WESTERN SYDNEY
UNIVERSITY



TACKLING MATERNAL ANXIETY IN THE PERINATAL PERIOD:

RECONCEPTUALISING MOTHERING NARRATIVES

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NB many of our team are also members of the Translational Health Research Institute

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EXECUTIVE SUMMARY

For many mothers in Australia, worries about pregnancy, birth and parenthood have become a source of considerable anxiety. Although apprehension and heightened concern are normal responses to change, raised expectations, contradictory information, the increased surveillance of mental health issues and a fragmented health system may contribute to the higher prevalence of anxiety.

Maternal anxiety¹ can have significant consequences for mothers and their children, families and communities. Infants of mothers with anxiety are more likely to have low birth weight or be born prematurely, increasing the risks of infant mortality and morbidity; these infants can also experience adverse neurodevelopmental outcomes. Increased morbidity can also lead to serious and/or long-term economic and social impacts.

These impacts of maternal anxiety suggest three key issues. Firstly, they indicate the complexity of maternal anxiety. Secondly, they verify the criticality of addressing maternal anxiety. Thirdly, they suggest that approaches to maternal anxiety have not adequately addressed the impact of the sociocultural context. As such, a different approach is urgently needed.

A transdisciplinary approach provides the opportunity to examine, understand and address the prevalence and associated impacts of maternal anxiety, specifically in order to:

- → recognise the roles played by biology, culture, societal circumstances, economics and public discourse, among other contributors;
- → illuminate the interplay of risk and protective factors at the individual, familial and societal levels;
- → transform the narrative from one that pathologises mothers, and those who support them, to one that normalises and embraces the diverse, natural concerns about parenting.

Western Sydney University is well positioned to respond to this issue. Our researchers are working with Western Sydney communities and services to examine the impact of the dominant narrative of the perfect or 'good mother', and are investigating community and service system responses to the complex and diverse experiences of mothers, and those who support them, across this life transition.

Our aim is to ameliorate maternal anxiety through effective interventions and services in the Greater Western Sydney area and beyond, and to develop strategies and scholarship that promote and celebrate diverse parenting. As this paper outlines, these strategies rest on building resilience in women, families and communities as they negotiate a world of constant information; developing, testing and implementing novel approaches to identify, prevent, and treat maternal anxiety; and codesigning systems that promote and sustain maternal and child health.

1. In this paper we use the term maternal anxiety to refer to mothers experiencing anxiety during pregnancy and one year following birth (the perinatal period).

INTRODUCTION



Anxiety in the perinatal period (i.e. in pregnancy or up to one year following birth) can become a major mental health issue affecting many mothers in Australia. This is distressing for individual women and families; and can impact the health and development of both unborn and young infants, producing poorer cognitive functioning in children, impairments in language, and physical, psychosocial, emotional and behavioural problems. Around 300,000 women give birth in Australia each year, and one in five will experience some form of mental health morbidity (including depression, anxiety and difficulties adjusting to the parenting role)3. The prevalence of anxiety in pregnancy and following birth appears to be increasing4.5. Women with moderate or severe anxiety in pregnancy or after birth are also likely to experience depression.

To date, attention has been on diagnosis, treatment and raising community awareness of perinatal depression, yet anxiety is the most common mental health condition in Australia. One in three women in Australia experiences anxiety in their lifetime, and around 20% of new mothers. Internationally, studies report that rates of prenatal anxiety are between 3% and 39%.8 It is critical that attention is turned to maternal anxiety in the perinatal period.

In this paper, we identify challenges surrounding maternal anxiety, including the limitations of current approaches to prevention and treatment, and the role the 'good mother' narrative may play in increasing anxiety. An overview of our research at Western Sydney University (WSU) demonstrates how working with mothers, and those who support them, can optimise resilience and hope and allow for new ways to celebrate the diverse experience of motherhood within our communities. Our ultimate goal is to transform the narrative from one that pathologises mothers, and those who support them, to one that normalises, embraces and celebrates the diverse, natural concerns about parenting.

1. THE CHALLENGE

Our goal is to transform the mothering narrative from one that pathologises mothers, and those who support them, to one that normalises, embraces and celebrates the diverse, natural concerns about parenting

Anxiety is a natural emotion with specific adaptive function. It has evolutionary, protective purposes as part of the flight-orfight response to real or perceived danger. However, if a person experiences feelings of anxiety about events in their life that are not resolved, these feelings can become both physically and psychologically problematic and may meet the criteria for the diagnosis of conditions such as generalised anxiety disorder, social anxiety, phobias, panic disorder and post-traumatic stress disorder8. The prevalence of anxiety is increasing worldwide and even at subclinical levels, anxiety may produce detrimental physical and psychological outcomes 9

UNDERSTANDING THE IMPACTS OF ANXIETY

Anxiety during pregnancy or following birth can be a normal but transient reaction to a major life transition. If a woman experiences significant and unresolved anxiety, it can result in debilitating symptoms of irritability, restlessness, tense muscles, tight chest or heart palpitations (see image in Figure 1). Women may express these symptoms as feelings of inner turmoil, anger or agitation; being 'wound up' or 'not sleeping'; worrying about their baby's development, safety and wellbeing; believing something catastrophic will happen; or, in some instances, experiencing panic attacks.¹⁰ If women do not recognise these symptoms as anxiety, or if they worry about the associated stigma, they may not discuss them with maternity care or child health professionals. Therefore, feelings that begin as a normal reaction to a major life transition can increase until the women are experiencing moderate to severe levels of anxiety that affect their wellbeing and may meet the criteria for

a diagnosis of an anxiety disorder. Therefore, understanding the root causes of anxiety and the way in which this anxiety can be reduce is an important issue for researchers and healthcare professionals.

