The benefits of KT planning were also evident here in the context of the focus group conducted with the ENRICH team as part of the case study, which showed that all participants had improved their understanding of KT-D planning and were already applying their learning to new projects. This example nicely illustrates that KT-D planning for researchers should not be an 'optional extra' or perceived to be a burden, whilst also demonstrating how active engagement in this process can ultimately benefit researchers as well as KUs. However, incentives are important and it was shown here (similar to Tait and Williamson, 2019) that KPs are more likely to engage in KT planning if they can see that it leads to a more effective use of resources, promotes better research outcomes and helps to maximise the impact of their research. Thus, KT-D planning was a central element of effective KT-D with KUs within the ENRICH research programme.

7.3 Research Implications

The findings across all three phases of this research indicate an increasing commitment in recent years to evidence-informed policy and practice decision-making is evident. The results emphasise, in particular, the central role of networking within effective KT-D, the role of contextual factors in shaping KT-D outcomes, and the importance of measuring and planning KT-D in order to maximise the reach and impact of research within public health and early years contexts. The following section explores the implications of these findings for key stakeholder groups.

Firstly, the findings have important (and similar) implications for both policy and practice. Clearly, policy-making and service provision are influenced by many factors other than research evidence, but KT-D is nonetheless important in ensuring that evidence plays a central role in shaping policy and practice and that barriers to effective evidence-informed policy and practice decision-making are removed where possible. Thus, tailoring the ways in which evidence is presented to align with the preferences of policy makers and practitioners (e.g. research summaries) may increase the visibility of research and, in turn, the likelihood of such knowledge being included within the process of policy formation and/or service delivery.

Interestingly, the findings of the case study outlined in the previous chapter, demonstrate how increased engagement and research awareness can potentially also foster KT-I outcomes, such as changes in practice and/or the manner in which policy formation is conducted. However, such impacts may take a longer time frame to materialise and would likely require ongoing KT-D efforts, interaction and relationship building between KPs and KUs. Arguably, relationship-building, partnership development and participatory approaches – as illustrated within the case study and throughout this research– are an effective means of conducting KT-D; these may also be seen as part of a long-run process in terms of laying the 'groundwork' for further engagement and positive working relationships in future research. For example, maintaining a social media presence and interacting with KUs through that platform, can help to maintain relationships and develop new interactions including with international collaborators and stakeholders. In addition, attending conferences and networking events with policy makers and practitioners in attendance, can help to promote the visibility of KPs and their related research.

Additionally, practitioners and policy makers/others who were interviewed as part of this research (and who completed the survey) reported a need for more training and capacity development supports to help enhance their understanding and research appraisal skills. Organisations have an important role to play in facilitating these types of capacity-building processes through the provision of increased resources and supports, including protected time for training. Such steps should be helpful in improving organisational capacity for dissemination and KU competency. Researchers/KPs can also help to address gaps in understanding by providing easily digestible information. However, it should also be noted that, like KUs, the producers of knowledge require resources and support in order to effectively engage with diverse audiences and to successfully disseminate their research findings.

An important audience for KPs are service users and members of the public, with whom effective engagement is key for successful dissemination. The KT case study shone light on the benefits of service user involvement in informing and guiding effective KT-D strategies. This finding is also reflected in some of the studies in the realist synthesis; for example, Kiltz et al. (2008) found that KT-D was enhanced when service users were involved in how their service delivery recommendations were presented. Thus, there are clear benefits to working with service users in an engaged and ‘iKT way’ rather than relying on more traditional end of grant research and passive dissemination strategies. Service user preferences for how research is disseminated to can also be identified and taken into account in the planning and execution of KT-D, thereby resulting in potentially more tailored and effective strategies.

As mentioned earlier, this KU group have not always been given due consideration during the dissemination process. However, there is undoubtedly an increasing imperative and movement towards the participatory involvement of parents/service users in the research process (e.g. Campus Engage, 2016; INVOLVE, 2020; Rycroft-Malone et al., 2013). This is also demonstrated by the recent establishment of a new Public and Patient Involvement (PPI) Network (HRB, 2020) to support research institutions across Ireland advance the involvement of the public, patients/service users in health and social care research. Another interesting example of such service user involvement is the Maternal health And Maternal Morbidity in Ireland [MAMMI] Study, 2020) which is ongoing and involves participants in co-designing the research, co-presenting findings at conferences and co-creating dissemination outputs. This form of highly engaged research was found to improve the ways in which researchers communicated with service users and the overall conduct of the research. The findings from these kinds of studies have significant implications for how research projects can be conducted in the future, whilst also highlighting the importance of ensuring that service users feel more valued and engaged in the research process.

Overall, the findings from this research highlight important lessons for researchers/KPs. First and foremost, a 'reframing' of the KT-D process is essential. In other words, KT-D planning should not be viewed as an extraneous or additional task or expectation, but should instead, be pursued actively and purposively. As indicated by the findings reported here, engagement and collaboration are crucial for effective KT-D. Although all parties must be motivated and willing to maximise efficacy, the onus tends to lie with the researcher to develop these relationships. An important implication, therefore, for research projects and teams is that engagement with KUs can be improved by adopting an iKT approach throughout the research process – from study development through to dissemination.

KT-D planning can also, arguably, increase the likelihood of more targeted and successful dissemination of the research findings. The findings from the case study strongly demonstrate how the team involved in the ENRICH research programme, benefitted from KT-D planning and KT training, in terms of enhanced understanding and capacity development. All expressed their intent to apply the learning to future research projects and to engage in enhanced, more purposeful KT-D to promote more effective translation of knowledge. Thus, an investment in capacity building processes can have long-term and ongoing benefits – not just for the researchers themselves, but also the institutions/organisations whom they represent. Indeed, academic institutions are increasingly required to be community facing and to undertake engaged research, one element of which involves knowledge dissemination with, and for, the wider community (Campus Engage, 2016). This, in turn, suggests that capacity building in respect of KT-D is important and, therefore, that increased resourcing of KT-D for research teams should be viewed as critical to building the linkages between institutions and communities and, in turn, increasing the 'footprint' and impact at a societal level.

With regard to the implications of the findings for research, the interviews conducted as part of the KT-D case study revealed that researchers are keen to have more communication supports in academic institutions to help with dissemination while the ENRICH research team members often felt that they lacked the necessary skills (e.g. graphic design or media communication) to engage in effective communication. Likewise, some of the results reported in Chapter Four indicate that KPs lack the expertise for dissemination, such as learning how to use social media to share findings (e.g. Edwards et al., 2019). A number of authors (e.g. Marcinkowski et al.,2014), have also suggested that universities should prioritise supports to better enable researchers to increase the visibility of their research and attempt to maximise its impact. Thus, building an appropriate infrastructure might include: increasing/enhancing training provision, broadening the remit of university communications departments to support researchers in their dissemination efforts; liaising with (resources permitting) an intermediary organisation or knowledge broker (e.g. the CES); and offering KT-D training to research staff (and to postgraduate students).

Academic institutions can (and should) also incentivise and reward KT-D planning by placing a greater value on all KT-D strategies by means of their inclusion in promotion criteria, performance appraisals and/or recruitment criteria. Indeed, KT-D strategies also appear to be relevant to funding agencies/organisations, some of whom have increasing expectations in this regard in terms of grant proposals and reports (e.g. the HRB in Ireland and the CIHR in Canada). Funders may be more likely to support research projects that propose to engage, or are, actively engaging in KT-D planning strategies and are producing tailored KT-D strategies to share their findings. Indeed, as already mentioned, the KEDs grant secured by the ENRICH team was important in helping to enhance the effectiveness of KT-D strategies and outcomes. This can inform funders of the value of offering grants specifically to promote KT-D with research projects.

Throughout the development of this thesis, the researcher (SO'C) has considered her own KT-D efforts in line with the findings from the research. This research and study design was underway prior to the researcher learning the importance of involving KUs in the development of the research process as early as possible. Therefore, further and earlier stakeholder input may have benefitted the overall study design. However, KUs influenced the progression of the research findings by informing the development of the KT-D plan.

This project evolved in the context of the larger ENRICH research programme and it was thought that the initial survey would be helpful in terms of identifying any key issues or concerns relating to KT-D amongst various KU groups. Indeed, the findings emanating from this work were important in informing the successful application to the HRB for the LinKT sub-study, although this also added additional work which, whilst very useful, was not anticipated at the beginning of the project. Most of the remainder of the work documented in the case study (Phase Three) was conducted in parallel to, and informed in part, the other two phases of the research. It proved difficult during the documentary analysis to identify how exactly research had informed the development/thinking behind many of the documents which were included, but nonetheless, it was felt that this provided useful context for the study and increased the researcher's knowledge of key policy developments during the last 20 years and how these have evolved over time. The realist-informed evidence synthesis proved the most challenging and time-consuming aspect of the research as it was based on a relatively new approach and involved a considerable amount of work and critical analysis but again, the findings here are important and they also help to support and amplify the results from Phase Three of the research whilst also adding to the extant literature and knowledge in the field. With regard to future dissemination, it is hoped that one or more aspects of the realist findings will be submitted for possible publication in journals such as *Implementation Science* or *Systematic Reviews*. In addition, the researcher prioritised the publication of findings in an academic journal for educational and career progression. She is also aiming to produce a summary document – as recommended throughout the thesis – to share the key thesis findings with KUs. The research findings will also continue to inform the researchers' future research endeavours in terms of implementing KT-D plans.

7.4 The Strengths and Limitations of the Research

This research had a number of key strengths. Firstly, the use of a multi-method approach provided an innovative and appropriate means of addressing the research aims and objectives and, in turn, generated interesting insights into the research questions. The validity and reliability of the findings were strengthened through triangulation of the qualitative and quantitative elements of the research. Secondly, significant efforts were made to recruit and involve a large number of participants (n=162) across the KU (apart from service users) and KP contexts to complete the questionnaire-based survey. Although comparatively fewer policy makers than researchers or practitioners completed the survey, there was a larger sample from the policy KU group included in the qualitative element of the research–and, arguably, this approach was more suitable for exploring the needs and perceptions of this particular group. Therefore, detailed perspectives were gathered from a range of key KU groups.

Furthermore, the rich findings obtained from the ENRICH team, coupled with the Parent Advisory Panel, would not have been achieved through a solely quantitative approach. Indeed, qualitative methodologies such as interviews and documentary analyses have been shown to offer considerable complementarity when used with quantitative research on KT-D (Green et al., 2015). The use of a documentary analysis and realist-informed approach to evidence synthesis, also helped to provide useful corroborating evidence from the policy domain and international literature respectively – particularly with regard to dissemination in the field of public health/early years.

Other strengths of the research include the rigorous approach adopted when undertaking the qualitative research (e.g. ensuring high quality records, verbatim transcription and the use of respondent validation). The use of qualitative methods was particularly useful in providing insights into the most common barriers and facilitators to dissemination. An examination of themes and coding with the supervisory team was also conducted to ensure the trustworthiness of the findings and to ensure 'fit' between the findings and the raw data. The findings from this research were also disseminated (and are still being disseminated) through a series of national and international peer-reviewed publications and conference presentations (see Appendix 1)as well as a range of other outputs.

The utilisation of a realist-informed approach in this research (as opposed to a traditional realist review), provided a useful and relatively novel method of exploring what works in terms of dissemination across a range of contexts and, in particular, providing detailed insights into the needs of various stakeholder groups and the contextual influences on dissemination in public health. This method (as described by Wong and colleagues, 2013) can be useful for research projects in which time and resource constraints may be present, but where researchers may wish to have a deeper understanding of which interventions work for whom, and in what circumstances. The realist-informed work, in this context, illuminated the similarities and discrepancies across the KT-D needs of a range of prospectively identified stakeholders, thereby addressing an important gap in the current literature which more commonly focuses solely on individual KU groups.

This research also sheds light on several KT-D topics that have been hitherto underexplored. For example, several authors (e.g. Cairney et al., 2016; Tait & Williamson, 2019) have found that the effectiveness of capacity-building training initiatives for health researchers, appear to be under-investigated and less developed when compared to initiatives for other KUs, such as practitioners. In the current research, the feedback from the KT-D training workshop for the ENRICH team (and other attendees) was overwhelmingly positive and - in conjunction with the focus group discussion - helped the team to be more thoughtful and systematic in their KT-D work and to identify key areas for improvement in terms of how they disseminated their findings from the ENRICH programme and other research projects. These findings highlight the utility and value of capacity-building/training initiatives for research teams – also reported elsewhere (e.g. Tait and Williamson, 2019).

The KT-D case study outlined in the previous chapter is the first of its kind (to our knowledge) to document the practical application of a KT-D plan within the context of an ongoing early intervention research programme, as informed by a KT planning tool and the emergence of ongoing (qualitative and quantitative) findings. This research also provided some useful information on the ways in which iKT might be implemented as part of a research project and particularly in terms of engaging with service users (i.e. parents) and practitioners to inform dissemination strategies. According to recent research by Graham and colleagues (2018), there is a need for further investigation in this regard so this research represents an important addition to the literature in this respect.

Given the increasing importance attributed to evidence-informed practice and policy, there is a vital need to ensure that knowledge is used to best effect and that KPs have up-to-date guidance/information on how best to pursue KT-D in order to reach different audiences. The findings of the case study reported here, demonstrate how KT-D may be planned and conducted and also how established frameworks may be applied to ‘real world’ research and dissemination efforts in public health and early years systems settings. The use of KT-D planning and a KT-D tool provided a sense of structure to the dissemination process, in what is often quite a disorganised or ad hoc process (Ngamo et al., 2016).

The KT-D case study findings further reinforce previous work highlighting the commonly reported gap in communication between policy makers and researchers (e.g. Raghavan, 2018) and several authors have recently suggested that further investigation was needed to examine networking across policy and research settings (e.g. Haynes et al., 2018; Oliver & Cairney, 2019; Van de Goor et al., 2017). Interestingly, the detailed and nuanced consideration that was afforded here to the perspectives of both researchers and policy makers in this research, indicates that this gap in communication may be perpetually widened through a lack of interaction and understanding as to the ‘how to’ of engagement and relationship building. The use of a KT-D plan helped to guide the ENRICH research team in how to better communicate with this KU group and as outlined earlier, this in turn, led to some positive KT-D outcomes, such as reach, engagement and relationship-building. This nicely illustrates how barriers to effective KT-D can be addressed when planned strategies are well thought out and implemented using established evidence-informed guiding frameworks.

Lastly, one of the key strengths of this research is the illustration, through both the realist synthesis and the KT-D case study, of a wide range of practical and effective KT-D strategies for both an early years and a general public health context and the kinds of mechanisms which mediate KT-D outcomes. Ultimately, the case study illustrates how the key KT-D goals of increasing visibility, understanding, and engagement with evidence can be achieved with several KU groups – thereby providing a rare ‘real world’ example of effective KT planning and execution within the context of a community-based evaluation of a prevention and early years intervention programme. The evaluation of KT-D strategies indicated further that there are several approaches that KPs might adopt to encourage more effective dissemination of their research, even within a limited budget or, as in the current case, during a global pandemic. This research further adds to the literature on both the process of evaluating KT-D strategies and the subsequent outcomes, as this is not often a priority for KPs - as highlighted by Dew and Boydell (2017). For example, reach impact indicators helped considerably to inform the KT-D plan for the ENRICH programme in terms of determining which strategies were more effective than others.

A number of research limitations should also be recognised. For example, there were challenges in executing and, in particular, evaluating the impact of certain KT-D strategies. It was not possible to assess how many attendees understood a conference presentation or found it useful, as this is not usually evaluated. Another challenge to the effective evaluation of KT-D strategies, relates to the number of unique visitors recorded, using webpage analytics, which may not be accurate because the same individual (e.g. the researcher) could potentially access the website several times using more than one IP address or computer. These kinds of challenges can impede our understanding of the benefits (or lack thereof) of utilising specific KT-D strategies. Moreover, it was beyond the time frame and scope of this research to conduct follow-ups/longer-term evaluations of the effectiveness of KT-D strategies. Thus, it is difficult to determine if there are any longer-term impacts on, for example, knowledge or skills following KT-D training or knowledge-sharing events. This is an obvious avenue for future research. In addition, the KT-D plan would have benefitted from further KU input earlier in the lifetime of the research,

There were also a number of external factors that hindered the development of some KT-D strategies in the context of the ENRICH research programme. For example, General Data Protection Regulation (GDPR) restrictions came into effect in May 2018; these required that KUs had to give their consent to receive any further e-newsletters after this date. It is likely, therefore – in the context of receiving many similar emails from other organisations to which they had subscribed – that the email from the ENRICH programme could have been missed or ignored. Thus, once these regulations were enforced, any KU who had not confirmed their consent to receive e-newsletters had to be deleted from the mailing list. These restrictions reduced considerably the dissemination of thee-newsletter (by 44%) and, therefore, the emerging ENRICH findings. This was disappointing as the KT-D case study had shown that engagement with this KT-D strategy, prior to the enforcement of these regulations, had been increasing with each issue. This highlights further the usefulness of using multiple KT-D strategies that can help to circumvent unexpected difficulties with the execution of a planned strategy. Nevertheless, these circumstances were outside of the control of the research team and also highlight the importance of ongoing networking and engagement to continually broaden the reach of research findings.

As described by Yin (2003), case study findings typically lack generalisability as they are carried out in a specific context. The KT-D case study outlined here, was rooted within a PEI context in the Republic of Ireland, but the way in which it was carried out is easily transferrable to any research field or context. In addition, case studies are considered complementary to realist methodologies and are also suitable for exploring KT-D (Aarons et al., 2012; Creswell, 1998; Yin, 2003), so it was considered an entirely appropriate method for inclusion in this research. Another research limitation was the lower than expected response rate to the survey (37%), despite email distribution, a number of follow-up reminders and the offer of an incentive for participation. Nevertheless, the findings were usefully triangulated with those from the realist-informed review. In addition, only a limited number of policy makers were recruited in the survey sample despite considerable effort, although a larger number of policy makers were recruited to participate in the qualitative element of the research.

As described earlier, this research investigated a number of KT-D goals relating to increasing awareness, understanding, and engagement with research, but there are other key KT-D indicators that could have facilitated a more wide-ranging appraisal of the impact of the ENRICH KT-D plan, such as reported changes in policy or practice. However, these can often take time to materialise (e.g. Bauer et al., 2015), which meant that it was not possible to examine them within the scope of the current research. Indeed, as with most research projects, contract researchers tend to move on to other research projects or posts without having the time to evaluate these kind of longer-term KT-I indicators (Sibley et al., 2017), while the resources to conduct such evaluations are also typically not available.

Other potential limitations include response bias which may have occurred with participants who agreed to take part in both the quantitative and qualitative elements of this research. These participants may have been more enthusiastic (including the ENRICH team) to participate in a KT-D study, or may have had some experience of research dissemination prior to their participation. In addition, the parents who agreed to take in the advisory panel and the focus group had previously participated in the ENRICH research and therefore, may have had a greater appreciation of, and interest in, the research evidence; this may have also influenced the feedback given on the KT-D strategies for this particular KU group.

In terms of conducting and analysing interviews/focus groups, the researcher's own personal views and academic perspective may have influenced the interpretation of the data, particularly when collecting data with the ENRICH research team or interviewing other researchers. However, in line with recommended practice (e.g. Laws et al., 2016), the researcher strictly followed interview schedules and focus group topic guides with all KU groups to address reflexivity and to limit the impact of personal biases on the data generated.

The documentary analysis also included only a brief review of child and family policies and service provision prior to 2000. The review chiefly explored the relevant policies and programmes over the last two decades. This time frame was chosen to align with the development of the first comprehensive national policy for children as this was a key milestone in the development of research-informed policies and initiatives in Ireland. The researcher was also the lead evaluator of the KT-D strategies for the ENRICH programme and the sole reviewer of the documents included in the documentary analysis. Nonetheless, the potential for bias was addressed and minimised insofar as possible through ongoing consultations with the ENRICH research team (and Principal Investigator) and the supervisory team.

Finally, the realist-informed evidence synthesis only included articles that reported positive KT-D outcomes, mainly because it was designed to correspond with the first objective of this research, that is, the effectiveness of a range of KT-D strategies relative to identified KT-D goals. In addition, the KT-D case study described a number of KT-D strategies that produced both positive and negative outcomes for the ENRICH programme so this provided a broader evaluative perspective. This again speaks to the usefulness of KT-D planning and the importance of clearly outlining well in advance, the relevant dissemination goals, strategies and outcomes within a research study. Indeed, future research in this area should explore 'negative' findings or ineffective KT strategies in order to address key gaps in the literature. Lastly, the researcher acknowledges that both the documentary analysis and the realist synthesis may not have included some relevant documents/articles (e.g. including only the first page of Google results) as the aim of these methodologies was to provide a comprehensive overview, not an exhaustive search, of the relevant literature.

7.5 Directions for Further Research

The findings from this research highlight a number of gaps in the current literature and identify several possible areas for further research, some of which have already been mentioned. With respect to the ENRICH research programme, further exploration of the extent to which the research findings impacted on policy and practice, would help to provide longer-run insights into the effectiveness of KT-D strategies, whilst also providing additional insights into the utility of specified dissemination strategies on KT-I goals. This research could also determine if there were any longer-term impacts on, for example, knowledge or skills following KT-D training or knowledge-sharing events.

Additional research is also needed to provide more detailed and precise insights into the process of policy formulation and service delivery and the use of evidence therein. This would help to demonstrate how research findings are typically disseminated to policy makers and practitioners in Ireland and the factors that influence the extent to which research informs policy and practice decisions (and their development). In addition, an in-depth review could further explore why some evidence-based and evidence-informed initiatives and policy recommendations fail to be implemented. Gaining an understanding the decision-making processes in these cases, could help to guide KPs in terms of how best to disseminate their findings/evidence.

Further research might also explore how KUs can access information on the various research studies, projects and programmes (across fields) that are currently being carried out in Ireland (and elsewhere). For instance, Doyle (2020) argues for the need for a centralised national database for stakeholders to easily source and access knowledge/evidence. In terms of child and family research, the '*What Works*' resource by the DCYA (2019) has helped to address this lack. Such databases can be mutually beneficial for both researchers and KUs and indeed, this was the rationale underpinning the development of a knowledge hub as part of the ENRICH research. However, whilst this could be a very useful first step in increasing interest in, and enhancing the visibility of, research on PEI and other public health topics, it takes skill, time and resources to set up and more importantly, to maintain such a database.

Additionally, the ENRICH research team followed an iKT approach which included a number of activities including: ongoing meetings regarding the progress of the research; co-presenting at a conference with community partners; engaging with the Parent Advisory Panel to inform the development of KT-D strategies; and including parents on a discussion panel at the launch of the ENRICH findings. Further research could explore if including KUs (such as parents – and fathers in particular which are often overlooked) from the start and throughout the research process, is beneficial in terms of dissemination. The value of collaborating with a range of KUs (particularly policy makers) through various KT-D strategies (e.g. through co-presenting at conferences or co-designing research outputs as in the MAMMI study) could also be explored and evaluated.

Further investigation of how best to advance networking KT-D strategies and engagement between KUs would be beneficial, particularly in a policy-making context. According to Haynes and colleagues (2018), studies that explore networking KT-D strategies often report engagement as a positive outcome, but rarely explore how or why these participants engaged with the research. Therefore, this could be investigated in more detail through, for example, a social network analysis similar to that conducted by Colineau and Paris(2010), to explore how KUs and KPs interact and which relationships appear to be stronger and which would benefit from further development. More research is also needed to explore the effectiveness of arts-based KT-D strategies as this more recent, alternative approach is increasing in popularity (Greenwood, 2019). Other factors that could be considered when implementing a KT-D plan include the role of socio-economic status and the levels of health literacy amongst KUs when developing KT-D strategies. The parent advisory panel did attempt to address health literacy in some respect as this KU group provided their feedback on the content of a sample of KT-D strategies from ENRICH. In addition, the role of gender may impact on the tailoring of KT-D strategies and as mentioned earlier, most of the participants in this research were female.