Anxiety in pregnancy is associated with prematurity and low birth weight¹⁸ as well as deficits in neurological development resulting in physical and psychological, language-development and emotional and behavioural problems (see Figure 1), possibly caused by epigenetic mechanisms in pregnancy.¹ Following birth, anxiety can disrupt the parental capacity to respond to the infant in an empathic way.¹²

IMPROVING TREATMENTS

Currently, guidelines exist for pharmacological, psychological and complementary therapies. 13,14 The first-line treatment for moderate to severe anxiety or depression during the perinatal period is pharmacological, with psychological therapies introduced once medication has become effective.3 However, the best treatment for mild clinical or subclinical anxiety in this period is less clear, as there are concerns about the impact of pharmacological treatment on both the fetus and the baby during breastfeeding.14,15 Mindfulness training may be effective for women with a history of depression during pregnancy3. Recent Australian clinical guidelines for anxiety and depression following birth indicate that psychosocial interventions such as psychoeducation, cognitive behavioural therapy (CBT) and psychotherapy (IPT) have limited, preventive effects.3

CHANGING OUR THINKING

Regardless of culture, many mothers feel judged and stigmatised and have difficulty getting the support they need and this can result in feelings of anxiety during the perinatal period.16,17 In order to build resilience and hope in individual women and their children, families and communities, a transdisciplinary approach (including midwifery, nursing, medicine, sociology, anthropology, psychology, health services policy and management, economics, and information technology) to understanding maternal anxiety is required. With such an approach, we believe we can meet the challenge to improve the valuing of diverse mothering/parenting practices, both within communities and across society.

To achieve this we need to:

- → explore why anxiety during the perinatal period is so high;
- → investigate how risk factors can be identified, minimised or managed;
- → discover what protects mothers from perinatal anxiety, in particular by understanding the role that resilience plays in prevention;
- → develop new approaches to identifying, preventing and treating perinatal anxiety in clinical and community settings;
- → develop strategies, in particular social media, to reduce stigma and discrimination.

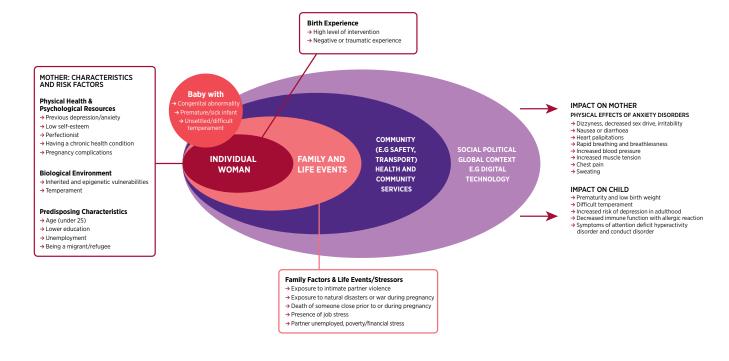
2. MATERNAL ANXIETY: WHAT WE KNOW

EXISTING RESEARCH

Significant biomedical, epidemiological and population health research has focused on the risk factors and predictors of anxiety with a view to developing screening tools, assessment processes and appropriate and acceptable treatments (see Figure 1). The following factors are associated with increased risk of anxiety in pregnancy or after birth.

- → Previous history of depression or anxiety is consistently found to be associated with perinatal anxiety. 18-20
- → Birth interventions are associated with post-traumatic stress disorder in the mother following birth. 18,19
- → Women in difficult socio-economic circumstances, who have a low level of social support, or are from culturally and linguistically diverse (CALD) backgrounds are more likely to be anxious.¹⁹
- → Women who report perfectionist characteristics may also strive to meet the ideals of the 'good mother'. 16.17, 21-27

Figure 1. Risk factors for perinatal anxiety and impacts on mother and baby.



AREAS FOR FURTHER UNDERSTANDING

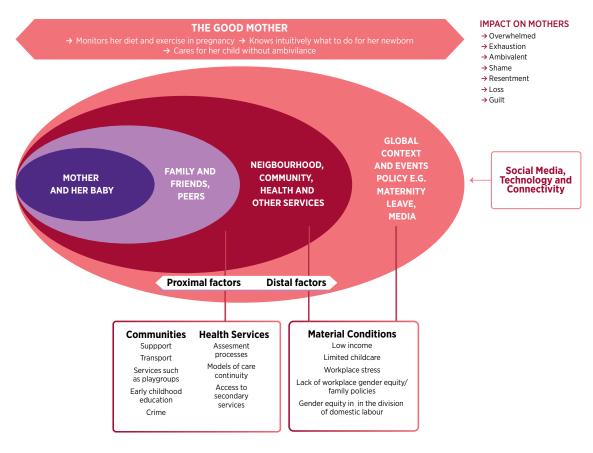
In the existing literature, there is little evidence of individual, family or community protective factors that may prevent or buffer the impact of anxiety in pregnancy or following birth.¹ However, the rise in clinical (diagnosed) and subclinical levels of anxiety in the perinatal period is a sociocultural phenomenon and a feminist concern. Social commentators argue that we live in an 'age of anxiety' where many women, particularly middle-class, Western women, invest in the discourse of the 'good mother': the person who is all-giving, always available and can knowledgeably meet their child's needs. While notions of the good mother vary across socio-economic

and cultural groups, mothers are acutely aware of being judged by others and are the subject of surveillance by other mothers, medical professionals and family members.¹⁷ Some women experience motherhood as overwhelming and characterised by guilt, shame, loss and exhaustion^{16,17,21-27} (see Figure 2). The 'good mother' imperative may be particularly felt by mothers living in poverty with little support,^{25,27} mothers from CALD backgrounds,¹⁷ or those with babies who are unwell or have special needs.^{28,29}

Further research in this area will benefit from input from multiple disciplines. Traditional ideas of what constitute proximal and distal influences on mothers may no longer exist in the ways services and professionals have

previously understood them: we need to consider the role that factors currently considered 'distal' – such as communities, health services, national policy context and social media – might play in generating resilience. The changing and dynamic nature of formal and informal support, and the spaces and places where those take place, are crucial to generating new understandings; as is the potential contribution of new technologies to helping build resilience. Resilience is not restricted to the individual but must also be understood as embedded in the communities that support mothers, as shown in Figure 2.

Figure 2. Distal factors potentially impacting new mothers.



WHY IS MATERNAL ANXIETY INCREASING?