Lastly, the field of KT-D must also keep apace with technological advances, and the development of effective KT-D planning guides and subsequent evaluation of KT-D strategies will need to be adjusted and explored in order to fully understand how technology can be put to best use to support KT-D efforts.

On the issue of social media, it might be worth exploring how recent trends and the rise in popularity of new apps such as TikTok - which was the most downloaded app in the world in 2020 (Forbes, 2021) - might influence future KT-D strategic planning. For instance, it may be the case that newer more popular apps may provide a more effective means of reaching younger stakeholders. In the context of the ongoing pandemic, a retrospective and prospective evaluation of remote networking KT-D strategies versus in-person formats and the extent to which the former might be useful into the future.

7.6 Conclusion

This dissemination-focused research aimed to explore the KT-D process in the field of public health with a particular focus on early years research/settings, and to increase visibility, understanding, and engagement with the ENRICH programme (and its emerging findings) through a series of KT-D strategies over the lifetime of the project. A combination of methods was used to provide a comprehensive and in-depth investigation of the KT-D process, the influence/use of research in policy and practice (insofar as this can be assessed), and the effectiveness of KT-D strategies in an early years/public health context. As described in Chapters Two and Five, the barriers to evidence dissemination are enduring and the need to find solutions must be recognised. While short-term challenges such as access can be more easily addressed by, for example, better resourcing, open access and wider channels of distribution, longer-term barriers to dissemination such as an unsupportive organisational culture, failure to act on evidence-based policy recommendations, or lack of know-how, still need to be addressed. This research highlighted the value of engaging in KT-D planning as a way to possibly address both short-term and long-term barriers. Likewise, understanding the context in which the research is being disseminated - and the corresponding barriers and facilitators to dissemination that are experienced by the stakeholders involved - can help to strengthen a KT-D plan.

This research further illustrates the importance of available resources and funding in shaping policy developments and decisions to support and sustain early years research (and services). The KEDS grant was a critical factor in enhancing the KT-D efforts of the ENRICH research team. Crucially, investing in KT-D training in order to help KPs engage in KT-D planning, can result in more efficient and cost-effective dissemination and use of funding in the longer-term. The use of a structured framework/tool can also help researchers to balance the many demands of academia (e.g. the need to publish numerous peer-reviewed papers) while maximising the potential impact of their research through varied and feasible dissemination strategies. Likewise, this research showed that adopting an iKT approach can benefit both KPs and KUs and provide them with a broader perspective on the dissemination process, thereby helping to improve the overall execution of the KT-D strategies. This, in turn, can encourage KUs to value evidence more if they are included as part of the research process.PEI is clearly a key research and investment area within policy and service delivery in Ireland. Reassuringly, as highlighted in Chapter Six, the vast majority of practitioners and policy makers who completed the online survey conducted as part of Phase Three of this research, believed that research evidence helps to improve services for parents and children. Therefore, there is a strong impetus and incentive for KPs to disseminate high-quality research evidence in this area, although it must also be recognised that a range of factors can influence the effective utilisation of research evidence. Ultimately however, high quality research evidence cannot make a positive impact on societal health and wellbeing unless it is communicated effectively to intended audiences. Thus, the findings from this research represent an important addition to both the national and international literature and the lessons learned therein can hopefully be transferred to other research projects and programmes both in Ireland and beyond.

REFERENCES

Aarons, G.A., Fettes, D.L., Sommerfeld, D.H.,& Palinkas, L.A. (2012). Mixed methods for implementation research: application to evidence-based practice implementation and staff turnover in community-based organizations providing child welfare services. *Child Maltreat., 17*(1), 67-79. https://doi.org/10.1177/1077559511426908.

Aarons, G.A., Wells, R. Zagursky., K., Fettes, D.L., & Palinkas, L.A. (2009). Implementing evidence-based practice in community mental health agencies: Multiple stakeholder perspectives. *American Journal of Public Health, 99*(11), 2087-2095. https://doi.org/10.2105/AJPH.2009.161711.

Aarons, G.A. & Palinkas, L.A. (2007). Implementation of evidence-based practice in child welfare: service provider perspectives. *AdmPolicy Ment Health, 34*(4), 411-9. https://doi.org/10.1007/s10488-007-0121-3.

Ahmed,O.H., Sullivan, S.J., Schneiders, A.G.,& McCrory, P. (2010). iSupport: do social networking sites have a role to play in concussion awareness? *Disabil Rehabil., 32*(22),1877-83. https://doi.org/10.3109/09638281003734409.

Alberta Addiction and Mental Health Research Partnership Program (2014). *Knowledge Translation Evaluation Planning Guide.* https://www.albertahealthservices.ca/assets/info/res/mhr/if-res-mhr-kt-evaluation-guide.pdf

Anderson, S. E., Hennessy, C., Cornes, M., & Manthorpe, J. (2013). Developing inter-disciplinary and inter-agency networks: reflections on a “community of practice” approach. *Advances in Dual Diagnosis*, *6*(3), 132-144. https://doi.org/10.1108/ADD-05-2013-0013.

Andrews, A.L. (2016).*“What is good traffic?”*Retrieved September 15 2019, from https://amylynnandrews.com/what-is-good-traffic/.

Armstrong, R., Waters, E., Dobbins, M., Anderson, L., Moore, L., Petticrew, M., Clark, R., Pettman, T.L., Burns, C., Moodie, M., Conning, R., & Swinburn, B. (2013). Knowledge translation strategies toimprove the use of evidence in public health decision making in local government: intervention design and implementation plan.*Implement Sci., 8,*121.

Armstrong, R., Waters, E., Crockett, B., & Keleher, H. (2007). The nature of evidence resources and knowledge translation for health promotion practitioners, *Health Promotion International, 22*(3), 254–260. https://doi.org/10.1093/heapro/dam017.

Atlantic Philantropies (2015). *Prevention and Early Intervention in Ireland and Northern Ireland: Making a Real Difference in the Lives of Children and Young.* https://www.atlanticphilanthropies.org/wp-content/uploads/2016/03/Prevention-Early-Intervention-Ireland-NI-Report.pdf

Austin, S.B., Yu, K., Tran, A., &Mayer, B. (2017). Research-to-policy translation for prevention of disordered weight and shape control behaviors: a case example targeting dietary supplements sold for weight loss and muscle building. *Eat Behav.,25*, 9–14.

Bakyawa, J., Serwadda, D., Devlin, M. &Jsselmuiden, C. (2013). Implementing a Health Research Communication Program in a Low Resource Country: Experience from Uganda's Makerere University School of Public Health. S*cholarly and Research Communication, 4*(2),20.

Banks, G. (2009). *Evidence-Based Policy-Making: What Is It? How Do We Get It?* Productivity Commission.

Barac, R., Stein, S., Bruce, B., & Barwick, M. (2014). Scoping review of toolkits as a knowledge translation strategy in health. *BMC Med Inform Decis Mak., 14,* 121. https://doi.org/10.1186/s12911-014-0121-7.

Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: a critical review. *BMC Med Res Methodol., 9,* 59. https://doi.org/10.1186/1471-2288-9-59.

Barwick, M., Dubrowski, R., & Petricca, K. (2020). *Knowledge translation: The rise of implementation.* American Institutes for Research.

Barwick, M. (2016). Building Scientist Capacity in Knowledge Translation: Development of the Knowledge Translation Planning Template. *Technology Innovation Management Review, 6*(9), 9–15.

Barwick, M.(2015). *Knowledge Translation Planning Template.* https://www.islandhealth.ca/sites/default/files/2018-05/knowledge-translation-planning-template-barwick.pdf.

Barwick, M.A., Schachter, H.M., Bennett, L.M., McGowan, J., Ly, M., Wilson, A., Bennett, K., Buchanan, D.H., Fergusson, D., & Manion, I. (2012). Knowledge translation efforts in child and youth mental health: a systematic review. *J Evid Based Soc Work.*, *9*(4), 369–395. https://doi.org/10.1080/15433714.2012.663667.

Barwick, M. A., Peters, J., & Boydell, K. (2009). Getting to uptake: Do communities of practice support the implementation of evidence-based practice? *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18*(1), 16–29.

Barwick, M.A., Boydell, K.M., Stasiulis, E., Ferguson, H.B., Blasé, K., & Fixsen, D. (2008). Research utilization among children's mental health providers. *Implementation Sci.,3*(19). https://doi.org/10.1186/1748-5908-3-19

Barwick, M. (2008, 2013, 2019). *Knowledge translation planning template.* Toronto, Ontario, Canada: The Hospital for Sick Children.https://www.sickkids.ca/learning/abouttheinstitute/programs/knowledge-translation/resources/li-kt-planning-template-form.html.

Bauer, M.S., & Kirchner, J. (2020). Implementation science: What is it and why should I care? *Psychiatry Res., 283*, 112376. https://doi.org/10.1016/j.psychres.2019.04.025.

Bauer, M.S., Damschroder, L., Hagedorn, H., Smith, J., & Kilbourne, A.M. (2015). An introduction to implementation science for the non-specialist. *BMC Psychol., 3,* 32. https://doi.org/10.1186/s40359-015-0089-9

Baumbusch, J.L., Kirkham, S.R., Khan, K.B., McDonald, H., Semeniuk, P., Tan, E., & Anderson, J.M. (2008). Pursuing common agendas: a collaborative model for knowledge translation between research and practice in clinical settings. *Res Nurs Health, 31*(2),130-40. https://doi.org/10.1002/nur.20242. PMID: 18213622.

Beatty, P. C., & Willis, G. B. (2007). Research Synthesis: The Practice of Cognitive Interviewing. *Public Opinion Quarterly, 71*, 287-311. http://dx.doi.org/10.1093/poq/nfm006

Bennett, G.G. & Glasgow, R.E. (2009). The Delivery of Public Health Interventions via the Internet: Actualizing Their Potential. *Annual Review of Public Health, 30,* 273-292. http://dx.doi.org/10.1146/annurev.publhealth.031308.100235

Berwick, D.M. (2003). Disseminating innovations in health care. *JAMA, 289*(15), 1969-75. https://doi.org/10.1001/jama.289.15.1969. PMID: 12697800

Besley, J.C., & Nisbet, M.(2013). How scientists view the public, the media and the political process. *Public Understanding of Science, 22*(6), 644-659.

Best Health for Children (2002). *Investing in Parenthood to Achieve Best Health for Children: The Supporting Parents Strategy*. Best Health for Children.

Bhogal, S.K., Murray, M.A., McLeod, K.M., Bergen, A., Bath, B., Menon, A., Kho, M.E., & Stacey, D. (2011). Using problem-based case studies to learn about knowledge translation interventions: an inside perspective. *J Contin Educ Health Prof., 31*(4), 268-75. https://doi.org/10.1002/chp.20140.

Birken, S.A., Rohweder, C.L., Powell, B.J. *et al.* (2018). T-CaST: an implementation theory comparison and selection tool. *Implementation Sci., 13,* 143. https://doi.org/10.1186/s13012-018-0836-4

Bornbaum, C.C., Kornas, K., Peirson, L., & Rosella, L.C. (2015). Exploring the function and effectiveness of knowledge brokers as facilitators of knowledge translation in health-related settings: a systematic review and thematic analysis. *Implementation Sci., 10,* 162. https://doi.org/10.1186/s13012-015-0351-9

Boulos, M.N.K., Maramba, I.,& Wheeler, S. (2006). Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. *BMC Med Educ.,* 6, 41.https://doi.org/10.1186/1472-6920-6-41

Bowen, S.J.,& Graham, I.D. (2012). From knowledge translation to engaged scholarship: promoting research relevance and utilization. *Arch Phys Med Rehabil., 94*(1), S3-8. https://doi.org/10.1016/j.apmr.2012.04.037.

Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal, 9*(2), 27-40. https://doi.org/10.3316/QRJ0902027

Boydell, K.M., Dew, A., Hodgins, M., Bundy, B., Gallego, G., Iljadica, A., Michelle L., Pignatiello, A., Teshima, J., &Willis, D.(2017). Deliberative Dialogues Between Policy Makers and Researchers in Canada and Australia. *Journal of Disability Policy Studies,28*(1),13-22. https://doi-org.jproxy.nuim.ie/10.1177/1044207317694840

Boydell, K., Hodgins, M., Gladsone, B., Stasiulis, E., Belliveau, G., Kontos, P., &Parsons, J. (2016).Arts-based health research and academic legitimacy: Transcending hegemonic conventions. *Qualitative Research Journal, 16*(3), 1–20.

Boyko, J. A., Lavis, J. N., & Dobbins, M. (2014). Deliberative dialogues as a strategy for system-level knowledge translation and exchange. *Healthcare policy*, *9*(4), 122–131.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa.

Brennan, S.E., Sue, E., Cumpston, M., Misso, M.L., McDonald, S., Murphy, M.J., & Green, S.E. (2016). Design and formative evaluation of the Policy Liaison Initiative: a long-term knowledge translation strategy to encourage and support the use of Cochrane systematic reviews for informing health policy. *Evid Policy, 12*(1), 25–52.

Briner, R. B., & Denyer, D. (2012). *Systematic review and evidence synthesis as a practice and scholarship tool.* In D. Rousseau (Ed.), The Oxford Handbook of Evidence-Based Management: Companies, Classrooms, and Research (pp. 112-129). (Oxford Library of Psychology). Oxford University Press.

Brownson, R. C., Eyler, A. A., Harris, J. K., Moore, J. B., & Tabak, R. G. (2018). Getting the Word Out: New Approaches for Disseminating Public Health Science. *Journal of public health management and practice : JPHMP*, *24*(2), 102–111. https://doi.org/10.1097/PHH.0000000000000673

Brownson, R.C., Dodson, E.A., Stamatakis, K.A., Casey, C.M., Elliott, M.B., Luke, D.A., Wintrode, C.G., Kreuter, M.W. (2011). Communicating evidence-based information on cancer prevention to state-level policy makers. *J Natl Cancer Inst.,103*(4), 306-16. doi: 10.1093/jnci/djq529

Buick, F., Blackman, D., O'Flynn, J., O'Donnell, M., & West, D. (2016). Effective Practitioner–Scholar Relationships: Lessons from a Coproduction Partnership. *Public Administration Review, (76)*1, 35-47. https://doi.org/10.1111/puar.12481

Bumbarger, B.,&Campbell, E. (2012). A state agency-university partnership for translational research and the dissemination of evidence-based prevention and intervention. *Adm Policy Ment Health Ment Health Serv Res.,39*, 268–77.

Burchinal, M., Kainz, K., Cai, K., Tout, K., Zaslow, M., Martinez-Beck, I., & Rathgeb, C. (2009). *Early care and education quality and child outcomes. OPRE Research-to-Policy Brief.*http://www.childtrends.org/Files//Child_Trends-2009_5_21_RB_ earlycare.pdf.

Buttner, F., Ardern, C., Blazey, P., Dastouri, S., McKay, H., Moher, D.,& Khan, K. (2021). Counting publications and citations is not just irrelevant: it is an incentive that subverts the impact of clinical research. *BMJ Editorial.* https://bjsm.bmj.com/content/bjsports/early/2020/12/23/bjsports-2020-103146.full.pdf.

Byng, R., Norman, I.,& Redfern, S. (2005). Using realistic evaluation to evaluate a practice-level intervention to improve primary healthcare for patients with long-term mental illness. *Evaluation,11*, 69-93

Cairney, P. (2016). *The Politics of Evidence Based Policy Making*. Palgrave Springer.

Cairney, P., Oliver, K., & Wellstead, A. (2016). To bridge the divide between evidence and policy: reduce ambiguity as much as uncertainty. *Public Adm Rev., 76*(3), 399–402. https://doi.org/10.1111/puar.12555.

Cambon, L., Petit, A., Ridde, V., Dagenais, C., Porcherie, M., Pommier, J., Ferron, C., Minary, L., & Alla, F. (2017). Evaluation of a knowledge transfer scheme to improve policy making and practices in health promotion and disease prevention setting in French regions: a realist study protocol.*Implementation Science,12*(1),83.

Campbell, D, Donald, B., Moore, G.,& Frew, D. (2011). Evidence Check: Knowledge Brokering to Commission Research Reviews for Policy**.** *Evidence & Policy: A Journal of Research, Debate and Practice*, *7*(1), 97-107.

Campus Engage (2016).*Engaged Research Society & Higher Education: Addressing Grand Societal Challenges Together.* Campus Engage. http://www.campusengage.ie/wp-content/uploads/2019/01/FINAL-JAN-16_ER-Report-2016-Jan-v2.pdf

Canadian Foundation for Healthcare Improvement (2014), "*Is research working for you? A self-assessment tool and discussion guide for health services management and policy organizations"*. Canadian Foundation for Healthcare Improvement, Ottawa, Canada.

Canadian Institutes of Health Research (2015). *Canadian Foundation for Healthcare Improvement, Ottawa, Canada.* https://cihr-irsc.gc.ca/e/45321.html

Canadian Institutes of Health Research (2014).*Canadian Foundation for Healthcare Improvement, Ottawa, Canada.* https://cihr-irsc.gc.ca/e/29418.html

Canadian Institute of Health Research (2004), *Knowledge translation strategy 2004–2009: Innovation in action.* Canadian Institutes of Health Research, Ottawa, ON.

Caplan, N. (1979). The Two-Communities Theory and Knowledge Utilization. *American Behavioral Scientist, 22*(3), 459–70.

Cartwright, N., &Hardie, J. (2012). *Evidence-Based Policy: A Practical Guide to Doing It Better*. Oxford University Press.

Centre for Early Childhood Development and Education (2006). *Síolta, the National Quality Framework for Early Childhood Education*. Dublin: Stationary Office.

Chan, T.M., Dzara, K., Dimeo, S.P. Bhalerao, A., & Maggio, L.A. (2020). Social media in knowledge translation and education for physicians and trainees: a scoping review. *Perspect Med Educ 9,* 20–30. https://doi.org/10.1007/s40037-019-00542-7.

Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Sage Publications.

Cherney, A.,& Head, B. (2011*). Supporting the knowledge to action process: a systems-thinking approach. Evidence and Policy, 7*(4), 471 488. https://doi.org/10.1332/174426411X603461

Children's Rights Alliance (2019). *Report Card 2019.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/CRA-Report-Card-2019.pdf

Children's Rights Alliance (2017). *Report Card 2017.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/Report%20Card%202017%20FULL.pdf

Children's Rights Alliance (2016). *Report Card 2016.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/Report%20Card%202016.pdf

Children's Rights Alliance (2015). *Report Card 2015.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/ReportCard2015Web.pdf

Children’s Rights Alliance (2014). *Report Card 2014.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/REPORTCARD2014_0.pdf

Children’s Rights Alliance (2011). *Report Card 2011.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/Report%20Card%202011_0.pdf

Children’s Rights Alliance (2010). *Report Card 2010.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/ReportCard10_0.pdf

Children’s Rights Alliance (2009). *Report Card 2009.*

https://www.childrensrights.ie/sites/default/files/submissions_reports/files/ReportCard09_0.pdf

Coles, E., Cheyne, H., Rankin, J., & Daniel, B. (2016). Getting It Right for Every Child: A

National Policy Framework to Promote Children's Well-being in Scotland, United Kingdom. *The Milbank quarterly*, *94*(2), 334–365. https://doi.org/10.1111/1468-0009.12195.

Colineau, N., &Paris, C. (2010). Talking about your health to strangers: understanding the use of online social networks by patients. *New Review of Hypermedia and Multimedia, (16)*1, 141-160. https://doi.org/10.1080/13614568.2010.496131

Commission on the Family (1998).*Strengthening Families for Life, Final Report of The*

*Commission on the Family to the Minister for Social Community and Family Affairs.*Stationery Office

Council for Social Welfare (1991). *The Rights of the Child. Irish perspectives on the UN Convention,* Dublin: The Council for Social Welfare.

Cox, S.M., & Boydell, K.M. (2016). *Ethical issues in arts-based health research.* Chapter 11 (pp. 83–91). In P. Camic and L. Wilson (Eds.), Creative arts in public health: International perspectives. Oxford University Press.

Cox, S., Kazubowski-Houston, M., & Nisker, J. (2009). Genetics on stage: Public engagement in health policy development on preimplantation genetic diagnosis. *Social Science & Medicine, 68,* 1472-1480

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications, Inc.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Sage Publications, Inc.

Crow, D. & Jones, M. (2018). Narratives as tools for influencing policy change. *Policy & Politics,46*(2), 217–34. https://doi.org/10.1332/030557318X15230061022899

Crowe (2019). *Process Evaluation of the Empowering Practitioners and Practice Initiative.* https://d1j85byv4fcann.cloudfront.net/cesdownloads/Crowe-EPPI-Evaluation-Report_03.10.2019.pdf?mtime=20210210184234&focal=none

Crowley, M., Scott, J.T.B.,& Fishbein, D. (2018). Translating prevention research for evidence-based policymaking: results from the research-to-policy collaboration pilot. *Prev Sci., 19,* 260–70.

Crick, K.,& Hartling, L. (2015). Preferences of Knowledge Users for Two Formats of Summarizing Results from Systematic Reviews: Infographics and Critical Appraisals. *PLoS ONE 10*(10): e0140029. https://doi.org/10.1371/journal.pone.0140029

Cunningham, C.E., Barwick, M., Rimas, H. Mielko, S., & Barac, R. (2018). Modeling the Decision of Mental Health Providers to Implement Evidence-Based Children's Mental Health Services: A Discrete Choice Conjoint Experiment. *Adm Policy Ment Health, 45,* 302–317. https://doi.org/10.1007/s10488-017-0824-z

Cvitanovic, C., Cunningham, R., Dowd, A-M., Howden, S.M. & van Putten, E.I. (2017). *Using Social Network Analysis to Monitor and Assess the Effectiveness of Knowledge Brokers at Connecting Scientists and Decision-Makers: An Australian case study.* Environmental Policy and Governance.

Cvitanovic, C., Hobday, A.J., van Kerkhoff, L., Wilson, S.K., Dobbs, K., & Marshall,

N.A. (2015) Improving knowledge exchange among scientists and decisionmakers to facilitate the adaptive governance of marine resources: a review of knowledge and research needs. *Ocean and Coastal Management, 112,* 25-35.

Dagenais, C., Queuille, L., & Ridde, V. (2013). Evaluation of a knowledge transfer strategy from a user fee exemption program for vulnerable populations in Burkina Faso. *Global Health Promotion, (20)*1. https://doi.org/10.1177/1757975912462416.

Damschroder, L.J., Aron, D.C., Keith, R.E. Kirsh, S.R., Alexander, J.A.,& Lowery, J.C (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Sci 4*, 50. https://doi.org/10.1186/1748-5908-4-50

Darker, C.D., Nicolson, G.H., Carroll, A.,&Barry, J.M. (2018). The barriers and facilitators to the implementation of National Clinical Programmes in Ireland: using the MRC framework for process evaluations. *BMC Health Serv Res., 18*(1), 733. doi: 10.1186/s12913-018-3543-6.