Awareness and screening

The disclosure of symptoms of anxiety during pregnancy and following birth has been facilitated by increasing efforts by government and non-government services to raise awareness of mental health concerns. In Australia, women's mental health and social wellbeing (including screening for domestic and family violence) is screened by most publicly funded maternity and child health services. ³⁰ Screening by GPs will also increase with the government announcement to provide Medicare reimbursements for this service.

However, limited access to continuity-of-care professionals and the fragmentation of services may lead to increasing maternal anxiety. When women receive maternity care from a risk-averse, professional expert, taking an authoritarian, advice-giving stance, they are left feeling unsupported, with their confidence undermined. ^{26,30-32} Additionally, there is limited community discussion aimed at raising awareness to support mothers or to help those who support or advocate on behalf of mothers who might be in crisis.

The 'good mother' discourse

Anxiety increases in a social landscape that emphasises the mother's multiple roles and the cultural norms associated with femininity. The 'good mother' ideology valorises the nuclear family and the absolute dedication of the mother. In this narrative of motherhood, the middle-class mother who professionalises homemaking, runs domestic life like a corporation and is highly sexualised has become the symbol of aspirational femininity^{24,33}; and is contrasted with single, welfare-dependent mothers or women from CALD backgrounds.

This ideology conflicts with the reality of women's lives. For many CALD women, the family is central to mothering activities, and when family are not accessible a woman may struggle to meet cultural expectations of motherhood.^{17,34} Similarly, members of LGBTI communities struggle to have their mothering status legitimised.35 Mothers in paid work find it difficult to live up to the image of the 'ideal worker'.34 Further, social scientists highlight the impact of socio-economic conditions on mothers - such as low incomes. limited child care, workplace stress, lack of workplace gender equity/family policies, 24,25,33 and gender inequity in the division of domestic labour, with women continuing to do almost twice as much unpaid domestic labour as men.36

One example of women resisting the 'good mother' discourse is 'mummy blogs', which enable 'more nuanced articulations of maternal identities' (p. 1) and can also promote supportive social networks for women. However, we do not know enough about the diverse ways these digital exchanges shape women's self-identities as mothers, or the extent to which they might alleviate – or contribute to – maternal anxiety.

Information overload

Constant information from diverse sources can increase anxiety. 38-40 Overwhelmingly, pregnant women and new mothers value the internet as a tool that enables them to source information for themselves, so that they feel in control of their decisions 39; and virtual communities are also important support networks for new parents. However, comparisons made with others online can have negative impacts on women's self-concepts as mothers. 40.41

Stigma and judgments associated with women's situations and the decisions they make appear to intensify through exposure to a multitude of 'expert' knowledges, as provided by medical professionals, self-help books, reality TV, lifestyle blogs, celebrity mothers and social media. Therefore, the challenge is to transform the dominant narrative of the ideal or 'good mother' to a model that both promotes and enacts societal valuing of the diversity of mothering and parenting practices.



3. THE OPPORTUNITY: OUR APPROACH

In transitioning to motherhood, women negotiate a range of expectations and aspirations with themselves, their loved ones, healthcare professionals, and more broadly, society itself. New mothers must acquire new skills and knowledge, a new language of motherhood, and a shift in identity. All this must be achieved while meeting the social imperative of the 'good mother'. This can be difficult for some women who face individual. family, community or societal challenges and vulnerabilities, and this may manifest in perinatal anxiety. We need to understand how social support and information exchange assist maternal wellbeing and promote the diversity of motherhood.

As researchers, educators and practitioners, our WSU team brings diverse collective expertise to address some central questions related to perinatal anxiety and maternal mental health. We need to ask the following questions in order to reconceptualise societal messages that place the sole responsibility for mothering on individuals rather than communities; and to ask how messages promoting maternal mental health are best communicated more broadly.

- How do pregnant women and new parents receive and respond to constant and competing information about pregnancy, birth, breastfeeding and parenting?
- 2. What types of messages about motherhood, being a parent, pregnancy, birth and breastfeeding promote good mental health and how do these messages need to vary in order to value diversity in parenting approaches?
- 3. What role can informal and formal supporters play in providing support to women experiencing perinatal anxiety?
- 4. What role can digital technologies play in promoting positive perinatal mental health?
- 5. How can health professionals and services modify the language of risk to promote positive, culturally appropriate and optimistic messages about pregnancy, birth and parenting?
- **6.** What are the impacts of integrative treatments on perinatal anxiety?
- 7. How can redesign of health and community services improve perinatal mental health?
- 8. How can communities promote positive maternal mental health in the perinatal period?

Transdisciplinary collaboration opens opportunities for novel methods and interventions to examine the interplay of known risk and yet-unknown protective factors associated with maternal anxiety, at the micro, meso and macro levels (as illustrated in diagrams 1-3). Thinking more broadly about maternal anxiety will help determine which positive strategies can protect and build resilience in individual women, their children, families and communities.

WSU researchers focus on the language used in parenting messages and the public and professional discourses that shape these messages. How women navigate choice in a world of constant information and how they interact with different agents of support needs to be understood in its dynamic context. Codesign and engaged research practices offer us tools to design interventions around local specificities, which can be adapted and scaled to different contexts, as shown in Figure 3.

Understanding experience and valuing Enabling choice and decision making Global and local policy and media Leveraging Community and services healthcare systems to tailor camily and peers Transforming the Narrative **MOTHER** Language and Discourse Novel approaches to treatment advocacy Harnessing and embedding support from family, peers and community Community

Figure 3. Action plan to transform mothering narratives.

ENABLING CHOICE AMID 'CONSTANT INFORMATION'

One of our research priorities is to partner with parents and parenting organisations to understand the impact of 'constant information' and determine how services can effectively use digital infrastructures and approaches to disseminate information. WSU health and social science researchers have used diverse methods (e.g., population-based studies analysing administrative data, surveys, ethnographic approaches, discourse analysis) to conceptualise women's experiences of pregnancy, birth and mothering across various consumer groups, to help to explain women's engagement with maternity and child health services. Insights from behavioural economics, information technology studies and cognitive psychology will enhance our knowledge of how parents respond, process and make choices based on information presented to them.