Davis, F.A., Mcdonald, L.,& Axford, N. (2012). *Technique is not enough: a framework for ensuring that evidence-based parenting programmes are socially inclusive.* The British Psychological Society.

de Graaf, I., Speetjens, P., Smit, F., de Wolff, M.,& Tavecchio, L. (2008). Effectiveness of the Triple P Positive Parenting Program on behavioral problems in children: a meta-analysis. *Behav Modif., 32*(5), 714-35.https://doi.org/10.1177/0145445508317134

Dearing, J.W., & Cox, J.G. (2018). Diffusion Of Innovations Theory, Principles, And Practice. *Health Affairs, (37)*2, 183-190. https://doi.org/10.1377/hlthaff.2017.1104

Del Mar, C., Hoffmann, T., &Glasziou, P. (2013). *Information needs, asking questions, and some basics of research studies.* In T. Hoffmann, S. Bennett & C. Del Mar (Eds.), Evidence-Based Practice across the Health Professions. (2nd ed.). Churchill Livingstone, Elsevier.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The Sage handbook of qualitative research* (3rd ed.). Sage Publications Ltd.

Department of Children & Youth Affairs (2018). *First 5: A Whole-of-Government Strategy for Babies, Young Children and their Families 2019-2028.* Stationery Office: Dublin

Department of Children & Youth Affairs (2014a). *Better Outcomes, Brighter Futures 2014-2020.* Stationery Office: Dublin

Department of Children & Youth Affairs (2014b). *State of the Nation's Children Report.* Stationery Office: Dublin

Department of Children & Youth Affairs (2013). *Right from the Start*. Stationery Office: Dublin

Department of Children & Youth Affairs (2011). *National Strategy for Research and Data on Children's Lives, 2011-2016*. Stationery Office: Dublin

Department of Health (2018). *Sláintecare.* Stationery Office: Dublin

Department of Health (1991). *Child Care Act.* Stationery Office: Dublin

Department of Health (1980). *The Task Force on Child Care Services*: *Final Report to the Minister for Health.* Stationery Office: Dublin

Department of Health & Children (2006). *A Vision for Change – Report of the Expert Group on Mental Health Policy.*Stationery Office: Dublin

Department of Health & Children (2000). *National Children's Strategy: Our Children - Their Lives.* Stationery Office: Dublin

Department of Health & Children (1999). *Best Health for Children - Developing a Partnership with Families.* Stationery Office: Dublin

Department of Health & Children (1999).*Children First:National Guidelines for the Protection and Welfare of Children.* Stationery Office: Dublin.

Department of Social, Community and Family Affairs (1998). *Strengthening Families for Life.* Stationery Office: Dublin

Devaney, C.&McGregor, C(2017). Child protection and family support practice in Ireland: a contribution to present debates from a historical perspective. *Child & Family Social Work, 22*(3), 1255-1263.

Dew, A &Boydell, K.M. (2017). Knowledge translation: bridging the disability research-to-practice gap. *Research and Practice in Intellectual and Developmental Disabilities,(4)*2, 142-157. https://doi.org/10.1080/23297018.2017.1315610

Dicicco-Bloom, B., & Crabtree, B.F. (2006). The Qualitative Research Interview. *Medical Education, 40,* 314-321. http://dx.doi.org/10.1111/j.1365-2929.2006.02418.x

Dobbins, M., Hanna, S.E., Ciliska, D. Manske, S., Cameron, R., Mercer, S.L. O'Mara, L., DeCorby, K., & Robeson, P. (2009). A randomized controlled trial evaluating the impact of knowledge translation and exchange strategies. *Implementation Sci 4,* 61. https://doi.org/10.1186/1748-5908-4-61

Dobbins, M., Rosenbaum, P., Plews, N., Law, M., & Fysh, A. (2007). Information transfer: what do decision makers want and need from researchers? *Implementation Sci*., (*2)*20. https://doi.org/10.1186/1748-5908-2-2.

Doran D. M., Haynes R. B., Kushniruk A., Straus S., Grimshaw J., Hall L. M., &Jedras, D. (2010). Supporting evidence-based practice for nurses through information technologies. *Worldviews on Evidence-Based Nursing, 7*(1), 4-15. https://doi.org/10.1111/j.1741-6787.2009.00179.x

Doyle, M. (2020). *Research For Public Policy And Society: Building A Stronger Architecture For Ireland: Discussion Paper.*https://www.ria.ie/sites/default/files/research_for_public_policy_and_society-_m.doyle_1.pdf

Doyle, O., McNamara, K., Cheevers, C., Finnegan, S., Logue, C. & McEntee, L. (2010). Preparing for Life Early Childhood Intervention Impact Evaluation Report 1. UCD Geary Institute, University College Dublin

Dretzke, J., Davenport, C., Frew, E., Barlow, J., Stewart-Brown, S., Bayliss, S., Taylor, R.S. Sandercock, J., & Hyde, C. (2009). The clinical effectiveness of different parenting programmes for children with conduct problems: a systematic review of randomised controlled trials. *Child Adolesc Psychiatry Ment Health (3)* 7. https://doi.org/10.1186/1753-2000-3-7

Eden, C., & Ackermann, F. (1998). *Making Strategy: The Journey of Strategic*

Management. Sage Publications.

Edwards, A., Zweigenthal, V., & Olivier, J. (2019). Evidence map of knowledge translation strategies, outcomes, facilitators and barriers in African health systems. *Health Res Policy Syst., 17* (1),16. https://doi.org/10.1186/s12961-019-0419-0.

Edwards D. J. (2015). Dissemination of Research Results: On the Path to Practice Change. *The Canadian journal of hospital pharmacy*, *68*(6), 465–469. https://doi.org/10.4212/cjhp.v68i6.1503.

Eisman, A.B., Heinze, J., Kilbourne, A.M., Franzen, S., Melde, C., & McGarrell, E. (2020). Comprehensive approaches to addressing mental health needs and enhancing school security: a hybrid type II cluster randomized trial. *Health Justice, 8,*2. https://doi.org/10.1186/s40352-020-0104-y.

Eljiz, K., Greenfield, D., Hogden, A., et al. (2020). Improving knowledge translation for increased engagement and impact in healthcare. *BMJ Open Quality, 9*:e000983. https://doi.org/10.1136/ bmjoq-2020-000983.

Elueze, I.N.(2015). Evaluating the effectiveness of knowledge brokering in health research: a systematised review with some bibliometric information. *Health Info Libr J., 32*(3), 168-81. https://doi.org/10.1111/hir.12097.

Epstein, I. (2009). Promoting harmony where there is commonly conflict: evidence-informed practice as an integrative strategy. *Social Work in Health Care*, *48,* 216–231.

Etherington K. (2007). Ethical Research in Reflexive Relationships. *Qualitative Inquiry*, *13*(5), 599-616. https://doi.org/10.1177/1077800407301175.

European Research Council (2017). *Guidelines on Implementation of Open Access to Scientific Publications and Research Data.* https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/oa-pilot/h2020-hi-erc-oa-guide_en.pdf

Eurostat (2001).*The Social Situation in the European Union.*European Commission.

Evans, S. & Huxley, P.J.(2008). Factors associated with the recruitment and retention of social workers in Wales: Employer and employee perspectives. *Health & Social Care in the Community, 17*(3), 254-66. https://doi.org/10.1111/j.1365-2524.2008.00818.x

Farrington, D. P., & Welsh, B. C. (2007). *Saving children from a life of crime: Early risk* *factors and effective interventions.* Oxford University Press.

Featherstone, B. (2004).*Family Life and Family Support: A Feminist Analysis.* Palgrave Macmillan.

Feldstein, A. C.,& Glasgow, R. E. (2008). A Practical, Robust Implementation and Sustainability Model (PRISM) for integrating research findings into practice. *The Joint Commission Journal on Quality and Patient Safety, 34*(4), 228-243.

Field, B., Booth, A., Ilott, I.,& Gerrish, K. (2014). Using the Knowledge to Action Framework in practice: a citation analysis and systematic review. *Implement Sci., 9,* 172. https://doi.org/10.1186/s13012-014-0172-2.

Fisher C. (2011). *Knowledge brokering and intermediary concepts: analysis of an e-discussion on the Knowledge Brokers' Forum.* UK: Brighton.

Fitzpatrick, A. (2012). Working with Parents in the Early Years Services. (Eds.) Mhic Mhathuna, M. and Taylor M. (Eds.), *Early Childhood Education and Care. An Introduction for Students in Ireland*, Gill and Macmillan.

Fixsen, D. L., Van Dyke, M. K., & Blase, K. A. (2019). *Science and implementation*. Active Implementation Research Network. www.activeimplementation.org/resources

Flodgren, G., Parmelli, E., Doumit, G., Gattellari, M., O'Brien, M. A., Grimshaw, J., & Eccles, M. P. (2011). Local opinion leaders: effects on professional practice and health care outcomes. *The Cochrane database of systematic reviews, 8,* CD000125. https://doi.org/10.1002/14651858.CD000125.pub4

Forsetlund, L., Bjørndal, A., Rashidian, A., Jamtvedt, G., O'Brien, M. A., Wolf, F., Davis, D., Odgaard-Jensen, J., & Oxman, A. D. (2009). Continuing education meetings and workshops: effects on professional practice and health care outcomes. *The Cochrane database of systematic reviews, 2,* CD003030. https://doi.org/10.1002/14651858.CD003030.pub2

Froggatt K, Preston N, Turner M, &Kerr C. (2015). Patient and public involvement in research and the Cancer Experiences Collaborative: benefits and challenges. *BMJ Support Palliat Care, 5*(5), 518-21. doi: 10.1136/bmjspcare-2013-000548.

Furlong, M., McGilloway, S., Bywater, T., Hutchings, J., Smith, S.M., &Donnelly, M. (2012). Behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems in children aged 3 to 12 years. *Cochrane Database Syst Rev., 2,* CD008225. https://doi.org/10.1002/14651858.CD008225.pub2.

Gagliardi, A.R., Berta, W., Kothari, A., Boyko, J.,& Urquhart, R. (2016). Integrated knowledge translation (IKT) in health care: a scoping review. *Implement Sci., 11,*38. https://doi.org/10.1186/s13012-016-0399-1

Gagliardi, A.R., Brouwers, M.C., Palda, V.A. *et al.* (2011). How can we improve guideline use? A conceptual framework of implementability. *Implementation Sci., 6*, 26. https://doi.org/10.1186/1748-5908-6-26

Garcia J.L, Heckman, J.J.,& Ziff, A.L. (2019). Early childhood education and crime. Infant *Mental Health Journal, (40)*1, 141-151.

Gardner, A., Geierstanger, S., Brindis, C., & McConnel, C. (2010). Clinic consortia media advocacy capacity: partnering with the media and increasing policymaker awareness. *J Health Commun., 15*(3), 293–306.

Geddes, M., Dommett, K., & Prosser, B. (2018). A recipe for impact? Exploring knowledge requirements in the UK parliament and beyond. *Evidence and Policy*, *14*(2), 259-276. https://doi.org/10.1332/174426417X14945838375115

Gerrish, K. &, Piercy, H. (2014). Capacity Development for Knowledge Translation: Evaluation of an Experiential Approach through Secondment Opportunities. *Worldviews Evid Based Nurs,11*(3), 209-16. https://doi.org/10.1111/wvn.12038.

Gilligan, R. (1995). *Family Support and Child Welfare.* Ferguson & Kenny.

Giustini, D., Ali, S.M., Fraser, M., &Kamel Boulos, M.N. (2018). Effective uses of social media in public health and medicine: a systematic review of systematic reviews. *Online J Public Health Inform.,10*(2):e215. https://doi.org/10.5210/ojphi.v10i2.8270.

Glacken, M.,& Chaney, D. (2004). Perceived barriers and facilitators to implementing research findings in the Irish practice setting. *J Clin Nurs., 13*(6), 731-40. https://doi.org/10.1111/j.1365-2702.2004.00941.x.

Glasgow, R.E., Vogt, T.M., &Boles, S.M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *Am J Public Health, 89*(9), 1322-7. https://doi.org/10.2105/ajph.89.9.1322.

Glover, J., Izzo, D., Odato, K., & Wang, L. (2006). *EBM Pyramid.* http://www.ebmpyramid.org/images/pyramid.gif

Graham, I.D., Kothari, A., McCutcheon, C.(2018). Moving knowledge into action for more effective practice, programmes and policy: protocol for a research programme on integrated knowledge translation. *Implementation Sci .,13*, 22. https://doi.org/10.1186/s13012-017-0700-y

Graham, I. D., & Tetroe, J. M. (2009). Getting evidence into policy and practice: Perspective of a health research funder. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18*(1), 46–50.

Graham, I.D., Logan, J., Harrison, M.B, Straus, S.E., Tetroe, J., Caswell, W., &Robinson, N.

(2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions, 26*, 1, 13-24 https://doi.org/10.1002/chp.47

Gray, R., Fitch, M., Labrecque, M., & Greenberg, M. (2003). Reactions of health professionals to a research-based theatre production. *Journal of Cancer Education*, *18*(4), 223-229.

Green T. (2019). Publication is not enough, to generate impact you need to Campaign. Accessed September 23 2019 fromhttps://blogs.lse.ac.uk/impactofsocialsciences/2019/09/27/publication-is-not-enough-to-generate-impact-you-need-to-campaign.

Greenhalgh, T., Kristjansson, E., &Robinson, V. (2007). Realist review to understand the efficacy of school feeding programmes. *BMJ, 335*(7625), 858-61. https://doi.org/10.1136/bmj.39359.525174.AD.

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., Kyriakidou, O., Peacock, R. (2005). Storylines of research in diffusion of innovation: a meta-narrative approach to systematic review. *Soc Sci Med, 61,* 41730.

Greenwood, J. (2019). *Arts-based research.* https://doi.org/10.1093/acrefore/9780190264093.013.29

Gresh, A., Mena-Carrasco, F., Rauh, A., & Pfaff, T. (2017). Utilization of communities of practice for ongoing learning and knowledge dissemination: Making the case for the global alliance for nursing and midwifery (GANM). *Nurse Education in Practice, 26*, 64-67. http://dx.doi.org.jproxy.nuim.ie/10.1016/j.nepr.2017.07.001

Grilli, R., Ramsay, C,. & Minozzi, S. (2002). Mass media interventions: effects on health services utilisation. *Cochrane Database Syst Rev, 1,* CD000389. https://doi.org/10.1002/14651858.CD000389.

Grimshaw, J., Eccles, M., Lavis, J., Hill, S., & Squires, J. (2012). Knowledge translation of research findings. *Implement Sci.,7,*50.

Grimshaw, J.M., Shirran, L., Thomas, R., Mowatt, G., Fraser, C., Bero, L., Grilli, R., Harvey, E., Oxman, A.,& O'Brien, M.A. (2001). Changing provider behavior: an overview of systematic reviews of interventions. *Med Care., 39*(8), II2-45.

Grol, R.& Grimshaw, J. (2003). From best evidence to best practice: effective implementation of change in patients' care. *Lancet, 362*(9391):1225-30.https://doi.org/10.1016/S0140-6736(03)14546-1.

Growing Up in Ireland (2020). Growing Up In Ireland. Accessed December 5 2020, from www.growingup.ie

Growing Up in Ireland (2017). Growing Up In Ireland. Accessed November 10 2017 from http://www.twitter.com/GrowingUpIre?lang=en

Grzymkowski E. (2019). 2019 Google Analytics Benchmarks for Higher Education Websites. Accessed September 15 2019 fromhttps://www.oho.com/blog/2019-google-analytics-benchmarks-higher-education-websites.

Guerin, S., Hayes, N., & McNally, S. (Eds.). (2017). *Research and Evaluation in Community, Health and Social Care Settings: Experiences from Practice* (1st ed.). Routledge. https://doi.org/10.4324/9781315142920

Guest, G., Bunce, A., Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, *18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

Hack, T,F,, Carlson, L,, Butler, L,, Degner, L,F,, Jakulj, F,, Pickles, T,, Dean Ruether, J,, & Weir, L. (2011). Facilitating the implementation of empirically valid interventions in psychosocial oncology and supportive care. *Support Care Cancer, 19*(8), 1097-105. https://doi.org/10.1007/s00520-011-1159-z.

Hand, R.K., Kenne, D., Wolfram, T.M., Abram, J.K.,& Fleming, M. (2016). Assessing the Viability of Social Media for Disseminating Evidence-Based Nutrition Practice Guideline Through Content Analysis of Twitter Messages and Health Professional Interviews: An Observational Study. *J Med Internet Res., 18*(11), e295. https://doi.org/10.2196/jmir.5811.

Hanneke, R.,& Link, J.M. (2019). The complex nature of research dissemination practices among public health faculty researchers. *J Med Libr Assoc.,107*(3),341-351. https://doi.org/10.5195/jmla.2019.524.

Haq, Z.U., Sood, S., Yansen, S., Javeed, S., & Ali, N.(2010). Using TV talk show for public health media advocacy: a case study. *J Pak Med Assoc., 60*(6), 460–4.

Harden, A., & Gough, D. (2012). *Quality and relevance appraisal. Introduction to Systematic Reviews.* Sage, 153-178.

Haskins, R., & Margolis, G. (2015). *Show Me the Evidence: Obama's Fight for Rigor and Results in Social Policy*. Brookings Institution Press. http://www.jstor.org/stable/10.7864/j.ctt7zsvr9

Hawkes, S., Aulakh, B.K., Jadeja, N., Jimenez, M., Buse, K., Anwar, I., Barge, S., Odubanjo, M.O., Shukla, A., Ghaffar, A. &Whitworth, J. (2016). Strengthening capacity to apply health research evidence in policy making: experience from four countries. *Health Policy and Planning, 31*(2), 161–170. https://doi.org/10.1093/heapol/czv032

Hayes, N. (2002). *Children’s Right – Whose Right? A Review of Child Policy Development in Ireland.* Studies in Public Policy 9. The Policy Institute, Trinity College Dublin.

Haynes, A., Rowbotham, S. J., Redman, S., Brennan, S., Williamson, A., & Moore, G. (2018). What can we learn from interventions that aim to increase policy-makers' capacity to use research? A realist scoping review. *Health research policy and systems*, *16*(1), 31. https://doi.org/10.1186/s12961-018-0277-1

Health Research Board (2020). Public and Patient Involvement in Research. Access on December 10 2020 from https://www.hrb.ie/funding/funding-schemes/public-and-patient-involvement-in-research/

Health Research Board (2018). Knowledge Exchange and Dissemination Scheme (KEDS). https://www.hrb.ie/funding/funding-schemes/all-funding-schemes/grant/knowledge-exchange-and-dissemination-scheme-keds-next-call-tbc/

Hewitt, G., Sims, S. and Harris, R. G. (2012). The realist approach to evaluation research: An introduction. *International Journal of Therapy and Rehabilitation, 19*(5), 250-259.

Hickey, G., McGilloway, S., Leckey, Y., Stokes, A., Bywater, T., & Donnelly, M. (2021). "Putting Meat on the Bones": Understanding the Implementation of a Community-Based Early Intervention and Prevention Programme—Contextual, Person, and Programme Influences. *Prev Sci., 22,* 113–129. https://doi.org/10.1007/s11121-020-01170-y

Hickey, G.,McGilloway, S., Leckey, Y., Furlong, M., Leavy, S., Stokes, A., O'Connor, S., Bywater, T., & Donnelly, M. (2019). Mothers' well-being, parenting attitudes, and home environment: Cumulative risk and parity in early motherhood. *Child Care Health Dev, 45*(4): 523-530

Hickey, G., McGilloway, S., Leckey Y. and Stokes, A. (2018). A Universal Early Parenting Education Intervention in Community-Based Primary Care Settings: Development and Installation Challenges. *Education Sciences,8*, 178.

Hickey, C., O'Riordan, A., Huggins, S. & Beatty, D. (2018).*National Evaluation of the Area Based Childhood Programme: Summary Report.* Dublin: Department of Children and Youth Affairs, The Atlantic Philanthropies, and the Centre for Effective Services.

Hill, S., & McAlpine, H. (2019). Knowledge exchange or research impact – what is the difference between REF and KEF?https://blogs.lse.ac.uk/impactofsocialsciences/2019/05/20/knowledge-exchange-or-research-impact-what-is-the-difference-between-ref-and-kef/ (accessed 15 September 2019).

Holzer, P., Lewig, K., Bromfield, L., & Arney, F. (2007).*Research use in the Australian child and family welfare sector.* Australian Government.

Home A., Carter, I., Scarth, S., & Warren, R. (2015). Working together in special needs parenting: An innovative research dissemination project. *Social Work & Social Sciences Review,17*(3), 6-19. https://doi.org/10.1921/12603170302.

Hopkins, M., Wiley, K.E., Penuel, W.R. & Farrell, C.C. (2018). Brokering research in science education policy implementation: the case of a professional association. *Evidence & Policy, 14*(3), 459–76. https://doi.org/10.1332/174426418X15299595170910

Horsley, J.A., Crane, J., & Bingle, J.D. (1978). Research utilization as an organizational process. *Journal of Nursing Administration,* 4-6.

Huang, S., Martin, L.J., Yeh, C.H., Chin, A., Murray, H., Sanderson, W.B., Mohindra, R., Chan, T.M., & Thoma, B. (2018). The effect of an infographic promotion on research dissemination and readership: A randomized controlled trial. *CJEM. 20*(6), 826-833. https://doi.org/10.1017/cem.2018.436. Epub 2018 Oct 5. PMID: 30289098.

Hutchings, J., Griffith, N., Bywater, T., & Williams, M. E. (2017). Evaluating the Incredible Years Toddler Parenting Programme with parents of toddlers in disadvantaged (Flying Start) areas of Wales. *Child: Care, Health and Development, 43*,104–113.

Ingold, J.& Monaghan, M. (2016). Evidence translation: an exploration of policy makers' use of evidence. *Policy & Politics, 44*(2), 171-190(20) https://doi.org/10.1332/147084414X13988707323088

Innvaer, S., Vist, G., Trommald, M., & Oxman, A. (2002). Health policy-makers' perceptions of their use of evidence: a systematic review. *J Health Serv Res Policy, 7*(4), 239-44. https://doi.org/10.1258/135581902320432778.

INVOLVE (2020). Accessed November 20 2020 from https://www.involve.org.uk/

Jabbar, H., Goel, La., Londe, P., Debray, E., Scott, J. & Lubienski, C. (2015). How Policymakers Define ‘Evidence’: The Politics of Research Use in New Orleans. *Policy Futur Educ.,12*, 286–303.

Jacobson, N., Butterill, D., & Goering, P. (2004). Organizational Factors that Influence University-Based Researchers’ Engagement in Knowledge Transfer Activities. *Science Communication*, *25*(3), 246–259. https://doi.org/10.1177/1075547003262038

Jacobson, N., Butterill, D., & Goering, P. (2003). Development of a framework for knowledge translation: understanding user context. *J Health Serv Res Policy, 8*(2):94-9. https://doi.org/10.1258/135581903321466067. PMID: 12820671.

Jagosh, J., Bush, P.L., Salsberg, J., Macauley, A.C., Greenhalgh, T., Wong, G., Cargo, M., Green, L.W., Herbert, C.P., & Pluye, P. (2015). A realist evaluation of community-based participatory research: partnership synergy, trust building and related ripple effects. *BMC Public Health, 15,* 725. https://doi.org/10.1186/s12889-015-1949-1

Jansen, M.W. & Hoeijmakers, M. (2013). A masterclass to teach public health professionals to conduct practice-based research to promote evidence-based practice: a case study from The Netherlands. *J Public Health Manag Pract.,19*(1), 83-92. https://doi.org/10.1097/PHH.0b013e318225158a.