Pregnant women and new parents seek out information to inform decision-making regarding birth and parenting in various locations, within and beyond health services. Women rarely make choices with only themselves in mind; and their network of important relationships, tied to a sense of responsibility for 'getting it right', can act to raise women's stress levels when making decisions. These decisions are often made in the absence of reliable, comprehensive, useful information. This is particularly so for women who have additional stressors (e.g., chronic illness) that may influence their own health and that of their unborn child.43 Further, the digital age increases the potential for information overload and adds to the complexity that women must negotiate when making decisions. At the same time, however, online spaces offer opportunities for women to resist normative representations of the 'good mother'. This is critical as the characteristics of women's responses to information determine how likely they are to seek appropriate interventions when needed.

WSU is well placed to examine this complex decision-making environment; in particular through the adoption of engaged research methodologies employed by the Young and Well Co-operative Research Centre (CRC) and the suite of tools developed in WSU's 'living lab'. These methods allow communities to codesign and customise research interventions around relevant local concerns, helping us to examine the information women are accessing, the sources of that information, how they feel about information/encounters, and how decisions are made. Identifying the ways information is gathered, processed and responded to informs how to identify where professional intervention is needed and how best to enable positive outcomes. Providing relevant and appropriate information that is congruent with women's values, needs and circumstances is critical to building confidence and resilience and reducing decisional conflict and anxiety associated with family choices.43 Table 1 outlines specific projects in this area of research.

TAILORING MESSAGES AND SOCIAL SUPPORT INTERVENTIONS FOR DIVERSE PARENT GROUPS

New technologies offer opportunities to tailor messages to pregnant women and new parents that recognise their diverse needs at any point in time. Promoting positive messages in health interventions needs to be understood in context. Research methodologies that allow users to help determine where messages should be placed, the timing of their delivery and what those messages look and sound like, will contribute to the future success of those interventions.

Our research into perinatal care pathways highlights the potential for personalised digital applications (apps) to support mothers and link them to professionals before their levels of anxiety increase to the point of requiring services. Such apps may also support continuity of care; a key service component that potentially reduces anxiety (see Table 1).

To help reduce the anxiety that information overload can generate in mothers, platform and app design might benefit from strategies adopted in behavioural economics and marketing. These approaches need to be linked to individualised and personal care planning in ways that preserve the user's autonomy.

A team at WSU has commenced work in this area, examining how digital technologies, including apps, mediate and remediate risk, and their role in defining risk for audiences.

Table 1. Projects related to navigating choice and tailoring messages.

NAVIGATING CHOICE AND TAILORING MESSAGES

Current and potential projects	Leader/team
Mother's Day Letters Initiative	Prof Virginia Schmied
	Prof Hannah Dahlen
	And the Maternal Anxiety collaborators
Digital technology use in pregnancy and following birth	A./Prof. Alphia Possamai-Inesedy
	Dr Kate Huppatz
	Prof. Pranee Liamputtong
	Prof. Virginia Schmied
The living lab - gathering real time information from mothers in Western Sydney about what, where	A./Prof Amanda Third
and when they access parenting information and how this influences their decisions and experiences (pilot project in Western Sydney)	And colleagues

DEVELOPING AND TESTING NEW APPROACHES TO IDENTIFYING AND TREATING ANXIETY

WSU researchers are examining novel approaches to identifying, preventing and treating maternal anxiety, such as effective screening, assessment and referral pathways; applying integrative therapies; and leveraging the informal social support received by women. Our research in this area is outlined in Table 2.

Table 2. Projects focused on developing and testing new approaches.

EFFECTIVE IDENTIFICATION AND REFERRAL PATHWAYS FOR MENTAL HEALTH CONCERNS

Current and potential projects	Leader/team
Linked data analysis examining pregnancy, birth and child health outcomes for women reporting	Prof Hannah Dahlen
mental health concerns in pregnancy.	Dr Charlene Thornton
	and national and international colleagues
Exploratory study of how women from CALD backgrounds conceptualise mental health and	Prof. Virginia Schmied
wellbeing in pregnancy and after birth, with a view to informing screening and assessment. (multiple	Prof. Lynn Kemp
projects)	Dr Olayide Ogunsij
	Dr Christine Taylor
	PhD candiate
Identifying and supporting women experiencing birth-related PTSD	Prof. Hannah Dahlen
	Dr Holly Priddis
	PhD candidate
Screening for domestic and family violence and pregnancy and birth outcomes for women	Dr Rebecca O'Reilly
disclosing violence (and identifying mechanisms of support - see below).	Prof. Hannah Dahlen
	Dr Lyn Francis
MODELS OF CARE AND SERVICE REDESIGN	
Understanding the key components of midwifery continuity of care that result in positive mental	Prof. Hannah Dahlen
health outcomes. (multiple projects)	Prof. Virginia Schmied
	Dr Elaine Burns
	PhD candidate
Ethnographic methods used to examine antenatal encounters and encounters in postnatal care to	Prof. Hannah Dahlen
support breastfeeding (emphasis on how language is used in interactions).	Prof. Virginia Schmied
	Dr Elaine Burns
	PhD candidate
Psycho-social intervention to meet different information and support needs for women with diverse	Prof. Tanya Meade
backgrounds during prenatal and postnatal periods, particularly those with complex comorbid	Prof Phillipa Hay
(physical and psychological) presentations e.g. eating disorders. Interventions will range from	Dr Karen Mattock
psycho-education to self-care, new models of antenatal education, provision of e-resources and brief,	Dr Suza Trajkovski
early interventions to minimise anxiety symptoms.	Dr Rakime Elmir
	Dr Kate Levett
Testing the efficacy, effectiveness and implementation of sustained nurse home visiting in national/international sites.	Prof. Lynn Kemp
Designing and testing tailored models of social support including online environments. Studies with	Dr Karen Mattock
diverse groups, e.g., CALD women, parents of premature infants, women with chronic conditions in	Dr Lyn Francis
pregnancy, women experiencing violence, breastfeeding support.	Dr Suza Trajkovski
pregnancy, memori experiencing violence, predaticeding support.	Dr Jann Foster
	Dr Kim Psaila
INTEGRATIVE SERVICES AND COMPLEMENTARY MEDICINE	
Development of evidence-based sustainable models for integrative therapies, e.g., trials of yoga and	Prof. Caroline Smith
acupuncture to assist in managing anxiety and depression in pregnancy.	Prof. Hannah Dahlen
	Dr Kate Levett
A feasibility study of music therapy for hospitalised women during pregnancy	Dr Alison Short
5 5	Prof Virginia Schmied
	Prof Virginia Stulz