Jessani, N.S., Valmeekanathan, A., Babcock, C.M. & Ling, B. (2020). Academic incentives for enhancing faculty engagement with decision-makers—considerations and recommendations from one School of Public Health. *Humanit Soc Sci Commun., 7,* 148. https://doi.org/10.1057/s41599-020-00629-1

Jones, K., Armstrong, R., Pettman, T. & Waters, E. (2015). Knowledge Translation for researchers: developing training to support public health researchers KTE efforts. *Journal of Public Health*, *37*(2), 364–366. https://doi.org/10.1093/pubmed/fdv076

Kajermo, K.N., Boström, AM., Thompson, D.S., Hutchinson, A.M., Estabrooks, C.A. & Wallin, L. (2010). The BARRIERS scale -- the barriers to research utilization scale: A systematic review. *Implementation Sci 5,* 32. https://doi.org/10.1186/1748-5908-5-32

Karikari, T. K., Yawson, N. A., & Quansah, E. (2016). Developing science communication in Africa: Undergraduate and graduate students should be trained and actively involved in outreach activity development and implementation. *The Journal of Undergraduate Neuroscience Education, 14*(2), E5–E8.

Katharine Howard Foundation (2018). Accessed fromhttp://www.khf.ie/wp-content/uploads/2018/04/GOCTBSIL-FINAL-REPORT-24-4-18-1.pdf

Kattula D, Sarkar R, Sivarathinaswamy P*, et al*. (2014). The first 1000 days of life: prenatal and postnatal risk factors for morbidity and growth in a birth cohort in southern India. *BMJ 4:*e005404. https://doi.org/10.1136/bmjopen-2014-005404

Kelly, J., Sadeghieh, T., & Adeli, K. (2014). Peer Review in Scientific Publications: Benefits, Critiques, & A Survival Guide. *EJIFCC*, *25*(3), 227–243.

Kernohan, W.G., Brown, M.J., Payne, C., &Guerin, S. (2018). Barriers and facilitators to knowledge transfer and exchange in palliative care research. *BMJ Evid Based Med., 23*(4), 131-136. https://doi.org/10.1136/bmjebm-2017-110865.

Kho, M.E., Estey, E.A., DeForge, R.T., Mak, L., &Bell, B.L. (2009). Riding the knowledge translation roundabout: lessons learned from the Canadian Institutes of Health Research Summer Institute in knowledge translation. *Implement Sci.,4*, 33.

Kim, W. & Vender, R. (2014). Use of facebook as a tool for knowledge dissemination in dermatology. *J Cutan Med Surg., 18*(5), 341-4. https://doi.org/10.2310/7750.2014.14022. PMID: 25186996.

Kings College London and Digital Science (2015). *The Nature, Scale and Beneficiaries of Research Impact: An Initial Analysis of Research Excellence Framework (REF) 2014 Impact Case Studies",* Higher Education Funding Council for England, London.

Kirshbaum, M. (2008). Translation to practice: a randomised, controlled study of an evidence-based booklet for breast-care nurses in the United Kingdom. *Worldviews Evid Based Nurs., 5*(2), 60-74. https://doi.org/10.1111/j.1741-6787.2008.00113.x.

Kitson, A., Powell, K., Hoon, E. Newbury, J., Wilson, A., & Beilby, J. (2013). Knowledge translation within a population health study: how do you do it? *Implementation Sci 8*, 54. https://doi.org/10.1186/1748-5908-8-54

Koch, B., Fitzgerald, L., Evans, D., O'Donnell, M., & McAuliffe, L. (2008). *Navigating the Maze of Nursing Research.* In S. Borbasi, D. Jackson & R. W. Lanford (Eds.), (2nd edn). Mosby Elsevier.

Kothari, A., Boyko, J.A., Conklin, J., Stolee, P. & Sibbald, S.L. (2015). Communities of practice for supporting health systems change: a missed opportunity. *Health Res Policy Syst., 13*, 33. https://doi.org/10.1186/s12961-015-0023-x.

Kothari, A., Sibbald, S.L. & Wathen, C.N. (2014). Evaluation of partnerships in a transnational family violence prevention network using an integrated knowledge translation and exchange model: a mixed methods study. *Health Res Policy Sys., 12,* 25. https://doi.org/10.1186/1478-4505-12-25

Kothari, A., & Wathen, C.N. (2013). A critical second look at integrated knowledge translation. *Health Policy, 109*(2), 187-91. https://doi.org/10.1016/j.healthpol.2012.11.004.

Kothari, A., MacLean, L., & Edwards, N. (2009). Increasing Capacity for Knowledge Translation: Understanding How Some Researchers Engage Policy Makers. *Evidence & Policy*, 5(1), 33--51.

Kothari, A., Birch, S.,& Charles, C. (2005). "Interaction" and research utilisation in health policies and programs: does it work? *Health Policy,71(*1), 117-25. https://doi.org/10.1016/j.healthpol.2004.03.010.

Krueger, R., & Casey, M. (2009). *Focus Groups: A Practical Guide for Applied Research.* Sage Publications.

Kumah, E.A., McSherry, R., Bettany-Saltikov, J., Hamilton, S., Hogg, J., Whittaker, V., & van Schaik, P. (2019). PROTOCOL: Evidence-informed practice versus evidence-based practice educational interventions for improving knowledge, attitudes, understanding, and behavior toward the application of evidence into practice: A comprehensive systematic review of undergraduate students. *Campbell Systematic Reviews, 15*(1-2), e1015. https://doi.org/10.1002/cl2.1015

Kylili, A., Afxentiou, N., Georgiou, L., Panteli, C., Morsink-Georgalli, P.Z., Panayidou, A., et al. (2020). The role of Remote Working in smart cities: lessons learnt from COVID-19 pandemic. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects.*https://doi.org/10.1080/15567036.2020.1831108

Landhuis, E. (2016). Scientific literature: Information overload. *Nature 535,* 457–458 https://doi.org/10.1038/nj7612-457a.

Landry, R., Amara, N. and Lamari, M. (2001), “Utilisation of social science research knowledge in Canada”, *Research Policy,* Vol. 30, pp. 333-349.

Langlois, E. V., Becerril Montekio, V., Young, T., Song, K., Alcalde-Rabanal, J., & Tran, N. (2016). Enhancing evidence informed policymaking in complex health systems: lessons from multi-site collaborative approaches. *Health research policy and systems*, *14*, 20. https://doi.org/10.1186/s12961-016-0089-0

Lapum, J.L., Liu, L., Church, K., Yau, T.M., Ruttonsha, R., Matthews David, A & Retta, B. (2014). Arts-Informed Research Dissemination in the Health Sciences: An Evaluation of Peoples’ Responses to “The 7,024th Patient” Art Installation. *SAGE Open January-March,* 1–14.

Lavis, J., Davies, H., Oxman, A., Denis, J.L., Golden-Biddle, K., Ferlie, E. (2005). Towards systematic reviews that inform health care management and policy-making. *J Health Serv Res Policy,10 Suppl 1*, 35-48. https://doi.org/10.1258/1355819054308549.

Lavis, J.N., Robertson, D., Woodside, J.M., McLeod, C.B.,&Abelson, J. (2003). Knowledge Transfer Study Group. How can research organizations more effectively transfer research knowledge to decision makers? *Milbank Q., 81*(2), 221-48, 171-2. https://doi.org/10.1111/1468-0009.t01-1-00052.

Leckey, Y., Hickey, G., Stokes, A.,& McGilloway, S. (2019). Parent and facilitator experiences of an intensive parent and infant programme delivered in routine community settings. *Prim Health Care Res Dev, 20*, e74.

Leijten, P., Raaijmakers, M.A. J., Orobio de Castro, B., van den Ban E. and Matthys W. (2015). Effectiveness of the Incredible Years Parenting Program for Families with Socioeconomically Disadvantaged and Ethnic Minority Backgrounds. *Journal of Clinical Child & Adolescent Psychology, 46*(1), 59-73.

Lemire, N., Souffez, K., & Laurendeau, M (2013). Facilitating a knowledge translation process: Knowledge review and facilitation tool. *Institut National de Sante Publique du Quebec*, 1-71

Leung, B.M., Catallo, C., Riediger, N.D., Cahill, N.E. & Kastner, M. (2010). The trainees’ perspective on developing an end-of-grant knowledge translation plan. *Implement Sci.,5*, 78.

Leurer, M.D. (2013). Lessons in media advocacy: a look back at Saskatchewan's nursing education debate. *Policy Polit Nurs Pract., 14*(2), 86–96

Li, S.A., Jeffs, L., Barwick, M., & Stevens, B. (2018). Organizational contextual features that influence the implementation of evidence-based practices across healthcare settings: A systematic integrative review. *Syst Rev., 7*(1),72.

Li, L.C., Grimshaw, J.M., Nielsen, C., Judd, M., Coyte, P.C. & Graham, I.D. (2009). Use of communities of practice in business and health care sectors: A systematic review. *Implementation Sci., 4,* 27. https://doi.org/10.1186/1748-5908-4-27

Logan, J., & Graham, I. D. (1998). Toward a Comprehensive Interdisciplinary Model of Health Care Research Use. *Science Communication*, *20*(2), 227–246. https://doi.org/10.1177/1075547098020002004

Lomas, J. (1993). Retailing research: Increasing the role of evidence in clinical services for childbirth. *The Milbank Quarterly, 71,* 439–475.

Lombardi, J. (2018). What policymakers need from implementation evaluations of early childhood development programs.*Ann N Y Acad Sci.,1419*(1),17-19. https://doi.org/10.1111/nyas.13661.

Maaskant, J.M., Knops, A.M., Ubbink, D.T., & Vermeulen, H. (2013). Evidence-based practice: a survey among pediatric nurses and pediatricians. *J Pediatr Nurs., 28*(2), 150-7. https://doi.org/10.1016/j.pedn.2012.05.002.

Malik, S. & Coulson, N.S. (2010). 'They all supported me but I felt like I suddenly didn't belong anymore': an exploration of perceived disadvantages to online support seeking. *J Psychosom Obstet Gynaecol., 31*(3), 140-9. https://doi.org/10.3109/0167482X.2010.504870. PMID: 20718585.

MAMMI Study (2020). *The MAMMI Study.* Accessed on December 5 2020 from https://www.tcd.ie/mammi

Marcinkowski, F., Kohring, M., Fürst, S., & Friedrichsmeier, A. (2014). Organizational influence on scientists' efforts to go public. *Science Communication, 36*(1), 56–80. https://doi.org/10.1177/1075547013494022

Margaryan, A., Littlejohn, A., & Vojt, G. (2011). "Are digital natives a myth or reality? University students' use of digital technologies.", *Computers & Education, 56*(2), 429–440. https://doi.org/10.1016/j.compedu.2010.09.004.

Marquez, C., Johnson, A.M., Jassemi, S. et al. (2018). Enhancing the uptake of systematic reviews of effects: what is the best format for health care managers and policy-makers? A mixed-methods study. *Implementation Sci.*, *13*, 84. https://doi.org/10.1186/s13012-018-0779-9

Martin, L.J.,Turnquist A., Groot, B., Huang S.Y.M., et al. (2019). Exploring the Role of Infographics for Summarizing Medical Literature. *Health Professions Education,5(1),* 48-57

Massarani, L. (2015). Voices from other lands. *Public Underst Sci., 24*(1), 2-5. https://doi.org/10.1177/0963662514563888. PMID: 25556200.

Mathew, D., McKibbon, K. A., Lokker, C., & Colquhoun, H. (2014). Engaging with a Wiki related to knowledge translation: a survey of WhatisKT Wiki users. *Journal of medical Internet research*, *16*(1), e21. https://doi.org/10.2196/jmir.3001

McConnell, D., Breitkreuz, R., & Savage, A. (2012). Independent evaluation of the Triple P Positive Parenting Program in family support service settings. *Child & Family Social Work, 17*(1), 43–54. https://doi.org/10.1111/j.1365-2206.2011.00771.x

McGilloway, S., O'Brien, M., Ni Mhaille, G., Leckey, Y., Devlin, M., Donnelly, M., & Stern, E. (2013). *A Process Evaluation* of *youngballymun* (Final report). http://youngballymun.org/wp-content/uploads/2019/06/Item_8a_ProcessEvaluation_Summary_Report.pdf

McGilloway, S., Ni Mhaille, G., Bywater, T., Furlong, M., Leckey, Y., Kelly, P., Comiskey, C. & Donnelly, M. (2012) A parenting intervention for childhood behavioral problems: A randomized controlled trial in disadvantaged community-based settings. *Journal of Consulting and Clinical Psychology, 80*(1), 116 – 127

McGinty, E.E., Siddiqi, S., Linden, S., Horwitz, J., &Frattaroli, S. (2019). Improving the use of evidence in public health policy development, enactment and implementation: a multiple-case study. *Health Educ Res., 34*(2), 129-144. https://doi.org/10.1093/her/cyy050.

McKeown, K., Clarke, M., & Little, M. (2004). *Promoting the well-being of families and children: A study of family support services in the health sector in Ireland.* Dublin: Department of Children and Youth Affairs.

McKeown, K.(2001).*Fathers and families: research and reflection on key questions*. Dublin: Department of Health and Children.

McKeown, K. (1999). *Springboard Evaluation System.*Dublin: Department of Health and Children

McKibbon, K.A., Lokker, C., Keepanasseril, A., Colquhoun, H., Haynes, R.B., &

Wilczynski. N.L. (2013). WhatisKT wiki: a case study of a platform for knowledge translation terms and definitions--descriptive analysis. *Implement Sci.,8*, 13. https://doi.org/10.1186/1748-5908-8-13.

McKibbon, K.A., Lokker, C., Wilczynski, N.L., Ciliska, D., Dobbins, M., & Davis, D.A., Haynes, R.B., & Straus, S.E. (2010). A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel? *Implement Sci.,5*, 16. https://doi.org/10.1186/1748-5908-5-16.

McCormick, J. (2013). *Evidence exchange: Learning from social policy across the UK.* Carnegie UK Trust.

Mc Sween-Cadieux, E., Dagenais, C., & Ridde, V. (2018). A deliberative dialogue as a knowledge translation strategy on road traffic injuries in Burkina Faso: a mixed-method evaluation. *Health research policy and systems*, *16*(1), 113. https://doi.org/10.1186/s12961-018-0388-8

McTavish, J. (2017). Negotiating concepts of evidence-based practice in the provision of good service for nursing and allied health professionals. *Health Information and Libraries Journal, 43*(1), 45-57.

McVay, A.B., Stamatakis, K.A., Jacobs, J.A., Tabak, R.G. & Brownson, R.C. (2016). The role of researchers in disseminating evidence to public health practice settings: a cross-sectional study. *Health Res Policy Syst., 14,* 1–9.

Mee, G. (2019).What is a Good Engagement Rate on Twitter? Accessed on September 15 2019 from https://www.scrunch.com/blog/what-is-a-good-engagement-rate-on-twitter.

Meisel, Z.F., Mitchell, J., Polsky, D., Boualam, N., McGeoch, E., Weiner, J., et al. (2019). Strengthening partnerships between substance use researchers and policy makers to take advantage of a window of opportunity. *Subst Abuse Treat Prev Policy,14*,12.

Melnyk B, & Newhouse, R. (2014). Evidence-based practice versus evidence-informed practice: a debate that could stall forward momentum in improving healthcare quality, safety, patient outcomes, and costs. *Worldviews Evid Based Nurs.,11*(6), 347-9. https://doi.org/10.1111/wvn.12070. Epub 2014 Nov 13. PMID: 25394811.

Menting, A.T., Orobio de Castro, B., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial child behavior: a meta-analytic review. Clin Psychol Rev., 33(8), 901-13. https://doi.org/10.1016/j.cpr.2013.07.006.

Milat, A.J., King, L., Bauman, A. and Redman, S. (2011), “Scaling up health promotion interventions: An emerging concept in implementation science." *Health Promot J Austr.,* Vol. 22 No. 3, pp. 238.

Minian N., deRuiter, W.K., Lingam, M., Corrin, T., Dragonetti, R., Manson, H., Taylor, V.H., Zawertailo, L., Ebnahmady, A., Melamed, O.C., Rodak, T., Hahn, M.,& Selby, P. (2018). The effects of interventions targeting multiple health behaviors on smoking cessation outcomes: a rapid realist review protocol. *Syst Rev.,* 7(1), 38. https://doi.org/10.1186/s13643-018-0702-0.

Mitton, C., Adair, C.E., McKenzie, E., Patten, S.B., & Waye Perry, B. (2007). Knowledge transfer and exchange: review and synthesis of the literature. *Milbank Q., 85*(4), 729–68.

Moore G, Redman, S., D'Este, C., Makkar, S., & Turner, T. (2017). Does knowledge brokering improve the quality of rapid review proposals? A before and after study. *Syst Rev.,6*, 23.

Moore G, Redman, S., Haines, M., Todd, A.(2011). What works to increase the use of research in population health policy and programs: a review. *Evid Policy, 7*(3), 277–305.

Moorhead, S.A., Hazlett, D.E., Harrison, L., Carroll, J.K., Irwin, A., &Hoving, C. (2013). A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. *J Med Internet Res.,15*(4), e85. https://doi.org/10.2196/jmir.1933.

Morawska, A., Tometzki, H., & Sanders, M.R. (2014). An evaluation of the efficacy of a triple P-positive parenting program podcast series. *J Dev Behav Pediatr., 35*(2), 128-37. https://doi.org/10.1097/DBP.0000000000000020.

Morton, S., & Sedita, K. (2018). Evidence synthesis for knowledge exchange: balancing responsiveness and quality in providing evidence for policy and practice. *Evidence & Policy, 14*(1), 155–67. https://doi.org/10.1332/174426416X14779388510327

Morton, S, (2015). Creating research impact: The roles of research users in interactive research mobilisation. *Evidence & Policy 11*(1), 35–55

Morton, S., & Wright, A. (2015). *Getting evidence into action to improve Scotland's public services.* What Works Scotland.

National Adult Literacy Agency (2020) Accessed December 5 2020 from https://www.nala.ie/cross-party-support-for-new-plain-language-bill/

National Children's Office (2005). *National Set of Child Well-being Indicators.*

Dublin: Stationary Office.

National Children's Office (2004). *Ready, Steady, Play! The National Play Policy 2004-2008* Dublin: Stationary Office.

Ndlovu, H., Joubert, M., & Boshoff, N.(2016). Public science communication in Africa: views and practices of academics at the National University of Science and Technology in Zimbabwe. *JCOM Journal of Science Communication, 15*(6). https://doi.org/10.22323/2.15060205

Neiger, B. L., Thackeray, R., van Wagenen, S. A., Hanson, C. L., West, J. H., Barnes, M. D., & Fagen, M. C. (2012). Use of social media in health promotion: Purposes, key performance indicators, and evaluation metrics. *Health Promotion Practice*, *13*(2), 159-164. https://doi.org/10.1177/1524839911433467.

Neta, G., Glasgow, R.E., Carpenter, C.R., Grimshaw, J.M., Rabin, B.A., Fernandez, M.E., & Brownson, R.C. (2015). A Framework for Enhancing the Value of Research for Dissemination and Implementation. *American Journal of Public Health, 105,* 49-57. https://doi.org/10.2105/AJPH.2014.302206

Nevo, I., & Slonim-Nevo, V. (2011). The Myth of Evidence-Based Practice: Towards Evidence-Informed Practice, *The British Journal of Social Work, 41*(6), 1176–1197. https://doi.org/10.1093/bjsw/bcq149.

Newman, J., Cherney, A.&Head, B.W.(2015). Do Policy Makers Use Academic Research? Reexamining the "Two Communities" Theory of Research Utilization. *Public Administration Review, 76*(1), 24-32.https://doi.org/10.1111/puar.12464

Newman, I. , Ridenour, C. , Newman, C. & DeMarco, G.M.P. , Jr. (2003). *A typology of research purposes and its relationship to mixed methods research.* In A. Tashakkori & C. Teddlie , (Eds.) Handbook of mixed methods in social & behavioral research (pp. 167-188). Sage

Ngamo, S.T., Souffez, K., Lord, C. & Dagenais, C. (2016). Do knowledge translation (KT) plans help to structure KT practices? *Health Res Policy Syst, 14,*46. https://doi.org/10.1186/s12961-016-0118-z.

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Sci 10,* 53. https://doi.org/10.1186/s13012-015-0242-0

Nixon, E.,Layte, R., &Thornton, M. (2019) *Growing up in Ireland: The effects of economic recession and family stress on the adjustment of 3-year-olds in Ireland. Infant cohort, report 8.* Dublin: Stationery Office.

Nyirenda, M.J. (2016). Non-communicable diseases in sub-Saharan Africa: understanding the drivers of the epidemic to inform intervention strategies. *International Health*, *8*(3), 157–158. https://doi.org/10.1093/inthealth/ihw021

Odgers, C.L., Moffitt, T.E., Broadbent, J.M., Dickson, N., Hancox, R.J., Harrington, H., Poulton, R., et al. (2008). Female and male antisocial trajectories: from childhood origins to adult outcomes. *Development and Psychopathology, 20,* 673–716.

O'Leary, Z. (2014). *The essential guide to doing your research project (2nd ed.).* SAGE Publications, Inc.

Oliver, K. & Cairney, P. (2019). The dos and don'ts of influencing policy: a systematic review of advice to academics. *Palgrave Commun 5,* 21. https://doi.org/10.1057/s41599-019-0232-y

Oliver, K., Innvar, S., Lorenc, T., Woodman, J., &Thomas, J. (2014). A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Services Research, 14,* 2.

Anthony J. Onwuegbuzie, A.J. & Leech, N.L. (2005). On Becoming a Pragmatic Researcher: The Importance of Combining Quantitative and Qualitative Research Methodologies, *International Journal of Social Research Methodology, 8*(5),375-387. https://doi.org/10.1080/13645570500402447

O'Neill D, McGilloway S, Donnelly M, Bywater T, Kelly P. (2013). A cost-effectiveness analysis of the Incredible Years parenting programme in reducing childhood health inequalities. *Eur J Health Econ., 14*(1), 85-94. https://doi.org/10.1007/s10198-011-0342-y.

Palinkas, L.A. (2014). Qualitative and Mixed Methods in Mental Health Services and Implementation Research, *Journal of Clinical Child & Adolescent Psychology, 43*(6), 851-861. https://doi.org/10.1080/15374416.2014.910791

Pappaioanou, M., Malison, M., Wilkins, K., Otto, B., Goodman, R.A., Churchill, R.E., White M,, & Thacker, S.B. (2003). Strengthening capacity in developing countries for evidence-based public health: the data for decision-making project. *Soc Sci Med., 57*(10), 1925-37. https://doi.org/10.1016/s0277-9536(03)00058-3.

Parahoo, K. (2017).*Evidence-Based Practice: misconceptions and challenges.* Child and Family Nursing Conference, Cork University Hospital, April 2017.

Park, J.S., Moore, J.E., Sayal, R., Holmes, B.J., Scarrow, G., Graham, I.D., Jeffs, L., Timmings, C., Rashid, S., Johnson, A.M., Straus, S.E. (2018). Evaluation of the

"Foundations in Knowledge Translation" training initiative: preparing end users to practice KT. *Implement Sci., 13*(1), 63.

Parsons, J., & Boydell, K. (2012). Arts-based research and knowledge translation: Some key concerns for health-care professionals. *Journal of Professional Care, 26*(3), 170-172.

Pawson R. (2006). *Evidence-Based Policy: A Realist Perspective.* SAGE.

Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review--a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy, 10* Suppl 1, 21-34. https://doi.org/10.1258/1355819054308530..

Pawson, R. & Tilley, N. (1997). *Realistic Evaluation*. Sage.