DESIGNING RESPONSIVE HEALTH SYSTEMS

How health professionals discuss the risks associated with pregnancy and birth with women, and those who support them, can impact outcomes; and health systems and professionals must respond to challenges of this kind. Our research, outlined in Table

3, shows that the approach taken by many professionals intensifies uncertainty and increases anxiety in women and their families. New approaches focus on increasing the capacity of professionals to present and discuss risk in a way that does not raise unnecessary fear or worry.

We work in positive and affirming ways and promote an integrated approach to healthcare. We value participatory approaches and work collaboratively with consumers and service providers. POSH – Positive Organisational Scholarship in Healthcare – is one methodology used to facilitate practice change and service redesign.

Table 3. Projects related to the design of responsive service systems.

RESPONSIVE SERVICE SYSTEMS

Current and potential projects	Leader/team
Positive Organisational Scholarship in Healthcare (POSH) is a methodology used to facilitate practice change and service redesign, based on the identification of existing practices and experiences that exceed expectations. This approach is being applied in diverse settings,	Dr Ann Dadich and colleagues
Appreciative inquiry approach to service redesign, e.g., neonatal nurseries and breastfeeding support	Dr Suza Trajkovski, Dr Elaine Burns, Prof. Virginia Schmied
Translating 'proportionate universal healthcare' into meaningful service-system design to achieve outcomes for families with young children.	Prof. Lynn Kemp, Prof. Virginia Schmied, Dr Ann Dadich
Models of support for birth parents and foster carers	Dr Stacy Blythe, Adi. A./Prof Karleen Gribb

WORKING WITH COMMUNITIES TO CELEBRATE MOTHERING AND PROMOTE DIVERSITY IN PARENTING

We recognise that the parenting journey is an uncertain one, and that the experience of parenthood needs to be understood and negotiated with diverse communities in mind. The 'motherhood narrative' is not solely located in the individual. It is imagined in our social, political, economic and cultural

communities, which are informed by historical representations of women as having deficits rather than strengths. There is a broad community responsibility to provide new parents – especially mothers – with supports that allow them to navigate their new roles in ways that value their stories, experiences and strengths, while celebrating difference.

Working with communities across Greater Western Sydney, we are exploring how to create communities that support parenting in diverse and positive ways; including 'messaging' this via social media and online, in family conversations, and in health services, community services, schools and beyond. Areas of interest include the valuing of parenting stories; familial and social histories of mothering; and reflection on what might be missed by not considering historical contexts, particularly in relation to stigma associated with mental health and mothering. Examples of projects are listed in Table 4.

Table 4. Projects related to working with Greater Western Sydney communities.

WORKING WITH COMMUNITIES TO CELEBRATE PARENTING

WORKING WITH COMMONITIES TO CELEBRATE PARENTING		
Current and potential projects	Leader/team	
Parenting in Public	Prof. Virginia Schmied, Dr Elaine Burns,	
Mother-Infant Caring Community: supporting new mothers to breastfeed their infants.	A./Prof. Athena Sheehan, Dr Kate Huppatz	
Supporting fathers in the perinatal period.	Dr Rakime Elmir, Prof Virginia Schmied,	
	Dr Karen Mattock	
Mockingbird project	Dr Diana Jefferies, Prof Virginia Schmied,	
Historical constructions of maternal anxiety	Dr Margie Duff, Dr Emma Kearney, Dr Alison	
	Watts, A/Prof Amanda Third	

4. WORKING TOGETHER

FOR SYSTEMIC CHANGE: THE ROLE OF STAKEHOLDERS

Our team is working to transform existing, pathologising narratives; instead normalising, embracing and celebrating the diverse, natural concerns about parenting. Given the complexity of maternal anxiety, such approaches require disciplinary, theoretical and methodological plurality, engaging a broad range of perspectives. We also need active involvement in the identification, development, conduct and communication of research by individuals and groups with different views and agendas. Collaborators include mothers and those supporting mothers, community members, midwives, child and family health nurses, general practitioners, local government and urban planners, faith-based groups and the business community.

Successful, solution-orientated research approaches depend on strong understanding by each stakeholder of how their role contributes to shared goals. Examples of stakeholders working together include: WSU researchers from SONM and SOB working with child and family health nursing services in South Western Sydney Local Health District to redesign services and researchers from SSS&P, THRI, MARCS, and SONM studying ways to support mothers with chronic illness or those with premature infants, Importantly, stakeholders need to work with women to develop systems that assist rather than overwhelm them with information and our researchers are developing personalised health information apps for the postnatal period.

WSU draws on the transdisciplinary expertise and experience of our researchers to strategically support this type of engaged research in a variety of settings. Linking health paradigms with sociocultural understandings and qualitative methods, we are adept at determining sustainable interventions that work across the micro, meso and macro levels of the ecologies of motherhood and parenting.



5. OUTCOMES:

IMPACTING HEALTH AND WELLBEING IN GREATER WESTERN SYDNEY AND BEYOND

Our vision is ambitious: to transform the dominant narrative of motherhood in Australia from one that marginalises mothers to one that facilitates inclusiveness, equity and respect, and frees mothers from stigma and judgment. This is an ongoing project, within which we have set the following short-, medium- and long-term goals for output and impact.

Immediate short-term outputs (1-3 years)

- → Increase media communications regarding perinatal mental health, and promote research as a positive strategy to celebrate mothers and improve the lives of women.
- → Articulate the key elements of Mother-Infant Caring Communities that foster resilience and wellbeing.
- → Contribute to policy and practice across critical societal structures that can support mothers' resilience and help reduce anxiety; such as child care, workplace gender equity/family policy, and gender equity in the division of domestic labour.

Impact in the medium term (3-5 years)

- → Raised AWARENESS, within families and the community, of the distress that anxiety causes in new mothers; including strategies to cherish new mothers.
- → Increased KNOWLEDGE of maternal anxiety within the health and community service professions, achieved through policy and education.
- → UPTAKE of appropriate care pathways and treatment/interventions by policy makers and health and community services.
- → REDUCTION of anxiety in specific population groups that participate in intervention trials.

Long-term objectives (5-10 years)

- → TRANSLATE effective interventions on a larger scale to services across Greater Western Sydney.
- → IMPROVE maternal mental health, particularly to reduce anxiety both in the perinatal period and beyond the child's first year.
- → IMPROVE outcomes for the children of women who experience anxiety in pregnancy and after birth and who have received appropriate individual or family intervention:
- → IMPROVE community wellbeing, particularly in Greater Western Sydney, by optimising community programs that build resilience among mothers and those who support them.



6. FUTURE DIRECTIONS

WSU researchers have devised an ambitious agenda to transform the mothering narratives from those that pathologises mothers and those who support them, to narratives that celebrates the diverse, natural concerns about parenting.

Our next steps are to

- → Identify and engage prospective stakeholders in diverse fields such as technological entrepreneurs, marketing experts, transport and urban planning policy makers epigeneticists, biochemists and biomimetists, among others.
- → Seek and formalise consumer and community engagement in the co-design of research and translation into practice
- → Establish a Motherhood Think Tank to guide this work
- → Set clear priorities for health and wellbeing research on resilience, among mothers with anxiety.

The Motherhood Think Tank** will convene regularly with relevant stakeholders in order to identify and prioritise key concerns, discuss how to strategically address them, and harness opportunities. The work of the Think Tank will include:

- → preparing a response to the NSW government inquiry into support for new parents:
- → co-authoring reviews of key issues and implementing research translation strategies to implement research evidence into practice:
- → sourcing external funds to collaboratively address concerns;
- → responding to government requests for tender;
- → contributing to and shaping university curricula.
- ** In October 2017, WSU researchers convened a workshop with representation from health services, NGOs, local council and mothers of young children. The workshop summary is presented in Appendix 2.

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APPENDIX 1

BRIEF BIOGRAPHIES LEAD AUTHORS

Professor Virginia Schmied is Professor of Midwifery in the SONM. She has an international reputation in the field of maternal and child health and co-leads the Maternal Infant and Family health research network in the SONM. She has numerous transdisciplinary collaborators nationally and internationally including psychiatrists; psychologists; sociologists and cultural theorists. Her research addresses the transition to parenthood for women and men, perinatal mental health, infant feeding and health services research for culturally and linguistically diverse populations. Research outputs: in the past 5 years include 4 national competitive grants (S600,000) with a range of industry partners; 123 publications refereed journal articles and she has just co-edited "psychosocial Resilience and Risk in the Perinatal Period". In this time she has supervised 15 HDR to completion and in 2016 received the Vice Chancellor's award for HDR supervision and training. Virginia's research has been translated to practice through the development of health policy, models of care, teaching resources for consumers and health professionals.

Dr Emma Kearney works both as a Cultural Studies Lecturer at Southern Cross University and as a Senior Research Officer on a number of projects at Western Sydney University, predominantly for the Institute for Culture and Society. Her PhD in the theory and philosophy of history focused on how ideas of justice are incorporated into historical study and processes, along with the contemporary impact of historical representations on public discourses. Her post doctoral work has included oral history and archival work exploring discourses of mental health in former mental asylums. She is presently involved in a network of interdisciplinary researchers who share a focus on the history of 'maternal insanity' and the potential impact of those socio-cultural narratives on present day mental health stigmas for mothers.

Contributing authors and research team MEMBERS

Dr Stacy Blythe is a senior lecturer and Director of Engagement & International in the School of Nursing and Midwifery at the Western Sydney University. Stacy has published more than 15 papers and has given papers at over 25 conferences and seminars with many of these being invited keynote addresses. Stacy has received over 14 awards and scholarships, including the Dean's Medal for Academic Excellence and the University Medal for Outstanding Scholarship, Stacy has a growing profile in the area of foster care. She provides training on both a national and international stage for foster carers who care for infants and children with a history of substance exposure. As an authorised Foster Carer, Stacy also has first-hand experience caring for infants and children with a history of substance exposure. Stacy is a member of the Australian Council of Parents. Families and Carers. Stacv has experience with qualitative methodologies and systematic reviews. She teaches in the undergraduate research methodologies unit and provides research training and mentoring to Registered Nurses and Clinical Nurse Consultants in the local health district. Research interests include: infant mental health substance exposed infants, foster care, foster carers, the foster care family. Stacy competed her PhD in 2013 and commenced supervising higher degree students.

Dr Elaine Burns is a Senior Lecturer in Midwifery at Western Sydney University and an executive member of the Australian College of Midwives (NSW Branch). She completed her PhD in 2011 where she explored the language and practices used by health professionals during the early establishment of breastfeeding. Elaine has 20 peer reviewed publications, book chapter and has written for the Conversation and other online publications. She has presented at more than 30 conferences (many as invited speaker) and has attracted research grant funding (as chief and co-investigator) totaling \$52,000. Elaine currently supervises 6 HDR students in related work and has established research partnerships with industry and interdisciplinary colleagues. Her current area of research focuses on women's experience of post birth care, breastfeeding, and migrant and refugee women's experiences of maternity care.