Pawson, R., &Tilley, N.(1994).What works in evaluation research? *The British Journal of Criminology, 34*(3), 291-306. Oxford University Press

Payne, C., Brown, M.J., Guerin, S., & Kernohan, W.G. (2019). EMTReK: An Evidence-based Model for the Transfer & Exchange of Research Knowledge-Five Case Studies in Palliative Care. *SAGE Open Nurs.,, 26*, 5https://doi.org/10.1177/2377960819861854. PMID: 33415246; PMCID: PMC7774354.

Paulsell, D., Del Grosso, P., & Dynarski, M. (2009).*The Atlantic Philanthropies' Children and Youth Programme in Ireland and Northern Ireland: Overview of Programme Evaluation Findings.* Mathematica Policy Research, Inc.

Petkovic, J., Welch, V., Jacob, M.H., Yoganathan, M., Ayala, A.P., Cunningham, H., & Tugwell, P. (2016). The effectiveness of evidence summaries on health policymakers and health system managers use of evidence from systematic reviews: a systematic review. *Implementation Sci*., *11,* 162. https://doi.org/10.1186/s13012-016-0530-3

Phipps, D., Jensen, K.E., Johnny, M. & Myers, G. (2012). Field Note: Research Summaries Improve Access and Utility of Academic Research. *Scholarly and Research Communication, 4*(1), 17.

Piler, P., Kandrnal, V., Kukla, L., Andrýsková, L., Švancara, J., Jarkovský, J., Dušek, L., Pikhart, H., Bobák, M., & Klánová, J. (2017). Cohort Profile: The European Longitudinal Study of Pregnancy and Childhood (ELSPAC) in the Czech Republic. *International journal of epidemiology*, *46*(5), 1379–1379f. https://doi.org/10.1093/ije/dyw091

Powell, B.J., Beidas, R. S,, Lewis, C.C., Aarons, G.A., McMillen, J.C., Proctor, E.K.&Mandell, D.S. (2017). Methods to Improve the Selection and Tailoring of Implementation Strategies.*J Behav Health Serv Res.,44*(2), 177-194. https://doi.org/10.1007/s11414-015-9475-6.

Powell, B.J., McMillen, J.C., Proctor, E.K., Carpenter, C.R., Griffey, R.T., Bunger, A.C., et al. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Med Care Res Rev., 69,* 123–57.

Powell, B.J., Waltz, T.J., Chinman, M.J., Damschroder, L.J., Smith, J.L., Matthieu, M.M., Procto, E.K., & Kirchner, J.E. (2015). A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Sci*., *10,* 21. https://doi.org/10.1186/s13012-015-0209-1

Prihodova, L., Guerin, S., & Kernohan, W.G. (2015). Knowledge transfer and exchange frameworks in health and their applicability to palliative care: scoping review protocol. *J Adv Nurs., 71*(7), 1717-25. https://doi.org/doi: 10.1111/jan.12642.

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda*. Adm Policy Ment Health., 38*(2): 65-76. https://doi.org/10.1007/s10488-010-0319-7.

Psychological Society of Ireland (2011).*Code of Professional Ethics.* The Psychological Society of Ireland.

Puddy, R. W.,& Wilkins, N. (2011). Understanding Evidence Part 1: Best Available Research Evidence. A Guide to the Continuum of Evidence of Effectiveness. Centers for Disease Control and Prevention

Querol-Julián, M.,& Fortanet-Gómez, I. (2012). Multimodal evaluation in academic discussion sessions: How do presenters act and react? *English for Specific Purposes, 31*(4), 271-283.

Rabin, B.A., Brownson, R.C., Haire-Joshu, D., Kreuter, M.W., & Weaver, N.L.(2008). A glossary for dissemination and implementation research in health. *JPublic Health Manag Pract.,14*(2), 117-23. https://doi.org/10.1097/01.PHH.0000311888.06252.bb.

Rich, M., Polvinen, J., & Patashnick, J. (2005). Visual narratives of the pediatric illness experience: Children communicating with clinicians through video. *Child and Adolescent Psychiatric Clinics of North America, 14,* 571-587.

Ritchie, J., & Spencer, L. (1994). *Qualitative Data Analysis for Applied Policy Research.* In: Bryman, A. and Burgess, B., Eds., Analyzing Qualitative Data, Routledge. http://dx.doi.org/10.4324/9780203413081_chapter_9

Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F. L., Behrman, J. R., Lu, C., Lucas, J. E., Perez-Escamilla, R., Dua, T., Bhutta, Z. A., Stenberg, K., Gertler, P., Darmstadt, G. L., & Paper 3 Working Group and the Lancet Early Childhood Development Series Steering Committee (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *Lancet (London, England)*, *389*(10064), 103–118. https://doi.org/10.1016/S0140-6736(16)31698-1

Ridde, V., & Dagenais, C. (2017). What we have learnt (so far) about deliberative dialogue for evidence-based policymaking in West Africa. *BMJ Glob Health., 2*(4), e000432. https://doi.org/10.1136/bmjgh-2017-000432.

Robling, M., Bekkers, M., Bell, K., Butler, C., Cannings-John, R., Channon, S., Martin, B.C., Gregory, J., Hood, K., Kemp, A., Kenkre, J., Montgomery, A., Moody, G., Owen-Jones, E., Pickett, K., Richardson, G., Roberts, Z., Ronaldson, S., Sanders, J., Stamuli, E., & Torgerson, D. (2016). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial. *Lancet (London, England), 387*, 146 - 155.

Roche, G., Hanafin, S. & Sharek, D. (2011) *Report on Public Consultation Processes for National Strategy for Research and Data on Children's Lives 2011-2016.* Dublin: Department of Children and Youth Affairs.

Rochford, S., Doherty, N., & Owens, S. (2014). *Prevention and Early Intervention in Children and Young People's Services: Ten years of Learning.* Dublin: Centre for Effective Services.

Rogers, E.M. (2003). *Diffusion of Innovations. 5th ed.* Free Press, Simon and Schuster.

Rogers, E. M. (1962). *Diffusion of innovations (1st ed.).* Free Press of Glencoe.

Russell, D.J., Rivard, L.M., Walter, S.D. *et al.* (2010). Using knowledge brokers to facilitate the uptake of pediatric measurement tools into clinical practice: a before-after intervention study. *Implementation Sci., 5,* 92. https://doi.org/10.1186/1748-5908-5-92

Rycroft-Malone, J., Seers, K., Chandler, J., Hawkes, C.A., Crichton, N., Allen, C., Bullock, I., & Strunin, L. (2013). The role of evidence, context, and facilitation in an implementation trial: implications for the development of the PARIHS framework. *Implementation Sci., 8,* 28. https://doi.org/10.1186/1748-5908-8-28

Rycroft-Malone, J., McCormack, B., Hutchinson, A.M. et al.(2012). Realist synthesis:

illustrating the method for implementation research. *Implementation Sci*., *7,* 33. https://doi.org/10.1186/1748-5908-7-33

Rycroft-Malone, J., Wilkinson, J.E., Burton, C.R., Andrews, G., Ariss, S., Baker, R., Dopson, S., Graham, I., Harvey, G., Martin, G., McCormack, B.G., Staniszewska, S. & Thompson, C. (2011). Implementing health research through academic and clinical partnerships: a realistic evaluation of the Collaborations for Leadership in Applied Health Research and Care (CLAHRC). *Implementation Sci., 6***,** 74. https://doi.org/10.1186/1748-5908-6-74.

Salmona, M., & Kaczynski, D. (2016). Don't Blame the Software: Using Qualitative Data Analysis Software Successfully in Doctoral Research. *Qualitative Social Research, 17*(3), Art 11.

Salter, K.L., &Kothari, A. (2014). Using realist evaluation to open the black box of knowledge translation: a state-of-the-art review. *Implement Sci., 9*, 115.

Sanders, M.R., Baker, S., & Turner, K.M. (2012). A randomized controlled trial evaluating the efficacy of Triple P Online with parents of children with early-onset conduct problems. *Behav Res Ther., 50*(11), 675-84. https://doi.org/10.1016/j.brat.2012.07.004.

Santacroce, S.J., Leeman, J. & Song, M.K. (2018). A training program for nurse scientists to promote intervention translation. *Nurs Outlook, 66*(2), 149-156. https://doi.org/10.1016/j.outlook.2017.09.003.

Saul, J.E., Willis, C.D., Bitz, J., & Best, A. (2013). A time-responsive tool for informing policy making: rapid realist review. *Implementation Sci., 8,* 103. https://doi.org/10.1186/1748-5908-8-103

Schipper, K., Bakker, M., De Wit, M., Ket, J.C., & Abma, T.A.(2016). Strategies for disseminating recommendations or guidelines to patients: a systematic review. *Implement Sci. 11*(1), 82. https://doi.org/10.1186/s13012-016-0447-x.

Scullion, P.A. (2002). Effective dissemination strategies. *Nurse Res.,10*(1), 65-77. https://doi.org/10.7748/nr2002.10.10.1.65.c5880. PMID: 12405007.

Sharpe, P.A., Brandt, H.M., McCree, D.H., Owl-Myers, E., Taylor, B., & Mullins, G. (2013). Development of culturally tailored educational brochures on HPV and pap tests for American Indian women. *J Transcult Nurs., 24*(3), 282-90. https://doi.org/10.1177/1043659613481676.

Shibasaki, S., Gardner, K., &Sibthorpe, B. (2016). Using Knowledge Translation to Craft "Sticky" Social Media Health Messages That Provoke Interest, Raise Awareness, Impart Knowledge, and Inspire Change. *JMIR Mhealth Uhealth. 4*(4), e115. https://doi.org/10.2196/mhealth.5987.

Shonkoff, J.P., & Garner, A.S. (2012). Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-46. https://doi.org/10.1542/peds.

Shortell S. M. (1999). The emergence of qualitative methods in health services research. *Health services research*, *34*(5 Pt 2), 1083–1090.

Shroff, Z.,Aulakh, B., Gilson, L., Agyepong, I.A., El-Jardali, F., & Ghaffar, A. (2015). Incorporating research evidence into decision-making processes: researcher and decision-maker perceptions from five low-and middle-income countries. *Health Res Policy Sys.13*, 70.

Sibley, K.M., Roche, P.L., Bell, C.P., Temple, B., & Wittmeier, K.D.M. (2017). A descriptive qualitative examination of knowledge translation practice among health researchers in Manitoba, Canada. *BMC Health Serv Res 17,* 627. https://doi.org/10.1186/s12913-017-2573-9.

Sick, B., & Abraham, J.M. (2011). Seek and ye shall find: consumer search for objective health care cost and quality information. *Am J Med Qual., 26(*6), 433-40. https://doi.org/10.1177/1062860611400898.

Sinding, C., Gray, R., Fitch, M., & Greenberg, M. (2006). Audience responses to a research-based drama about life after breast cancer. *Psycho-Oncology, 15,* 694-700.

Sladek, R.M., & Tieman, J. (2008). Applying evidence in the real world: a case study in library and information practice. *Health Info Libr J., 25*(4), 295-301. https://doi.org/10.1111/j.1471-1842.2008.00778.x.

Sorian, R. & Baugh, T. (2002). Power of information: closing the gap between research and policy. *Health Aff., 21*, 264–73.

Squires, J.E., Graham, I.D., Hutchinson, A.M. et al. (2015). Identifying the domains of context important to implementation science: a study protocol. *Implementation Sci 10,* 135. https://doi.org/10.1186/s13012-015-0325-y

Stetler, C.B. (2001). Updating the Stetler Model of research utilization to facilitate evidence-based practice. *Nurs Outlook 49*(6), 272-9. https://doi.org/10.1067/mno.2001.120517.

Stevens, B.J., Yamada, J., Carole, A., Estabrooks, C.A., Stinson, J., Campbell, F., Scott, S.D., Cummings, G. & CIHR Team in Children's Pain. (2014). Pain in hospitalized children: effect of a multidimensional knowledge translation strategy on pain process and clinical outcomes. *Pain, 155,* 60–8. https://doi.org/10.1016/j.pain.2013.09.007.

Strifler, L., Cardoso, R., McGowan, J., Cogo, E., Nincic, V., Khan, P.A., Scott, A., Ghassemi, M., MacDonald, H., Lai, Y., Treister, V., Tricco, A.C., & Straus, S.E. (2018). Scoping review identifies significant number of knowledge translation theories, models, and frameworks with limited use. *J Clin Epidemiol., 100,* 92-102. https://doi.org/10.1016/j.jclinepi.2018.04.008.

Sudsawad, P. (2007). *Knowledge translation: Introduction to models, strategies, and measures.* Austin, TX: Southwest Educational Development Laboratory, National Center for the Dissemination of Disability Research.

Sundberg, T., Leach, M.J., Thomson, O.P., Austin, P., Fryer, G., 7 Adams, J. (2018). Attitudes, skills and use of evidence-based practice among UK osteopaths: a national cross-sectional survey. *BMC Musculoskelet Disord 19,* 439. https://doi.org/10.1186/s12891-018-2354-6

Tabak, R. G., Padek, M. M., Kerner, J. F., Stange, K. C., Proctor, E. K., Dobbins, M. J., Colditz, G. A., Chambers, D. A., & Brownson, R. C. (2017). Dissemination and Implementation Science Training Needs: Insights From Practitioners and Researchers. *American journal of preventive medicine*, *52*(3 Suppl 3), S322–S329. https://doi.org/10.1016/j.amepre.2016.10.005

Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: models for dissemination and implementation research. *American journal of preventive medicine*, *43*(3), 337–350. https://doi.org/10.1016/j.amepre.2012.05.024

Tait, H.,& Williamson, A. (2019). A literature review of knowledge translation and partnership research training programs for health researchers. *Health Res Policy Sys 17,* 98. https://doi.org/10.1186/s12961-019-0497-z

Teddlie, C., &Tashakkori, A. (2009). Foundations of mixed methods research: integrating quantitative and qualitative techniques in the social and behavioral sciences. Sage Publications.

Tong, A., Sainsbury, P. & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care, 19* (6), 349 – 357.

Traynor, T., DeCorby, K & Dobbins, M. (2014). Original Research Knowledge brokering in public health: a tale of two studies. *Public Health,128*(6),533-544.

Tremblay, R.E., Nagin, D.S., Séguin, J.R., Zoccolillo, M., Zelazo, P.D., Boivin, M., Pérusse, D., & Japel, C. (2004). Physical aggression during early childhood: trajectories and predictors. *Pediatrics, 114*(1), e43-50. https://doi.org/10.1542/peds.114.1.e43.

Tricco, A.C., Antony, J., Soobiah, C., Kastner, M., Cogo, E., MacDonald, H., D'Souza, J., Hui, W. & Straus, S.E. (2016). Knowledge synthesis methods for generating or refining theory: a scoping review reveals that little guidance is available. *J Clin Epidemiol., 73,* 36-42.

Tricco, A.C., Ashoor, H.M., Cardoso, R., MacDonald, H., Cogo, E., Kastner, M., Perrier, L., McKibbon, A., Grimshaw, J.M., Straus, S.E. (2015). Sustainability of knowledge translation interventions in healthcare decision-making: a scoping review. *Implementation Sci., 11,* 55. https://doi.org/10.1186/s13012-016-0421-7

Tripathy, J. P., Bhatnagar, A., Shewade, H. D., Kumar, A., Zachariah, R., & Harries, A. D. (2017). Ten tips to improve the visibility and dissemination of research for policy makers and practitioners. *Public health action*, *7*(1), 10–14. https://doi.org/10.5588/pha.16.0090

Uneke, C. J., Ezeoha, A. E., Uro-Chukwu, H. C., Ezeonu, C. T., & Igboji, J. (2018a). Promoting Researchers and Policy-Makers Collaboration in Evidence-Informed Policy-Making in Nigeria: Outcome of a Two-Way Secondment Model between University and Health Ministry. *International journal of health policy and management*, *7*(6), 522–531. https://doi.org/10.15171/ijhpm.2017.123

Uneke, C. J., Sombie, I., Uro-Chukwu, H. C., Mohammed, Y. G., & Johnson, E. (2018b). Promoting evidence informed policymaking for maternal and child health in Nigeria: lessons from a knowledge translation workshop. *Health promotion perspectives*, *8*(1), 63–70. https://doi.org/10.15171/hpp.2018.08

Uneke, C. J., Ezeoha, A. E., Uro-Chukwu, H., Ezeonu, C. T., Ogbu, O., Onwe, F., & Edoga, C. (2015). Enhancing the Capacity of Policy-Makers to Develop Evidence-Informed Policy Brief on Infectious Diseases of Poverty in Nigeria. *International journal of health policy and management*, *4*(9), 599–610. https://doi.org/10.15171/ijhpm.2015.100.

University College Dublin (2020). *UCD Research and Innovation, 'Impact – Plan, Capture, Communicate'.* https://www.ucd.ie/research/portal/outcomesandimpacts/impactplancapturecommunicate

Usher, K., & Fitzgerald, M. (2008). *Introduction to nursing research.* In S. Borbasi, D. Jackson & R. W. Lanford (Eds.), Borbasi, S., Jackson, D Lanford, R.W. Mosby Elsevier.

van Eerd, D. &Saunders, R. (2013). Integrated Knowledge Transfer and Exchange: An Organizational Approach for Stakeholder Engagement and Communications.*Health Res Policy Syst.,11*,13.https://doi.org/10.22230/src.2017v8n1a274.

van de Goor, I., Hämäläinen, R.M., Syed, A., Juel Lau, C., Sandu, P., Spitters, H., Eklund Karlsson, L., Dulf, D., Valente, A., Castellani, T.,& Aro, A.R. (2017). REPOPA consortium. Determinants of evidence use in public health policy making: Results from a study across six EU countries. *Health Policy, 121*(3), 273-281. https://doi.org/10.1016/j.healthpol.2017.01.003.

van der Heide, I., Uiters, E., Jantine Schuit, A., Rademakers, J., & Fransen. M. (2015). Health literacy and informed decision making regarding colorectal cancer screening: a systematic review. *Eur J Public Health., 25*(4), 575-82. https://doi.org/10.1093/eurpub/ckv005.

Vogel, L. (2018). Trump administration shutters clinical guidelines database. *CMAJ : Canadian Medical Association journal, 190*(27), E841. https://doi.org/10.1503/cmaj.109-5624

Wakefield, M.A., Loken, B., & Hornik, R.C. (2010). Use of mass media campaigns to change health behaviour. *Lancet, 376*(9748). 1261-71. https://doi.org/10.1016/S0140-6736(10)60809-4. P

Waqa, G., Mavoa, H., Snowdon, W. et al. (2013). Knowledge brokering between researchers and policymakers in Fiji to develop policies to reduce obesity: a process evaluation. *Implementation Sci., 8,* 74. https://doi.org/10.1186/1748-5908-8-74

Ward, V., House, A., & Hamer, S. (2009). Developing a framework for transferring knowledge into action: a thematic analysis of the literature. *J Health Serv Res Policy, 14*(3), 156-64. https://doi.org/10.1258/jhsrp.2009.008120.

Wathen, C.N., & MacMillan, H.L. (2018). The Role of Integrated Knowledge Translation in Intervention Research. *Prev Sci., 19*(3), 319-327. https://doi.org/10.1007/s11121-015-0564-9.

Wathen, C. N., MacGregor, J. C., Sibbald, S. L., & MacMillan, H. L. (2013). Exploring the uptake and framing of research evidence on universal screening for intimate partner violence against women: A knowledge translation case study. *Health Research Policy and Systems, 11,* 13.

Wathen, C.N., S.L. Sibbald, S.M. Jack and H.L., & Macmillan. (2011). Talk, Trust and Time: A Longitudinal Study Evaluating Knowledge Translation and Exchange Processes for Research on Violence against Women. *Implementation Science, 6*(1), 102. https://doi.org/10.1186/1748-5908-6-102.

Webster-Stratton, C., Jamila Reid, M., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: evaluation of the Incredible Years Teacher and Child Training Programs in high-risk schools. *Journal of child psychology and psychiatry, and allied disciplines*, *49*(5), 471–488. https://doi.org/10.1111/j.1469-7610.2007.01861.x

Weisz, J. R., & Kazdin, A. E. (2010). *The present and future of evidence-based psychotherapies for children and adolescents.* In J. R. Weisz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents* (p. 557–572). The Guilford Press.

Wensing, M., & Grol, R. (2019). Knowledge translation in health: how implementation science could contribute more. *BMC Med 17*, 88. https://doi.org/10.1186/s12916-019-1322-9

Westhorp, G. (2018). *Understanding Mechanisms in Realist Evaluation and Research,* in N. Emmel et al. (eds), Doing Realist Research. Sage

Wong G, et al. RAMESES publication standards: realist syntheses. BMC Med. 2013;11:21.

Wong, G., Greenhalgh, T., Westhorp, G., Buckingham, J., & Pawson, R. (2013). RAMESES publication standards: realist syntheses. *BMC Med, 11,* 21. https://doi.org/10.1186/1741-7015-11-21

Yamada, J., Shorkey, A., Barwick, M. Widger, K., Stevens, B.J.(2015). The effectiveness of toolkits asknowledge translation strategies for integrating evidence into clinical care: a systematic review", *BMJ Open,5,* e006808. https://doi.org/10.1136/bmjopen-2014-006808.

Yin, R.K.(2003).*Case Study Research: Design and Methods.* SAGE.

Yost, J., Dobbins, M., Traynor, R. *et al.* (2014). Tools to support evidence-informed public health decision making. *BMC Public Health 14,* 728.https://doi.org/10.1186/1471-2458-14-728

Yost, J., Ciliska, D.,& Dobbins, M. (2014). Evaluating the impact of an intensive education workshop on evidence-informed decision making knowledge, skills, and behaviours: a mixed methods study. *BMC Med Educ., 14,* 13. https://doi.org/10.1186/1472-6920-14-13

Zhang, Z. & Ahmed. W. (2019). A comparison of information sharing behaviours across 379 health conditions on Twitter.*International Journal of Public Health,64,*431–440.

Appendix 1

List of ENRICH Publications (SO'C as Co-Author)

Publications

O'Connor, S., McGilloway, S., Hickey, G. & Barwick, M. (2021). Disseminating early years research: An illustrative case study.*Journal of Children's Services (16)*1, 56-73.

Hickey, G., McGilloway, S., Leckey, Y., Furlong, M., Leavy, S., Stokes, A., **O'Connor, S.,** Bywater, T. & Donnelly, M. (2019). Mothers' well-being, parenting attitudes, and home environment: Cumulative risk and parity in early motherhood. *Child Care Health Dev, 45(4):* 523-530 doi: 10.1111/cch.12677.

Furlong, M., Lecky, Y., **O'Connor, S.**& McMahon, K. (2018). *Evaluation of the TLC Kidz Programme for Children and Mothers Recovering from Domestic Abuse.* Dublin: Barnardos Ireland.

Stokes, A., Hickey, G., Furlong, M., Leckey, Y., **O'Connor, S.**& McGilloway. S. Engaging vulnerable families in a multi-centre exploratory RCT of a wraparound-inspired intervention for parents with children at risk of child-maltreatment. *XXII Congress of International Society for Prevention of Child Abuse and Neglect (ISPCAN) Proceedings, Prague,* 2-5 September 2018 (pp 434). http://www.ispcan2018.org/files/AB/files/assets/common/downloads/ISPCAN2018-Abstract_book.pdf

Stokes, A., Hickey, G., Furlong, M., Leckey, Y., **O'Connor, S.**& McGilloway. S. Understanding the implementation and perceived effectiveness of a wraparound-inspired and community-based parent support programme to prevent child maltreatment. *XXII Congress of International Society for Prevention of Child Abuse and Neglect (ISPCAN) Proceedings, Prague,* 2-5 September 2018 (pp 294). http://www.ispcan2018.org/files/AB/files/assets/common/downloads/ISPCAN2018-Abstract_book.pdf

Stokes, A., Hickey, G., Leckey, Y., Furlong, M., Leavy, S., **O'Connor, S.**& McGilloway. S. (2017). A Longitudinal Evaluation of a Community-Based Wraparound-Inspired Intervention for Vulnerable Parents of Children Aged 0-2 Years. *Children's Research Digest, 4(1),* 7-14.