Professor Hannah Dahlen is a Professor of Midwifery and Higher Degree Research Director in the SONM. She has had national and international success with grants (three NHMRC, one ARC, two EU COST). In the past 5 years Hannah has published 128 papers and commentaries and has presented at over 100 conferences and seminars with half of these being invited keynote addresses. Hannah is one of the top ranking Western Sydney authors for The Conversation. Hannah has strong international collaborations. She is co-founder of the international research collaboration EPIIC (Epigenetic Impact of Childbirth). She sits on several peak National and State committees. Hannah sits on several state and National Health committees. Area of expertise includes: midwifery, normal birth. birth interventions, perinatal mental health perineal trauma, incontinence, epigenetics, oral health, birth trauma,

Dr Ann Dadich is a Senior Lecturer within the School of Business; she is also a registered psychologist and a full member of the Australian Psychological Society, the Institute for Culture and Society, and the Translational Health Research Institute. Following undergraduate training, Ann acquired considerable research experience in health service management, with a particular focus on knowledge translation - that is, the processes through which knowledge borne from empirical research is transformed into quality consumer care. This is demonstrated by: the research grants she has helped to secure (approximately \$1.5 million); her publishing record, which includes over 130 refereed publications; and the awards she has received.

Dr Rakime Elmir is lecturer and ECR in the School of Nursing and Midwifery. For several years, Rakime has worked in a variety of maternity settings. She completed her PhD in 2012 which focused on women's experiences of severe postpartum haemorrhage and emergency hysterectomy. Following on from her doctoal work, Rakime has led several research projects exploring fathers' experiences of birth trauma, midwives' experiences of obstetric emergencies and women's experiences of eating disorders in the perinatal period. Rakime is well published in high impact Journals and has been

successful attracting competitive internal Western Sydney University grants. She has established cross-disciplinary collaborations with Professor Phillipa Hay, Western Sydney University, School of Medicine Dr Amit Arora, Western Sydney University, School of Health and Science, Dr Jan Ali, Western Sydney University, School of Humanities and Communication Arts

Dr Jann Foster is a senior lecturer in the School of Nursing and Midwifery at Western Sydney University. Jann has substantial clinical experience working in neonatal intensive care units and special care nurseries caring for premature and sick infants. She completed her PhD in 2011 and holds a Masters in Health Science Education and Graduate Diploma of Applied Science (Neonatology). She was awarded a Western Sydney University (WSU) Early Career Researcher Scholarship in 2012 and a WSU Women's Fellowship in 2016. Jann has over 40 peer-reviewed publications in nursing and medical journals and is coauthor on a book chapter. She has led several research projects on parental stress in the special care nursery. She is currently leading 3 projects examining feeding premature and sick infants including its effects on maternal stress in the neonatal intensive care unit and special care nursery settings. Jann was recently a member on an international working group with the World Health Organisation to develop the clinical practice guideline "Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services". She is an Associate Editor for Cochrane, and is the Director of the NSW Centre of Evidence Based Health Care: A Joanna Briggs Institute Centre of Excellence.

Dr Lyn Francis is a lecturer and early career researcher in the SONM. She has qualifications in nursing midwifery and in law. Lyn also holds a conjoint academic position at the University of Newcastle Her doctoral work titled "Women's perceived experiences of leaving or ending domestic violence and social support during that process" was a qualitative, cross-disciplinary (included professionals in health, law and social services) study. She has published 3 papers in the past 3 years and was recently successful in the WSU Vice Chancellor's Gender Equality Fund \$5000; Exploring barriers and facilitators to seeking promotion.

Professor Phillipa Hay is the Foundation Chair of Mental Health in SOM and THRI. In the past 5 years she has received around \$1.5 million in research support from NHMRC. ARC and other bodies. Notably, she was awarded a Science Without Borders Visiting Professorship from the CAPES research foundation in Brazil - total of \$30000 Australian equivalent in research support as well as \$A60000 in travel support for 3 years. She is collaborating with researchers in the SSSP, NICM and SONM as well as with dietitian researchers, and biomedical researchers. In the past 5 years she has had over 80 peer reviewed publications. 5 PhD students completed, 3 DPsych, 2 Honours, 2 BMed Res.

Dr Kate Huppatz is a Senior Lecturer in Sociology in the School of Social Sciences and Psychology at Western Sydney University. She specialises in the sociology of gender in households and workplaces. Her recent research projects include investigations into online and face-to-face prenatal education, the relationship between mothering and social class, and mothers' experiences in a variety of occupational settings including the military, academia and the advertising industry. Her publications include the books: The Good Mother: Contemporary Motherhoods in Australia (2010), Gender Capital at Work: Intersections of Femininity, Masculinity, Class and Occupation (2012), Identity and Belonging (2016), and Gender, Work and Social Theory (forthcoming, 2018). Kate is joint Editor-in-Chief of Journal of Sociology.

Dr Diana Jefferies is a senior lecturer in the School of Nursing and Midwifery at Western Sydney University. She is a mid-career researcher with 25 year career in acute mental health nursing and an academic background in the humanities. She combines her nursing experience with her humanities background to investigate historical and literacy depictions of illness. In the last five years she has published 13 papers in high quality high impact journals and has attracted \$50,000 in funding for her research. Her current work is focusing on postpartum psychosis and will culminate in February with the launch of a performancebased project "The Mockingbird" a collaboration between WSU and Changing Minds, a NZ based Mental Health Advocacy Group. It uses historical examples of women

experiencing psychosis or mania following childbirth to highlight the needs of women who experience postnatal psychosis. The use of arts-based methods such as performance will highlight this under-recognised condition and change conversations around Women's Mental health, thereby attracting increased funding for this research.

Professor Lynn Kemp is Director of the Translational Research and Social Innovation program in SONM. She is recognised as an international leader in the field of early childhood interventions in primary and community health and translational research. Her local, national and international research in early childhood is bringing quality evidence-based early intervention programs to vulnerable families with young children in Australia and world-wide. The Maternal Early Childhood Sustained Home-visiting (MECSH) program Lynn developed in south-western Sydney has received USA government approval as an effective, evidence-based sustained home visiting intervention. MECSH is now implemented in Australia, the UK, USA and South Korea, currently serving more than 15 000 families world-wide Significantly in South Korea, her work has been instrumental in the establishment of a universal child and family health service system, serving the city's 10million residents, where previously families had no access to such support. Lynn is an academic leader graduating 11 PhD students in the past 5 years, 50 publications and over 2 million in grant funding.