Hickey, G., McGilloway, S., Leavy, S., Leckey, Y., Furlong, M. &**O'Connor, S.** (2015). ENRICHing Children's Lives in the Earliest Years through the Implementation and Evaluation of new Wraparound Services for Parents and Infants in Disadvantaged Areas. *Children's Research Digest, 2(2),* 54-60.

Appendix 2

Document Analysis Form

1. What is the reason for this document being produced?
2. Who produced this document and when?
3. Who is the document aimed at?
4. What sources of information informed this document development?
5. What or how did research influence the document formulation?
6. What are the outcomes or impact of this policy?
7. A brief summary of the document

Appendix 3a

Survey Information Sheet

ENRICH RESEARCH PROGRAMME – KNOWLEDGE TRANSLATION

We would like to invite you to take part in an important research study. Please take a few minutes to read carefully through the following information so you can understand why the research is being done and what it will involve. Also, please ask us if there is anything that is not clear, or if you would like more information.

What is the research about?

The aim of this study is to explore your experiences and views on the utilisation and translation of research evidence in the field of child and family health and well-being.The study is being carried out by PhD Candidate,SiobhánO'Connor, as part of the ENRICH (EvaluatioN of wRaparound in Ireland for CHildren and families) research programme led by Prof.Sinéad McGilloway at Maynooth University Department of Psychology. The research has received funding from the Health Research Board.

Why have I been asked to take part?

You have been identified as someone who might be interested in sharing with us youropinions, views, experiences, and expectations in relation to the utilisation and translation of research evidence in the field of child and family health and well-being.

Who has approved this study?

The study has received ethical approval from the Maynooth University Social Research Ethics Committee.

Do I have to take part?

No, you are under no obligation whatsoever to take part in the research. However, we hope that you will agree to take part and give us some of your time to completean online survey. If you decide to do so, by clicking submit at the end of the survey, you are providing your consent for participation. If you decide to take part, you are still free to withdraw at any time without giving a reason and/or to withdraw your information up until such time as the data are anonymised.

What will happen to me if I take part?

You may be asked to complete an online survey at a number of points in time throughout the duration of the 4-year study (no more than 3 times), during which time you will be asked a number of questions relating to your views, experiences and expectations of the utilisation and translation of research evidence in the field of child and family health and well-beingand also the more general processes of knowledge translation (e.g. barriers and facilitators).

How long will the whole process take?

The survey will take approximately 15-20 minutes to complete.

Will my taking part in this research be kept confidential?

Yes, all information which is collected about you during the course of the research will be kept strictly confidential. No names will be identified at any time. All information will be held in a password-protected computer database and will be accessed only by the research team; no information will be distributed to any other unauthorised individual. If you so wish, the data that you provide can also be made available to you at your own discretion. Transcripts will be destroyed ten years after completion of the study (ending 2019). It must be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.

What will happen to the results of the research?

The research will be written up in report format and may be published in journals and presented at conferences. A summary of the research findings will be made available to you upon completion. Information regarding publications/outputs will also be available upon request.

Who do I contact if I have a question?

Please feel free to address any questions to Siobhán O'Connor, ENRICH Programme, Maynooth University Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 087 064 9249 or by email: siobhan.oconnor.2015@mumail.ie).

Alternatively, you may contact the ENRICH Principal Investigator/PhD Research Supervisor, Prof.Sinéad McGilloway, Maynooth University Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 01 708 6052/4765 or by email: sinead.mcgilloway@nuim.ie).

For more information on the ENRICH programme, please see our webpage: https://cmhcr.eu/enrich-programmefollow us on Twitter @ENRICH_Ireland, on Facebook: https://www.facebook.com/enrichprog or email siobhan.oconnor.2015@mumail.ie to request to receive our biannual e-newsletter.

If you think that you would like to take part in this research, please proceed to take the survey.

Appendix 3b

Interview/Focus Group Information Sheet

ENRICH RESEARCH PROGRAMME – KNOWLEDGE TRANSLATION

We would like to invite you to take part in an important research study. Please take a few minutes to read carefully through the following information so you can understand why the research is being done and what it will involve. Also, please ask us if there is anything that is not clear, or if you would like more information.

What is the research about?

The aim of this study is to explore your experiences and views on the utilisation and translation of research evidence in the field of child and family health and well-being.The study is being carried out by PhD Candidate,Siobhán O'Connor, as part of the ENRICH (EvaluatioN of wRaparound in Ireland for CHildren and families) research programme led by Prof. Sinéad McGilloway at Maynooth University Department of Psychology. The research has received funding from the Health Research Board.

Why have I been asked to take part?

You have been identified in the course of our research as a key person with knowledge of how research findings are understood and used in policy and practice. We would now like to invite you to take part in an interview/focus group with a researcher in order to share your opinions, views, experiences, and expectations in relation to the utilisation and translation of research evidence in the field of child and family health and well-being.

Who has approved this study?

The study has received ethical approval from the Maynooth University Social Research Ethics Committee.

Do I have to take part?

No, you are under no obligation whatsoever to take part in the research. However, we hope that you will agree to take part and give us some of your time to take part in an interview/focus group with a researcher. If you decide to do so, you will be asked to sign a consent form. If you decide to take part, you are still free to withdraw at any time without giving a reason and/or to withdraw your information up until such time as the data are anonymised.

What will happen to me if I take part?

You may be asked to take part in an interview/focus group with a researcher at a number of points in time throughout the duration of the study (no more than 2 times), during which time you will be asked a number of questions relating to your views, experiences and expectations of the utilisation of research findings as part of your work and also the more general processes of knowledge translation (e.g. barriers and facilitators). The interview/focus group will be audio recorded, with your consent, in order to ensure that we include all necessary details. Focus groups will be in the form of a group discussion among individuals from a similar professional position.

How long will the whole process take?

The interview/focus group will last approximately 30-40 minutes.

Will my taking part in this research be kept confidential?

Yes, all information which is collected about you during the course of the research will be kept strictly confidential. No names will be identified at any time. All information (including recordings and recorders where applicable) will be held in a locked cabinet and will be accessed only by the research team; no information will be distributed to any other unauthorised individual. If you so wish, the data that you provide can also be made available to you at your own discretion. Audio files will be destroyed after transcription and all personal or identifiable information will be removed from transcripts. Transcripts will be destroyedten years after completion of the study (ending in 2019). It must be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.

What will happen to the results of the research?

The research will be written up in report format and may be published in journals and presented at conferences. A summary of the research findings will be made available to you upon completion. Information regarding publications/outputs will also be available on our webpage: https://cmhcr.eu/enrich-programme, follow us on Twitter @ENRICH_Ireland, on Facebook: https://www.facebook.com/enrichprog or email siobhan.oconnor.2015@mumail.ie to request to receive our biannual e-newsletter.

Who do I contact if I have a question?

Please feel free to address any questions to Siobhán O’Connor, ENRICH Programme, The Centre for Mental Health & Community Research (CMHCR), Maynooth University Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 087 064 9249 or by email: siobhan.oconnor.2015@mumail.ie).
Alternatively, you may contact the ENRICH Principal Investigator/PhD Research Supervisor, Prof. Sinéad McGilloway, CMHCR, Maynooth University Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 01 708 6052/4765 or by email: sinead.mcgilloway@nuim.ie).

THANK YOU FOR YOUR HELP!

Appendix 4a

Research Dissemination Survey for Practitioners/Policy Makers

Q1 Please indicate that you have read and understood the information sheet for this study; you agree to take part in this study and to provide information to the researcher for use in the study; and you understand that you can withdraw from the study at any time

○ Yes (1)
○ No (2)

Q2 What is the your current job title?

Q3 What organisation do you currently work for?

Q4 How many years/months have you been working in this role?

Q5 Which county do you primarily work in?

Q6 What is your gender?

○ Male (1)
○ Female (2)

Q7 What age group do you belong to?

○ < 20 years (1)
○ 20 – 34 years (4)
○ 35 – 49 years (5)
○ 50 – 69 years (6)
○ 70 + years (7)

Q8 I feel I need to integrate evidence-based research more often into my work

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q9 I am interested in being involved in research

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q10 Which of the following do you understand as evidence? (please select all that apply)

- ☐ Research (1)
- ☐ Clinical experience (2)
- ☐ Peer consultations (3)
- ☐ Stakeholder views (4)
- ☐ Patient preferences (5)
- ☐ Personal values (6)
- ☐ Media influences (7)
- ☐ I don't know (8)
- ☐ Other (please state below) (9) ____________________

Q11 Which of the following have you used to access evidence? (please select all that apply)

- ☐ Research paper (1)
- ☐ Research brief/summary (2)
- ☐ Database (20)
- ☐ Non-journal report/grey literature (19)
- ☐ Conference/workshop/seminar presentation (3)
- ☐ Email/e-newsletter (4)
- ☐ Video (5)
- ☐ Webinar (8)
- ☐ Social media (9)
- ☐ Website (10)
- ☐ Expert group discussion (11)
- ☐ Working directly with researchers (16)
- ☐ Networking with peers (17)
- ☐ None (18)
- ☐ Other (please state below) (13) ____________________

Q12 I have attended a workshop/seminar that aimed to enhance my research use skills

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q13 Research evidence plays an important role in improving services for parents and children

- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (3)
- ○ Disagree (4)
- ○ Strongly disagree (5)

Q14 In the last year, on average, how often have you received research evidence that has changed or influenced your work?

○ 1-2 times (1)
○ 3-5 times (2)
○ 6-10 times (3)
○ 10+ times (4)
○ Never (5)

Q15 To what extent do you think research has an impact in your field?

○ To no extent (1)
○ To a little extent (2)
○ To a moderate extent (3)
○ To a great extent (4)

Q16 Please give at least one example of how a research programme/finding has had an impact on your work?

Q17 Getting access to research that demonstrates an effective evidence-based practice makes it more likely that it will be adopted in my work

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q18 Please list the job titles of the top three people (if applicable) with whom you have the most interaction about research

Q19 I don't feel capable of applying research evidence (Please explain your response in the box below)

○ Strongly agree (6)
○ Agree (7)
○ Neither agree nor disagree (8)
○ Disagree (9)
○ Strongly disagree (10) ____________________

Q20 I will not introduce a new programme or intervention that is not supported by research evidence

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (5)
○ Strongly disagree (6)

Q21 I don’t see the benefit of using research evidence
○ Strongly agree (5)
○ Agree (6)
○ Neither agree nor disagree (7)
○ Disagree (8)
○ Strongly disagree (2)

Q22 I have sufficient access to evidence
○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q23 I don’t like trying new ideas
○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q24 I would try a new programme or intervention even if it were very different from what I am used to
○ Strongly agree (1)
○ Agree (5)
○ Neither agree nor disagree (6)
○ Disagree (7)
○ Strongly disagree (8)

Q25 I don’t have time for research
○ Strongly agree (1)
○ Agree (5)
○ Neither agree nor disagree (6)
○ Disagree (2)
○ Strongly disagree (3)

Q26 To what extent do you trust researchers
○ To no extent (1)
○ To a little extent (2)
○ To a moderate extent (3)
○ To a great extent (4)

Q27 I would learn about an evidence-based practice if support were provided
- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (5)
- ○ Disagree (6)
- ○ Strongly disagree (7)

Q28 Research evidence is not easy to understand
- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (3)
- ○ Disagree (4)
- ○ Strongly disagree (5)

Q29 I have the incentive to use research (If you strongly agree or agree, please explain your response in the box below)
- ○ Strongly agree (1)
- ○ Agree (4)
- ○ Neither agree nor disagre (5)
- ○ Disagree (6)
- ○ Strongly disagree (7) ____________________

Q30 Evidence-based research is not relevant to my work
- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (3)
- ○ Disagree (4)
- ○ Strongly disagree (5)

Q31 My workplace has skilled staff for research
- ○ Strongly agree (1)
- ○ Agree (4)
- ○ Neither agree nor disagree (5)
- ○ Disagree (6)
- ○ Strongly disagree (7)

Q32 There is too much information to work with
- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (3)
- ○ Disagree (4)
- ○ Strongly disagree (5)

Q33 I tend to ignore research evidence if I am not convinced that the intervention will work for a particular population

- ○ Strongly agree (1)
- ○ Agree (5)
- ○ Neither agree nor disagree (6)
- ○ Disagree (2)
- ○ Strongly disagree (8)

Q34 Learning about evidence-based research will help me in my job

- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Neither agree nor disagree (5)
- ○ Disagree (6)
- ○ Strongly disagree (7)

Q35 Please list the top three (or any) barriers or challenges that you think affect the use of evidence-based research in early intervention and prevention in Ireland

Q36 I'd like to develop my skills further in finding, accessing and using evidence

- ○ Strongly agree (1)
- ○ Agree (7)
- ○ Neither agree nor disagree (8)
- ○ Disagree (9)
- ○ Strongly disagree (10)

Q37 Please list the top three (or any) facilitators that you think could aid the use of evidence-based research in early intervention and prevention in Ireland

Q38 I have attended a workshop/seminar to enhance my skills in using research

- ○ Yes (If yes, please name the organisation who ran the workshop/seminar) (1) ____________________
- ○ No (2)
- ○ I don't know (3)

Q39 Using research is a priority in my workplace

- ○ Strongly agree (1)
- ○ Agree (5)
- ○ Neither agree nor disagree (6)
- ○ Disagree (7)
- ○ Strongly disagree (8)

Q40 My workplace has enough resources to ensure research is accessible, adaptable and can be applied in making decisions

○ Strongly agree (1)
○ Agree (5)
○ Neither agree nor disagree (6)
○ Disagree (7)
○ Strongly disagree (8)

Q41 Staff in my workplace are informed of how evidence influenced the choices that were made as part of our work

○ Strongly agree (1)
○ Agree (5)
○ Neither agree nor disagree (6)
○ Disagree (7)
○ Strongly disagree (8)

Q42 My workplace promotes the use of research evidence as part of my work

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (5)
○ Disagree (6)
○ Strongly disagree (7)

Q43 My workplace has arrangements with external experts who search for research, monitor research, or do research for us

○ Yes (1)
○ I don't know (2)
○ No (5)

Q44 My workplace uses research well/enough

○ Strongly agree (1)
○ Agree (5)
○ Neither agree nor disagree (6)
○ Disagree (7)
○ Strongly disagree (8)

Q45 I feel that there should be more collaboration between researchers, service providers and policy makers in relation to child and family interventions in Ireland

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q46 We are hoping to interview key people to further explore the opinions, views, experiences, and expectations in relation to the utilisation and translation of research evidence in the field of child and family health and well-being. Please state your interest in participating in an interview or focus group:

○ I would be interested in participating in an interview/focus group (please include your email address below or if you would prefer email siobhan.oconnor.2015@mumail.ie) (1) ____________________

○ I would not be interested in participating in an interview/focus group (2)

Q47 If you have any additional comments, please feel free to write them here

Appendix 4b

Research Dissemination Survey – Researcher Section

Q9 Over the last 5 years, my research reports were read and understood by the practitioners and professionals concerned

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q10 Over the last 5 years, my work has been cited as a reference in the reports, studies, and strategies of action elaborated by practitioners and professionals

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q11 Over the last 5 years, efforts were made to adopt the results of my research by practitioners and professionals

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q12 Over the last 5 years, my research results influenced the choices and decisions of practitioners and professionals

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q13 Over the last 5 years, my results gave rise to applications and extension by the practitioners and professionals concerned

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q14 Over the last 5 years, I transmitted my research results to the practitioners and professionals concerned

○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Usually (4)
○ Always (5)

Q15 I feel that there should be more collaboration between researchers, service providers and policy makers in relation to child and family interventions in Ireland

○ Strongly agree (1)
○ Agree (2)
○ Neither agree nor disagree (3)
○ Disagree (4)
○ Strongly disagree (5)

Q16 Please list the top three (or any) barriers or challenges that you think affect the use of evidence-

Appendix 5

Sample Feedback Form

We would like to ask you some brief questions about your thoughts and opinions on today's launch event. All of the information you provide is anonymous and confidential, so please be as honest as possible.

1. **I found today's event useful.** ***(circle answer)***

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

2. **I have a good understanding of the findings from the UpTo2/Parent & Baby Programme.**

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

3. **What was the most helpful/interesting thing(s) that you learnt from today's event?**

4. **Do you have any other comments about today's launch or the findings/outputs?**

THANK YOU!

Appendix 6a

Survey Consent Form

The study is being carried out as part of the ENRICH (**E**valuatio**N** of W**R**aparound in **I**reland for **CH**ildren and families) research programme at Maynooth University Department of Psychology (Mental Health and Social Research Unit). You have been identified as someone whom we think would have an interest in the utilisation and translation of research evidence in the field of child and family health and well-being.

You are under no obligation whatsoever to take part in the research. If you decide to take part, you will be invited to complete an online survey, that will take approximately 30 minutes, during which time you will be asked a number of questions relating to your views, experiences and expectations of the utilisation of findings from research generally (e.g. barriers and facilitators) and also from the ENRICH programme.

ELECTRONIC CONSENT: PLEASE SELECT YOUR CHOICE BELOW.

Clicking on the "AGREE" button indicates that:

- You have read and understood the information sheet for the above study and have had the opportunity to ask questions.
- You agree to take part in this study and to provide information to the researcher for use in the study.
- You understand that you can withdraw from the study (or withdraw your data) at any time.
- You are at least 18 years of age.
- You have been employed in your current role for the previous six months.

If you do not wish to participate in the research study, please decline participation by clicking on the "DISAGREE" button.

AGREE ☐

DISAGREE ☐

Appendix 6b

Interview/Focus Group Consent Form

ENRICH RESEARCH PROGRAMME – KNOWLEDGE TRANSLATION

I confirm that have read and understood the information sheet for the above study and have had the opportunity to ask questions. ☐

I agree to take part in this study and to provide information to the researcher for use in the study. ☐

I agree to this interview/focus group being audio recorded for purposes of the research. ☐

I understand that I can withdraw from the study (or withdraw my data) at any time. ☐

Signature of participant:____

Date:____________________

Signature of researcher:____

Date: _____________________

> If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact the Secretary of Maynooth University Ethics Committee at research.ethics@nuim.ie or +353 (0)1 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.

If you have any questions or you would like a copy of your consent form, please contact Siobhán O'Connor, Centre for Mental Health & Community Research (CMHCR), Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 087 064 9249 or by email: siobhan.oconnor.2015@mumail.ie

Alternatively, you may contact the ENRICH Principal Investigator/PhD Research Supervisor, Prof. Sinéad McGilloway, CMHCR, Department of Psychology, John Hume Building, Maynooth University, Maynooth, Co. Kildare, Ireland (Tel: 01 708 6052/4765 or by email: sinead.mcgilloway@mu.ie).

Appendix 7a

ENRICH Team Interview Schedule

Interview Questions

1. As the ENRICH programme is coming to an end, what do you think has been (or will be) the most effective way ofdisseminatingthe findings in order to increase awareness of the programme? (see the list of ENRICH KT strategies below)

2. Do you think that the findings from the ENRICH programme have reached the audience they were intended for?

3. Did the KT strategies that you focused on change over the course of the programme, and if so, why?

4. What have been the barriers to developing and implementing the ENRICH KT strategies? (e.g. time to develop and deliver, money, skills, knowledge)

5. What has facilitated the development and implementation of the ENRICH KT strategies?

6. In terms of disseminating the findings, how have you found balancing the funder requirements, publishing journal articles for academic career development, andengaging in various KT strategies?

Closing (Summary)
Has anything else occurred to you about this topic that I haven't asked?
Thank you for their time.

<u>ENRICH KT STRATEGIES</u>

1. Dissemination events
2. Presentations
3. Academic publications
4. Grey literature e.g. summaries, newsletters
5. Website
6. Social media
7. KT capacity-building training
8. Implementation manual
9. Parent advisory panel
10. Knowledge hub and videos

Appendix 7b

Parent Focus Group Topic Guide

Introduction:
Many evidence-based parenting interventions, designed to promote the well-being and health of children and families, have been implemented and evaluated with positive results in Ireland and in other countries (e.g. Furlong et al., 2012; Hutchings et al., 2017; Leijten et al., 2015). However, these programmes are not always translated as intended to policymakers, practitioners or parents. This research is exploring how best to improve the understanding and access to high-quality research on child and family health and well-being.

Interview Questions

1. How do you usually access information/recommendations on parenting? e.g. websites, doctors, other parents, research articles. (Do you trust this information?)

2. How would you prefer to access the latest information/recommendations on parenting? e.g. leaflets, other parents, research articles, social media

3. What are your thoughts on academic research that is carried out on children and families? (Do you trust it or do you rely on other sources? Do you think this research is important? Does it have an impact on your family's health and well-being)

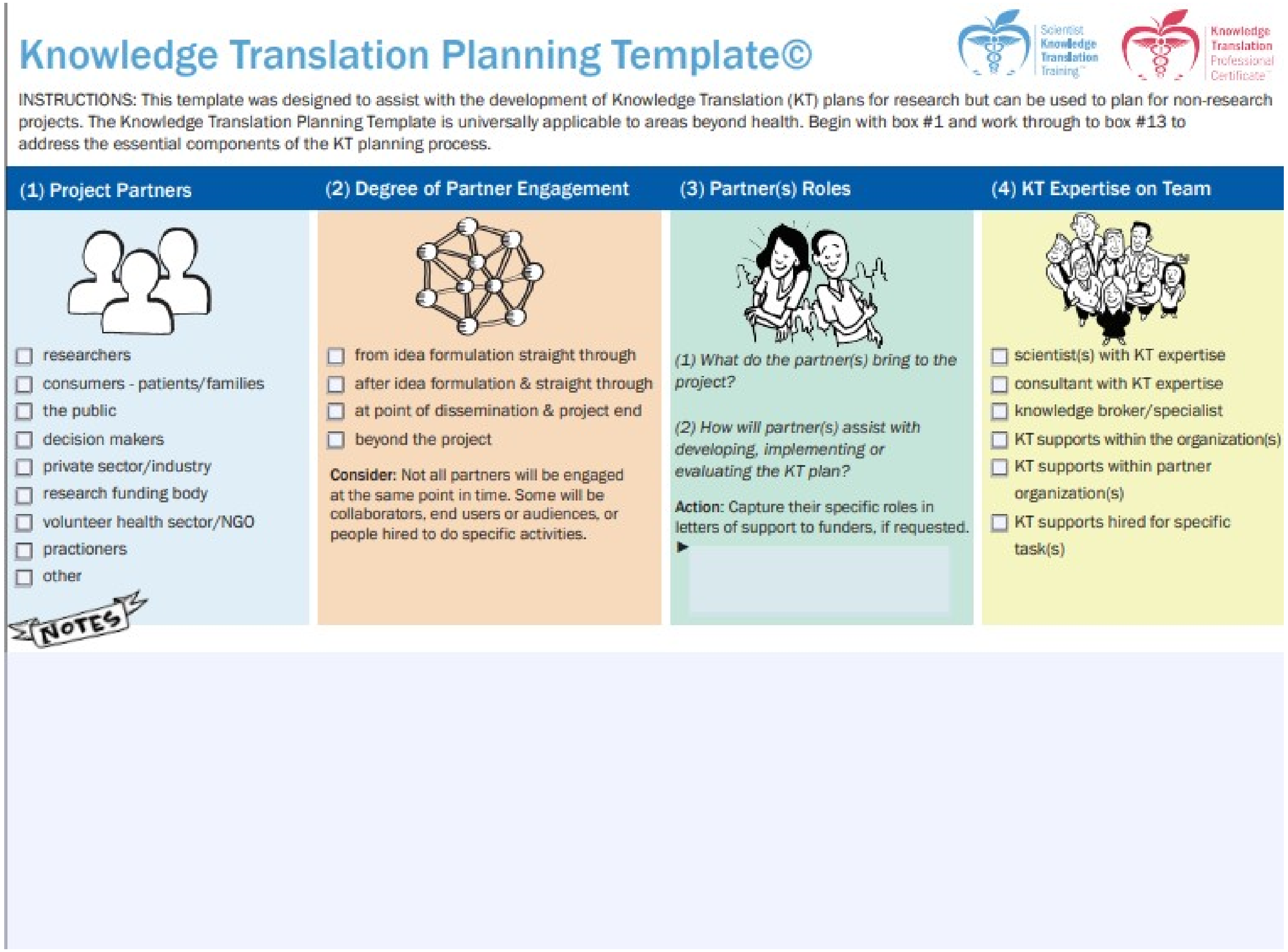
4. What research studies, if any, are you familiar with that focus on the well-being and health of children and families? (Would you like to know more about research that is being carried out in this area?)

5. If you have read a research study on child well-being and health in the past, did you think it was easy to understand? Why or why not?

6. Do you think the key issues for children and families in Ireland are being explored through research at the moment? Discuss.

Appendix 8

Knowledge Translation Planning Template (Barwick, 2008; 2013; 2019)



Knowledge Translation Planning Template©

INSTRUCTIONS: This template was designed to assist with the development of Knowledge Translation (KT) plans for research but can be used to plan for non-research projects. The Knowledge Translation Planning Template is universally applicable to areas beyond health. Begin with box #1 and work through to box #13 to address the essential components of the KT planning process.

(1) Project Partners

- ☐ researchers
- ☐ consumers - patients/families
- ☐ the public
- ☐ decision makers
- ☐ private sector/industry
- ☐ research funding body
- ☐ volunteer health sector/NGO
- ☐ practioners
- ☐ other

(2) Degree of Partner Engagement

- ☐ from idea formulation straight through
- ☐ after idea formulation & straight through
- ☐ at point of dissemination & project end
- ☐ beyond the project

Consider: Not all partners will be engaged at the same point in time. Some will be collaborators, end users or audiences, or people hired to do specific activities.

(3) Partner(s) Roles

(1) What do the partner(s) bring to the project?

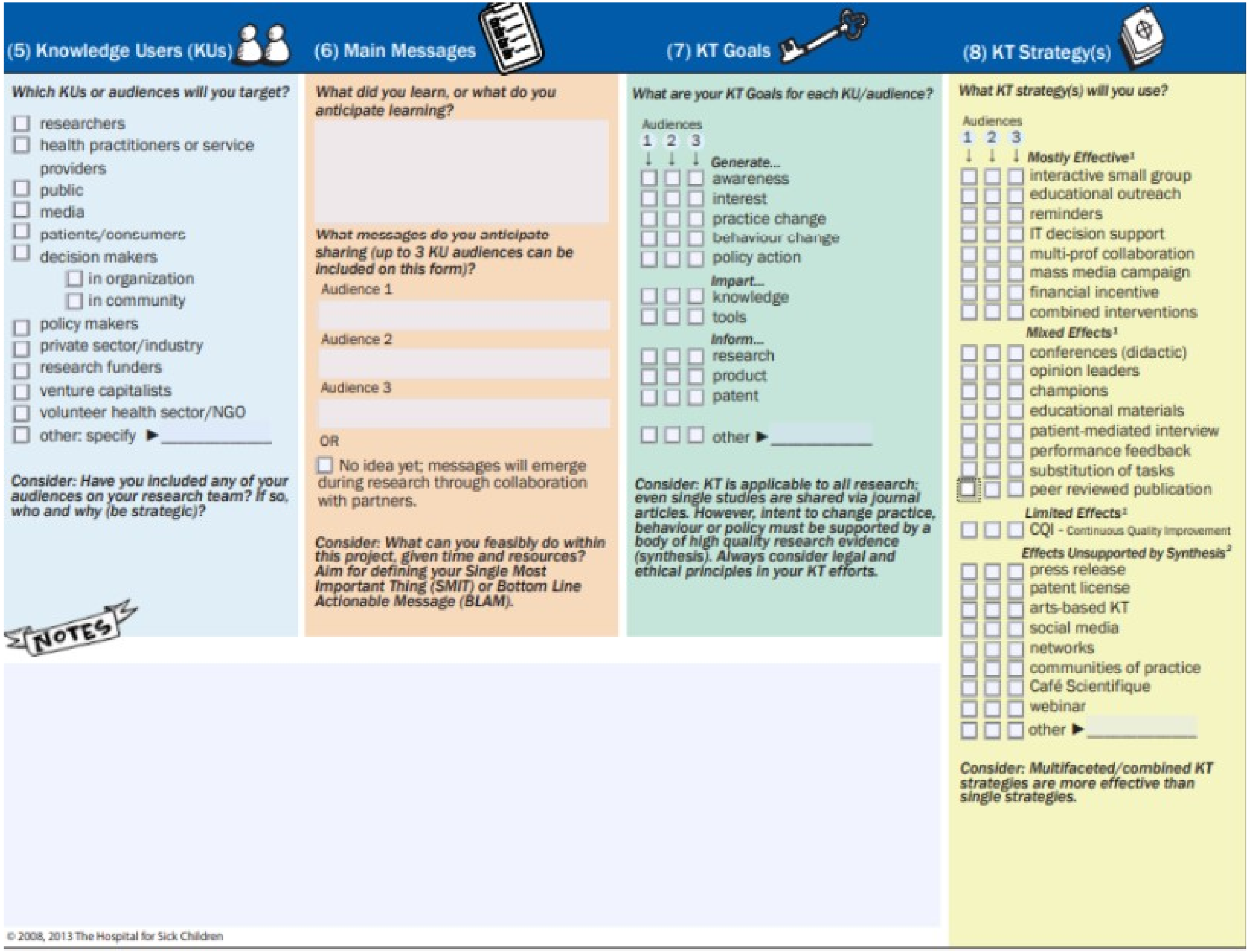
(2) How will partner(s) assist with developing, implementing or evaluating the KT plan?

Action: Capture their specific roles in letters of support to funders, if requested.

►

(4) KT Expertise on Team

- ☐ scientist(s) with KT expertise
- ☐ consultant with KT expertise
- ☐ knowledge broker/specialist
- ☐ KT supports within the organization(s)
- ☐ KT supports within partner organization(s)
- ☐ KT supports hired for specific task(s)



(5) Knowledge Users (KUs)

Which KUs or audiences will you target?

☐ researchers
☐ health practitioners or service providers
☐ public
☐ media
☐ patients/consumers
☐ decision makers
  ☐ in organization
  ☐ in community
☐ policy makers
☐ private sector/industry
☐ research funders
☐ venture capitalists
☐ volunteer health sector/NGO
☐ other: specify ► ____________

Consider: Have you included any of your audiences on your research team? If so, who and why (be strategic)?

(6) Main Messages

What did you learn, or what do you anticipate learning?

What messages do you anticipate sharing (up to 3 KU audiences can be included on this form)?

Audience 1

Audience 2

Audience 3

OR

☐ No idea yet; messages will emerge during research through collaboration with partners.

Consider: What can you feasibly do within this project, given time and resources? Aim for defining your Single Most Important Thing (SMIT) or Bottom Line Actionable Message (BLAM).

(7) KT Goals

What are your KT Goals for each KU/audience?

Audiences
1 2 3
↓ ↓ ↓ *Generate...*
☐ ☐ ☐ awareness
☐ ☐ ☐ interest
☐ ☐ ☐ practice change
☐ ☐ ☐ behaviour change
☐ ☐ ☐ policy action
Impart...
☐ ☐ ☐ knowledge
☐ ☐ ☐ tools
Inform...
☐ ☐ ☐ research
☐ ☐ ☐ product
☐ ☐ ☐ patent

☐ ☐ ☐ other ► ____________

Consider: KT is applicable to all research; even single studies are shared via journal articles. However, intent to change practice, behaviour or policy must be supported by a body of high quality research evidence (synthesis). Always consider legal and ethical principles in your KT efforts.

(8) KT Strategy(s)

What KT strategy(s) will you use?

Audiences
1 2 3
↓ ↓ ↓ *Mostly Effective*[1]
☐ ☐ ☐ interactive small group
☐ ☐ ☐ educational outreach
☐ ☐ ☐ reminders
☐ ☐ ☐ IT decision support
☐ ☐ ☐ multi-prof collaboration
☐ ☐ ☐ mass media campaign
☐ ☐ ☐ financial incentive
☐ ☐ ☐ combined interventions
Mixed Effects[1]
☐ ☐ ☐ conferences (didactic)
☐ ☐ ☐ opinion leaders
☐ ☐ ☐ champions
☐ ☐ ☐ educational materials
☐ ☐ ☐ patient-mediated interview
☐ ☐ ☐ performance feedback
☐ ☐ ☐ substitution of tasks
☐ ☐ ☐ peer reviewed publication
Limited Effects[1]
☐ ☐ ☐ CQI - Continuous Quality Improvement
Effects Unsupported by Synthesis[2]
☐ ☐ ☐ press release
☐ ☐ ☐ patent license
☐ ☐ ☐ arts-based KT
☐ ☐ ☐ social media
☐ ☐ ☐ networks
☐ ☐ ☐ communities of practice
☐ ☐ ☐ Café Scientifique
☐ ☐ ☐ webinar
☐ ☐ ☐ other ► ____________

Consider: Multifaceted/combined KT strategies are more effective than single strategies.

NOTES

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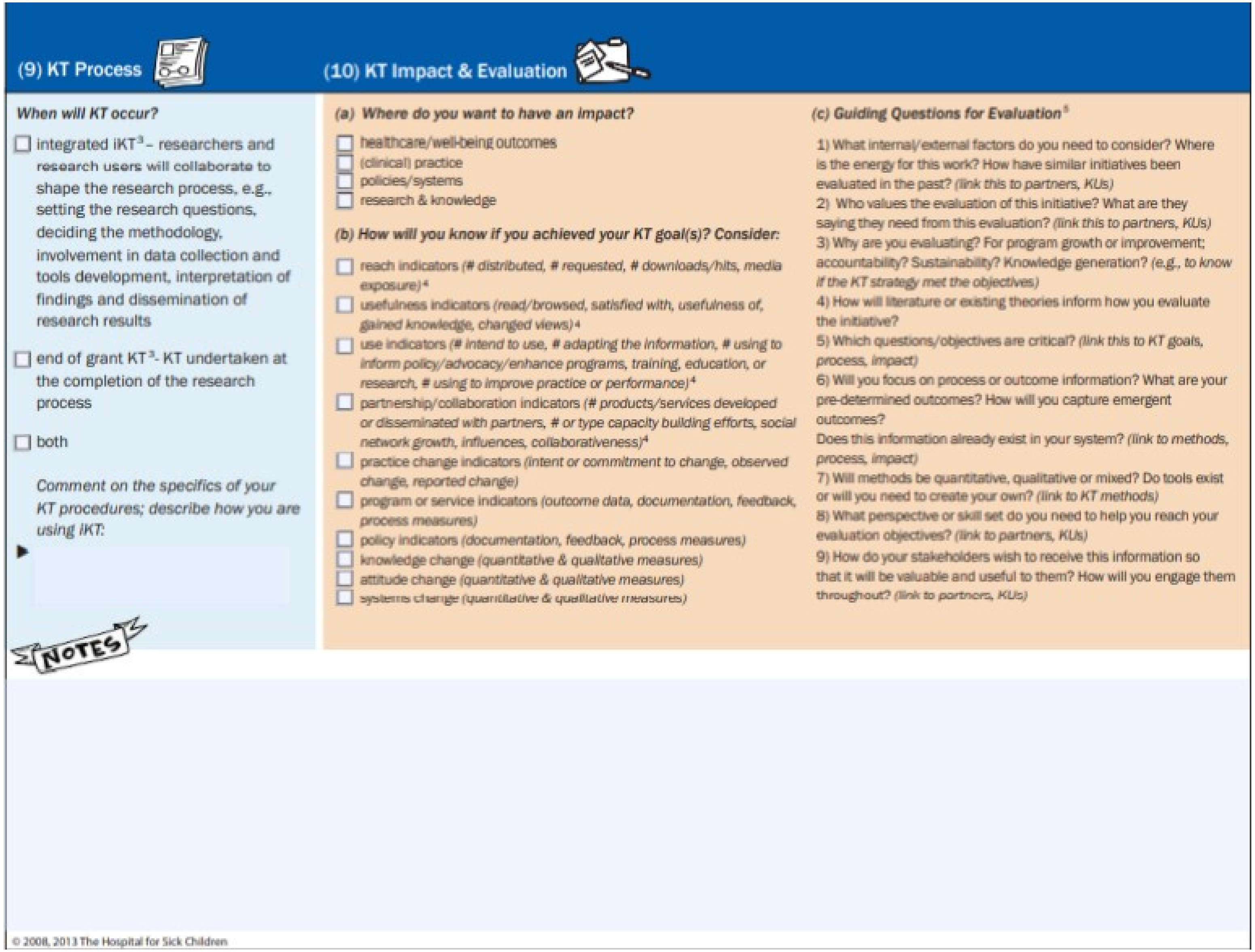

(9) KT Process

When will KT occur?

☐ integrated iKT[3] – researchers and research users will collaborate to shape the research process, e.g., setting the research questions, deciding the methodology, involvement in data collection and tools development, interpretation of findings and dissemination of research results

☐ end of grant KT[3]- KT undertaken at the completion of the research process

☐ both

Comment on the specifics of your KT procedures; describe how you are using iKT:

▶

(10) KT Impact & Evaluation

(a) Where do you want to have an impact?

☐ healthcare/well-being outcomes
☐ (clinical) practice
☐ policies/systems
☐ research & knowledge

(b) How will you know if you achieved your KT goal(s)? Consider:

☐ reach indicators *(# distributed, # requested, # downloads/hits, media exposure)*[4]
☐ usefulness indicators *(read/browsed, satisfied with, usefulness of, gained knowledge, changed views)*[4]
☐ use indicators *(# intend to use, # adapting the information, # using to inform policy/advocacy/enhance programs, training, education, or research, # using to improve practice or performance)*[4]
☐ partnership/collaboration indicators *(# products/services developed or disseminated with partners, # or type capacity building efforts, social network growth, influences, collaborativeness)*[4]
☐ practice change indicators *(intent or commitment to change, observed change, reported change)*
☐ program or service indicators *(outcome data, documentation, feedback, process measures)*
☐ policy indicators *(documentation, feedback, process measures)*
☐ knowledge change *(quantitative & qualitative measures)*
☐ attitude change *(quantitative & qualitative measures)*
☐ systems change *(quantitative & qualitative measures)*

(c) Guiding Questions for Evaluation[5]

1) What internal/external factors do you need to consider? Where is the energy for this work? How have similar initiatives been evaluated in the past? *(link this to partners, KUs)*
2) Who values the evaluation of this initiative? What are they saying they need from this evaluation? *(link this to partners, KUs)*
3) Why are you evaluating? For program growth or improvement; accountability? Sustainability? Knowledge generation? *(e.g., to know if the KT strategy met the objectives)*
4) How will literature or existing theories inform how you evaluate the initiative?
5) Which questions/objectives are critical? *(link this to KT goals, process, impact)*
6) Will you focus on process or outcome information? What are your pre-determined outcomes? How will you capture emergent outcomes?
Does this information already exist in your system? *(link to methods, process, impact)*
7) Will methods be quantitative, qualitative or mixed? Do tools exist or will you need to create your own? *(link to KT methods)*
8) What perspective or skill set do you need to help you reach your evaluation objectives? *(link to partners, KUs)*
9) How do your stakeholders wish to receive this information so that it will be valuable and useful to them? How will you engage them throughout? *(link to partners, KUs)*

NOTES

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Appendix 9

Articles included in the Realist-Informed Evidence Synthesis (*n*=54)

Author (Year)	Country	Sample	Setting	KT Strategy and Outcome
1. Austin et al. (2017)	USA	Not stated	Health (eating disorders)	Academic community-government partnership enhanced engagement.
2. Bhogal et al. (2011)	Canada	*n*=8	Health researchers	Two-day workshop – expanded individual understanding of KT; fostered learning experiences.
3. Boydell et al. (2017)	Canada	Not stated	Policy makers and researchers in child and youth mental health	Relationship-building central to enhancing KT.
4. Brownson et al. (2011)	USA	*n*=291	Oncology – state level policy makers	Policy briefs - understandable and credible for all participants
5. Bumberger (2012)	USA	Not stated	Researchers and programme staff	Powerpoint, Youtube, infographics, research briefs increased awareness
6. Campbell et al. (2011)	Australia	Not stated	Health policy makers	Knowledge brokers enhanced values of evidence; facilitated linkages
7. Crick & Hartling (2015)	Canada	*n*= 58	Nurses and physicians	Infographics – more visually pleasing; summary more

				comprehensive
8. Crowley, Bishop-Scott &Fishbein (2018)	USA	policy makers n=10; researchers n=29	Policy and research	In-person meeting and web conferencing - important for dissemination.
9. Dagenais, Queuille&Ridde (2013)	Burkina Faso	n=38	NGOs, decision makers in health sector	Partnership- positive attitude towards research and useful; increased access.
10. Dobbins et al. (2007)	Canada	n=92	Decision makers and front-line clinicians	Websites, research journals, emails, conference, workshops, summaries, abstracts - preferred access formats
11. Dobbins et al. (2009)	Canada	n=141	Public health department participants in child health decision-making	Web resources can facilitate evidence-informed decision-making
12. Doran et al. (2010)	Canada	n=488	Front line nurses	Access to web-resources, abstracts, best practice guidelines – improvement in awareness/value of research
13. Forsetlund et al. (2009)	North America, Europe, Australia, Indonesia, South Africa	81 studies	Nurses, pharmacists, GPs, community-based care	Mixed educational meetings - increase effectiveness.
14. Gardner (2010)	USA	Not stated	General public and policy maker	Access to websites, videos, newspapers, radio, TV interviews, newsletter - increased awareness
15. Gerrish& Percy (2014)	UK	Clinicians n=14 and	Nurses, clinicians,	KT skills development.

		academics; managers healthcare *n*=7	researchers	Clinical skills in evidence appraisal and evaluation skills
16. Gray et al. (2003)	Canada	*n*=26	Health professionals, nurses, care staff	Dramatic production series - engage service users and health professionals; Gained new levels of understanding and awareness.
17. Gresh et al. (2017)	160 countries	4000 members worldwide	Nursing students	Share knowledge, facilitate access to information and engage students through CoP. Blogs, webinars, podcasts, promote access to evidence globally; Publications nursing – information distribution.
18. Haq (2010)	Pakistan	*n*=20	District level health policy makers	TV talk show discussion around maternal and baby health with public – change in policy approach
19. Hawkes et al. (2016)	Bangladesh, India, Nigeria, Gambia	*n*=20	policy makers, practitioners, parliamentarians, senior and middle level health care managers	Strengthen policy maker capacity to use evidence. Access and interpretation - computer access and internet. Interaction - seminars and dialogue for discussing.
20. Hopkins et al. (2018)	USA	*n*=56	state policy makers	Knowledge brokers – enable access to research;

				facilitated exchanges
21. Jabbar et al. (2015)	USA	*n*=53	Policy makers, schools, intermediary organisations, researchers	Primarily use anecdotes to justify position over peer-review.
22. Jansen &Hoeijmakers (2013)	Holland	*n*=14	Public health professional practitioners	Masterclass in research skills; improved research competence; increased practice-based research skills
23. Jones, Armstrong, Pettman& Waters (2015)	Australia	unclear	researchers	Course - useful, increased understanding and confidence in KT theory and planning; built researchers' skills
24. Kho et al. (2009)	Canada	*n*=30 trainees	Health research	4-day capacity building event-facilitated interpersonal relationship; encouraged future KT training opportunities.
25. Kiltz et al., (2008).	Europe and Canada	*n*=18	Patients and practitioners	Discussion - improved the understanding of a document
26. Kim & Vender (2014)	Not stated	Not stated	Patients- public health	Patient-centred group on Facebook had the most engagement
27. Kirshbaum (2008)	UK	*n*=92	Nursing - oncology	Targeted booklet- increase in knowledge and changes in reported attitudes and practice
28. Kothari et al. (2015)	Canada	*n*=8	Health professionals e.g. nurses	CoPs – 7 webinars brought together.
29. Kothari, Sibbald&Wa	Canada, USA, UK,	*n*=37	Public health researchers,	Valued the network,

then (2014)	Asia, Europe and Australia		practitioners, policy makers	encouraged more communication
30. Langlois et al. (2016)	Mexico and Nicaragua	*n*=221	Maternal health stakeholders research healthcare professional and health system stakeholders	Communities of practice – ability to acquire, adapt, apply research; improved capacity to identify and use evidence; catalysed exchanges through social media.
31. Lapum et al. (2014)	USA and Canada	focus group *n*=34; an exhibition; interviews *n*=26 on the spot	Open heart surgery and recovery - patients, practitioners, researchers, family members, educators.	Poetry and photographs – Encouraged valid and meaningful representations, self-reflection; conveyed patient perspectives
32. Leurer (2013)	Canada	Not stated	Nursing health policy makers	Media interviews, newspaper - change in policy
33. Martin et al. (2019)	Canada	*n*=112	ER physicians	Preferred infographic summaries to abstracts, higher preference and low cognitive load.
34. McGinty et al. (2019)	USA	*n*=25	Public health research -policy	Interaction encouraged more effective long-term coalition
35. McSween-Cadieux, Dagenais&Ridde (2018)	Burkina Faso	survey *n*=37 (post workshop); interviews *n*=14 (6 weeks after)	Public health road safety – researchers, police, health policy makers, NGOs	1-day workshop deliberative dialogue –learned from each other, post- workshop collaborations created behaviour change in individuals
36. McVay et al (2016)	USA	*n*=266	Public health researchers	Face-to-face meetings, academic journals, policy

				briefs useful
37. Meisel et al (2019)	USA	*n*=18	Health policy makers (substance use)	Partner with policy makers early in the process through person-to-person meetings, conferences, webinars, summaries
38. Nyirenda et al.(2016)	Malawi	*n*=477	participatory community consultations	interactive health-talk radio programme - improved exposure and knowledge of medical research, dispelled misconceptions
39. Park et al. (2018).	Canada	*n*=62	clinicians, researchers, health care managers, and policy makers	In-person workshops, coaching, online platform for training increased the understanding of and confidence in using KT; knowledge was also shared with colleagues.
40. Peirson et al. (2012)	Canada	*n*=27	Public health	Evidence-informed decision making capacity enhanced - strong leadership, access to libraries; tech resources.
41. Russel et al. (2010)	Canada	*n*=122	Child health	6-month knowledge broker – knowledge increased in evidence-based tools, and at 12 months
42. Santecroce et al (2018)	USA	Unknown	Post-doctoral research nurse	KT training integrated into a nursing programme

43. Sharpe et al. (2013) .	American-Indian	*n*=32	nursing staff and patients	Engaged to create culturally appropriate brochures for clinic use
44. Shroff et al. (2015)	Argentina, Bangladesh, Cameroon, Nigeria, Zambia	Not stated	Health sector policy and researchers	Promote easy to understand research, increase interaction
45. Sinding et al. (2006)	Canada	*n*=396	Psycho-oncology, public	Research-based drama – 90% benefitted from seeing it, recommend it, normalised condition
46. Sprion et al. (2002)	USA	*n*=292	State health policy makers	Conferences - gain new information; Journals and newsletters somewhat valuable in decision-making; Summaries and brief reports - most useful
47. Traynor, DeCorby& Dobbins (2014)	Canada	3 health departments	Public health departments	Knowledge brokers – enhanced individual capacity to improve skills and knowledge in evidence
48. Uneke et al. (2018a)	Nigeria	*n*=10 and *n*=10	Health researchers, senior policy staff	6-month secondment programme - useful capacity building exercise, understanding of contexts, fostered professional relationships
49. Uneke et al. (2018b)	Nigeria	*n*=45	Researchers, policy makers, NGO representatives -	Increased understanding across KT areas after 3 day

			maternal and child health	workshop, enhancing future relationships
50. Uneke et al. (2015)	Nigeria	*n*=43	Health policy makers	One-day training workshop - capacity for evidence use and to develop policy briefs
51. Uneke et al (2012)	Nigeria	*n*=87	Health researchers, programme managers, heads of departments, managers of NGOs	1 day training workshop for policy makers and researchers - improved knowledge and understanding; enhanced research capacity and facilitated engagement for future collaborations.
52. Waqa et al. (2013)	Fiji	*n*=49	Health policy making (obesity)	Knowledge brokers - facilitated evidence-informed policy briefs, and skills
53. Wathen et al. (2011)	Canada	*n*=75 (3 months *n*=33) (6 months *n*=20)	Policy makers, health and community service providers, women's advocates	Workshops - valued meeting researchers, personal connections, shared findings within network.
54. Yost, Ciliska& Dobbins (2014)	Canada	*n*=51 – *n*=34 post test and *n*=21 – 6 month follow up	Health nursing	Workshops - skills to find, access, interpret and apply evidence – increased knowledge and skills immediately but not much in the longer term

Appendix 10

Selection of Supplementary Illustrative Quotes relating to Key Factors that Influence Dissemination

KT concept	Representative quote	Participant
Definitions of evidence	*Anecdotes mean nothing, data is all, all is data.*	(PM1)
Research mistrust	*People get disappointed in research then, the policy makers [say] sure what was the point in spending 4 million on that piece of research, it only confirmed what we already know or it only gave small effect sizes and things like that on particular intervention.*	(PM17)
Resources	*Considering a lot of the information that is published is paid for by public money, it seems a bit much that they are all behind pay walls.*	(PM9)
Collaboration	*Collaboration between research and practice isn't there so practitioners engage with other practitioners and researchers engage with other researchers.*	(P4)
Quality	*You can collaborate all you like, you can't make a poor piece of research turn into a good piece of research. (P8)*	(P8)
Understanding	*There needs to be a lot more emphasis on the researchers learning the skills to communicate with practitioners and policy makers.*	(R5)

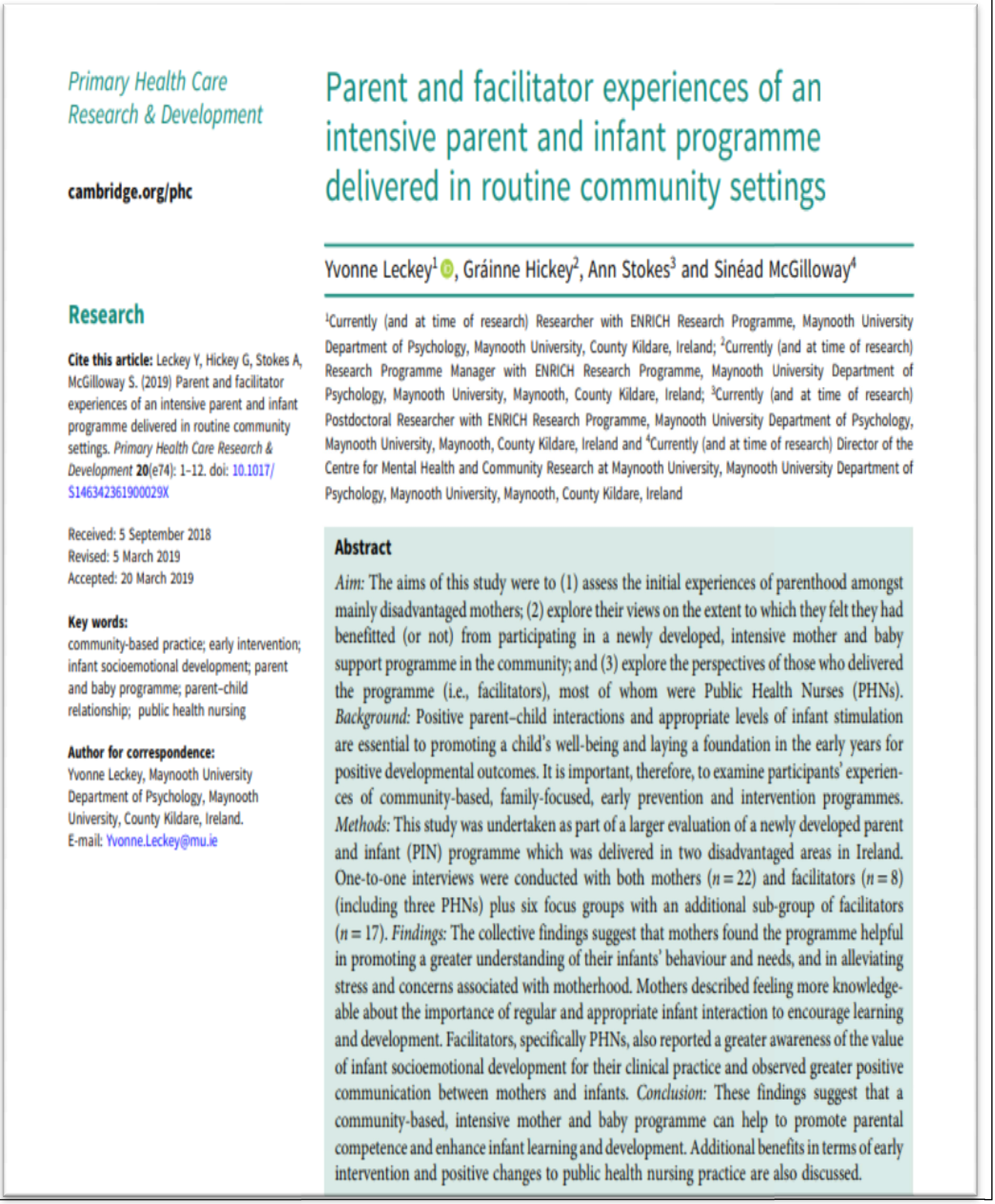
KT concept	Representative quote	Participant
Collaboration	*“Some networks can be a bit of closed shop”*	(PM11)
Collaboration	*We have an infant mental health network group of local practitioners and that has been going for the last seven or eight years and we meet once a month and it is kind of a peer learning group*	(P28)
Collaboration	*“you want to read it if you are interested, you will take the time no matter what it is.”*	PFG
Understanding	*It it is that reaching out to the community about the people who matter, that is difficult for academics.*	RFG
Resources	*“There is no service that ever has too much time or too many resources “*	PM15

Appendix 11

Enlarged Versions of Figure 4.4, 4.5, 4.6

Figure 4.4

Examples of Educational KT-D Strategies



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Parent and facilitator experiences of an intensive parent and infant programme delivered in routine community settings

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Research

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community-based practice; early intervention; infant socioemotional development; parent and baby programme; parent-child relationship; public health nursing

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Abstract

Aim: The aims of this study were to (1) assess the initial experiences of parenthood amongst mainly disadvantaged mothers; (2) explore their views on the extent to which they felt they had benefitted (or not) from participating in a newly developed, intensive mother and baby support programme in the community; and (3) explore the perspectives of those who delivered the programme (i.e., facilitators), most of whom were Public Health Nurses (PHNs). *Background:* Positive parent-child interactions and appropriate levels of infant stimulation are essential to promoting a child's well-being and laying a foundation in the early years for positive developmental outcomes. It is important, therefore, to examine participants' experiences of community-based, family-focused, early prevention and intervention programmes. *Methods:* This study was undertaken as part of a larger evaluation of a newly developed parent and infant (PIN) programme which was delivered in two disadvantaged areas in Ireland. One-to-one interviews were conducted with both mothers ($n = 22$) and facilitators ($n = 8$) (including three PHNs) plus six focus groups with an additional sub-group of facilitators ($n = 17$). *Findings:* The collective findings suggest that mothers found the programme helpful in promoting a greater understanding of their infants' behaviour and needs, and in alleviating stress and concerns associated with motherhood. Mothers described feeling more knowledgeable about the importance of regular and appropriate infant interaction to encourage learning and development. Facilitators, specifically PHNs, also reported a greater awareness of the value of infant socioemotional development for their clinical practice and observed greater positive communication between mothers and infants. *Conclusion:* These findings suggest that a community-based, intensive mother and baby programme can help to promote parental competence and enhance infant learning and development. Additional benefits in terms of early intervention and positive changes to public health nursing practice are also discussed.

8 Family

Programme enriching babies and parents

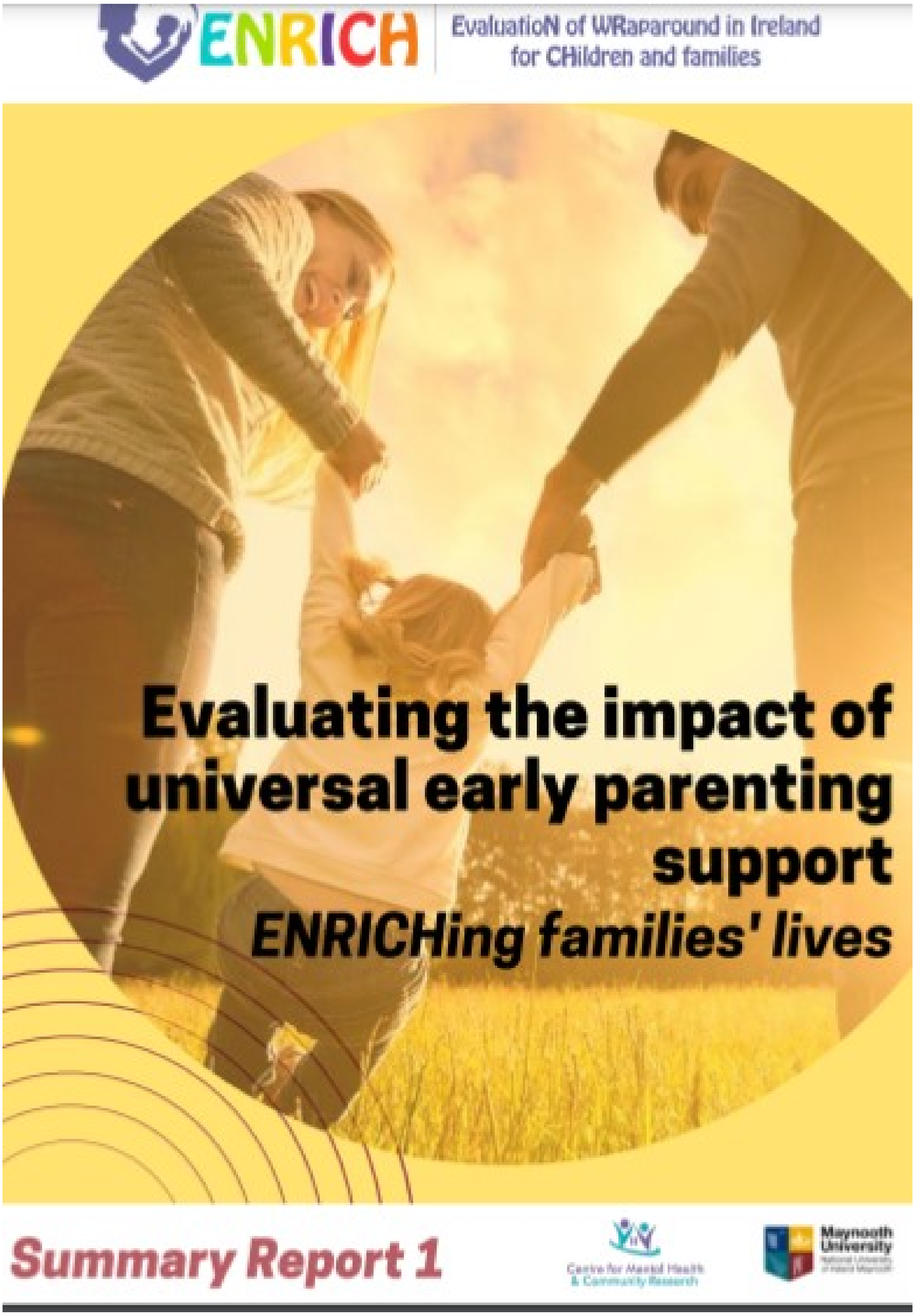
Sheila Wayman

Early-parenting support programme in west Dublin brings lasting improvement in confidence of participants

Wraparound

Isolation

> 'The power of mothers is phenomenal,' says public health nurse Mabel Murtagh, recalling one participant who came from direct provision, feeling very vulnerable and awkward. 'These mothers formed a cocoon around her'



ENRICH

EvaluatioN of WRaparound in Ireland
for CHildren and families

Evaluating the impact of universal early parenting support

ENRICHing families' lives

Summary Report 1

Centre for Mental Health & Community Research

Maynooth University
National University of Ireland Maynooth

Figure 4.5

Example of a Technological KT-D Strategy: Infographic (Early Childhood Ireland, 2020)

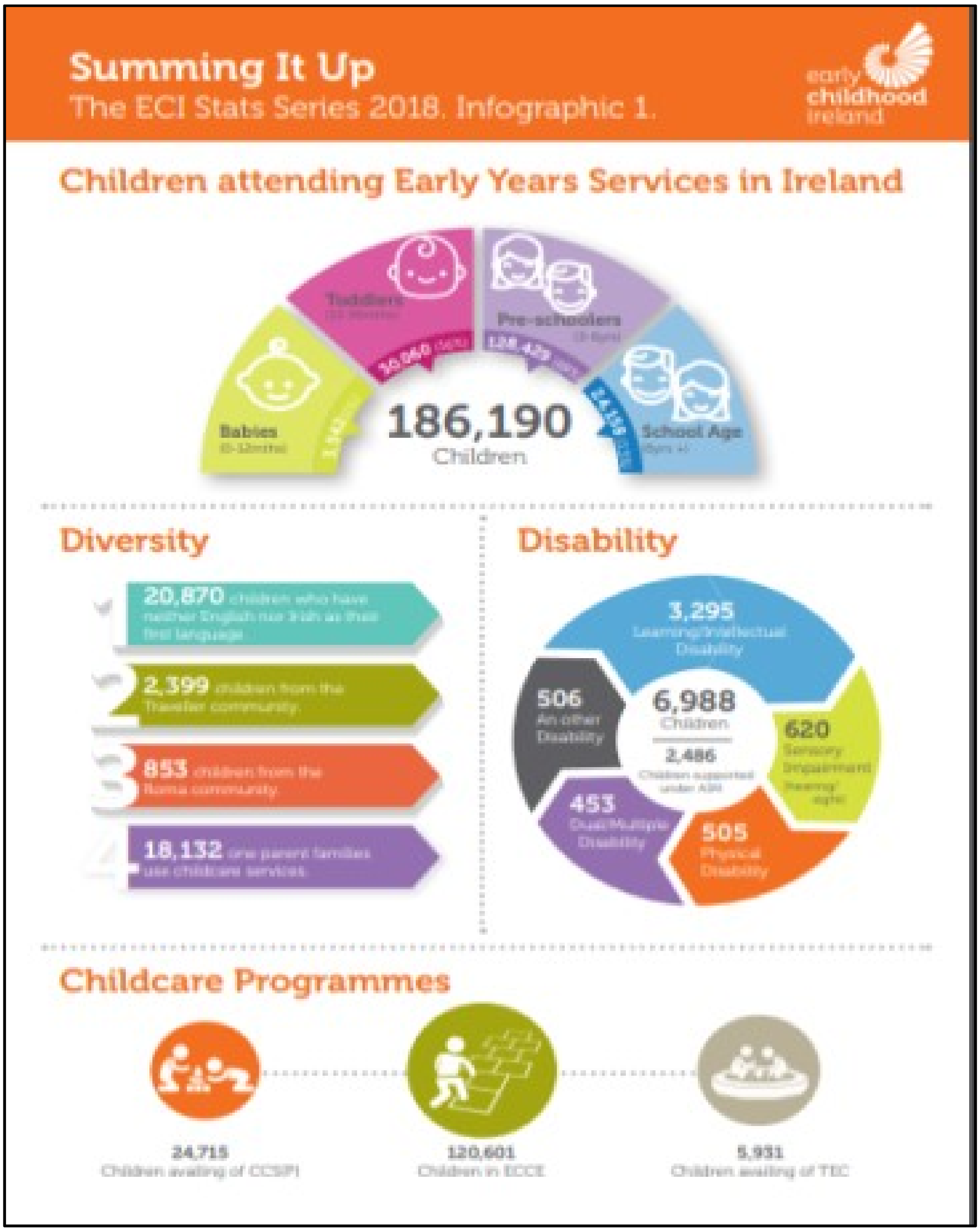
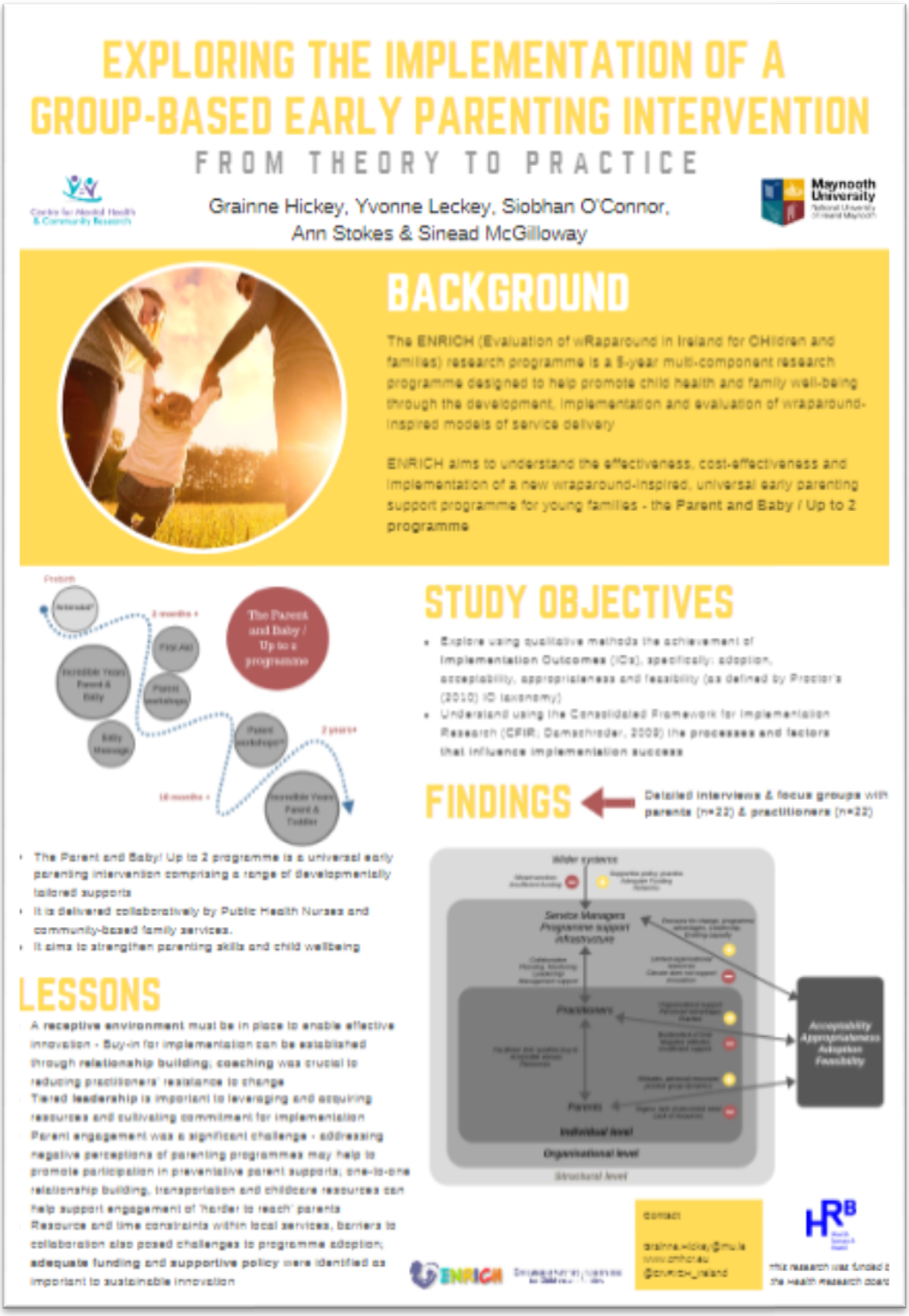


Figure 4.6

Example of a Networking KT-D Strategy (Poster Presentation for the ENRICH Research Programme)



EXPLORING THE IMPLEMENTATION OF A GROUP-BASED EARLY PARENTING INTERVENTION

FROM THEORY TO PRACTICE

Grainne Hickey, Yvonne Leckey, Siobhan O'Connor,
Ann Stokes & Sinead McGilloway

BACKGROUND

The ENRICH (Evaluation of wRaparound in Ireland for CHildren and families) research programme is a 5-year multi-component research programme designed to help promote child health and family well-being through the development, implementation and evaluation of wraparound-inspired models of service delivery

ENRICH aims to understand the effectiveness, cost-effectiveness and implementation of a new wraparound-inspired, universal early parenting support programme for young families - the **Parent and Baby / Up to 2 programme**

- The Parent and Baby/ Up to 2 programme is a universal early parenting intervention comprising a range of developmentally tailored supports
- It is delivered collaboratively by Public Health Nurses and community-based family services.
- It aims to strengthen parenting skills and child wellbeing

STUDY OBJECTIVES

- Explore using qualitative methods the achievement of **Implementation Outcomes** (IOs), specifically: adoption, acceptability, appropriateness and feasibility (as defined by Proctor's (2010) IO taxonomy)
- Understand using the Consolidated Framework for Implementation Research (CFIR; Damschroder, 2009) the **processes and factors** that influence implementation success

FINDINGS

Detailed interviews & focus groups with **parents** (n=22) & **practitioners** (n=22)

LESSONS

A **receptive environment** must be in place to enable effective innovation - Buy-in for implementation can be established through **relationship building; coaching** was crucial to reducing practitioners' resistance to change

Tiered **leadership** is important to leveraging and acquiring resources and cultivating commitment for implementation

Parent **engagement** was a significant challenge - addressing negative perceptions of parenting programmes may help to promote participation in preventative parent supports; one-to-one relationship building, transportation and childcare resources can help support engagement of 'harder to reach' parents

Resource and time constraints within local services, barriers to collaboration also posed challenges to programme adoption; **adequate funding and supportive policy** were identified as important to sustainable innovation

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