Professor Pranee Liamputtong is Professor of Public Health, School of Science and Health. She has established an outstanding body of research publications in the areas relevant to health and social sciences with a strong focus on childbirth and motherhood across cultures. In the last 5 years, she has published 12 books, 65 journal articles and 62 book chapters. and presented 74 national and international conference papers - several as an invited keynote speaker. Her total citations are 10,489. Her research interests are in the areas of women's health, mothers' and children's health, and reproductive and sexual health of culturally and linguistically diverse (CALD) background communities in Australia, and of women in Asia. She has obtained international research funding in the last 3 years.

Professor Tanya Meade is a Professor of Clinical Psychology and a Director of Clinical and Health Psychology Research Initiative (CaHPRI) in the SSS&P. A clinical and health psychologist, Professor Meade's research interests are in complex physical and mental health co-morbidities (pain and depression in rheumatoid arthritis; pregnancy in the context of a chronic condition, depression and cognitive function in older adults) and various aspects of deliberate self-harm (assessment, function and co-morbidities). Over the last five years Professor Meade has held competitive research grants totaling over \$1.3 million (two ARC Linkages, one BeyondBlue) and has published 32 papers and one book chapter. She contributes to the governance of external organisations such as Arthritis NSW (Research Committee) and the Australian Psychological Society (Past Chair CoHP NSW), is a member of professional organisations including the APS (College of Clinical Psychologists, College of Health Psychologists), and research networks such as OMERACT.

Dr Rebecca O'Reilly has been a Registered Nurse since 1993 and a Registered Midwife since 1998. Rebecca is a senior lecturer in the School of Nursing and Midwifery. As an academic Rebecca has coordinated multi-campus units, was the Academic Course Advisor for the Bachelor of Nursing Advanced course for 3 years, and is currently the Director of Academic Programs, Undergraduate in the School of Nursing and Midwifery, Rebecca graduated with her Master of Clinical Nursing in 2007 and PhD in 2012. The title of the PhD thesis is 'A Family Focused Approach to Promote Child Protection: What Child Protection Workers Do and Experience". Rebecca has a number of publications in women's and family health, domestic violence and primary health care. Rebecca has authored a book chapter in the textbook titled "An Introduction to Community and Primary Health Care in Australia". With a passion for advancing women's and family health, Rebecca has pursued research in this area. In 2006-2008 Rebecca was the principle researcher in a funded research project titled "Women's experiences of recovery from childbirth". In 2015 Rebecca is the principle researcher in a granted research project titled "Opportunistic Screening for Domestic Violence by Community Health Care Providers for Peri-natal Women." Rebecca is also a higher degree research supervisor of Masters Honours and PhD students.

Associtae Professor Alphia Possamai-**Inesedy** is an Associate Professor of Sociology in SS&P. She is the editor in chief of the Journal of Sociology (2013- end of 2016) as well as the co-creator of the Risk Societies Thematic Group within the Australian Sociological Association. She has worked as an Associate Pro-Vice Chancellor of Academia and was responsible for the creation of the Master of Research at WSU (the first centralised degree of the University). Her recent work includes Sociology: A Down-to-Earth Approach (with Henslin and Possamai, 2014, Pearsons); as well as upcoming books on Digital Methods and examining religion through the digital (Sage and deGruyter). Alphia is currently involved in ongoing research that focuses on risk society, religion, and methodologies.

Dr Holly Priddis is a lecturer of midwifery in the School of Nursing and Midwifery and Western Sydney University. As an early career researcher, who completed her PhD in 2015, Holly has been successful in securing an Early Career Researcher grant to the total of \$5000 for work exploring the early parenting period for women who sustained birth related trauma. Holly has collaborated with colleagues from midwifery, nursing and allied health on large projects which have focused on supporting women who experience birth related trauma, maternal wellbeing and the support of midwifery and nursing students. Holly has published widely in the field of midwifery with 15 publications including her PhD findings which was on the experiences of women following third and fourth degree perineal trauma. Holly is an invited conference speaker and facilitates workshops on perineal trauma and supporting women with birth related trauma in the postnatal period and in any subsequent birth.

Dr Kim Psaila is a Registered Nurse and Midwife with over twenty five years' experience in neonatal nursing care. Kim has substantial experience in nurse education having worked predominantly in nurse/clinical education roles within surgical and perinatal Neonatal Intensive Care and Newborn Care

nurseries. Dr Psaila has contributed to and led several neonatal Cochrane protocols and systematic reviews on behalf of the Neonatal Cochrane group. Specific topics include; non-nutritive sucking for gastroesophageal reflux; continuous versus intermittent tube feeding, and pacifiers for sudden infant death syndrome. In her doctoral research she explored the continuum or care in contemporary maternity and CFH services in Australia. The study examined how continuity could be achieved during the transition of care (ToC) from maternity to CFH services. Her research interests surround the parentinfant relationship, implementation of family centred, individualised, developmentally supportive care in the NICU, collaboration and transition of care (TOC), particularly in relation to supporting families through effective pathways and models of care. Dr Psaila has a strong commitment to facilitating the professional growth and clinical development of all nurses and midwives, particularly in the area of supporting families.

Associate Professor Athena Sheehan is

Director of Academic Program (Midwifery) in the SONM. She has made major original and innovative contributions to the field of infant feeding and maternal health and her research work in this area, has been recognised both nationally and internationally. Together with Professor Schmied and Dr Burns, she is working on an innovative study to create 'Mother infant Caring Communities'. Athena has published 15 papers in the past 5 years. She has been a co-investigator on two ARC linkage studies and has supervised 6 HDR students who have completed in that period. Her current research work also involves transdisciplinary collaboration with experts in the field of Linguistics.

Dr Alison Short is a Senior Lecturer and Academic Course Advisor for the Master of Music Therapy at WSU, one of only two courses in Australia. As an internationally qualified professional music therapist, she has worked with many populations including psychiatric care, palliative care, aged care, and private practice. Alison brings research knowledge from 10 years of working as a health services researcher (2004-2014). She has over 60 publications, with over 27 peer reviewed journal articles, invited book

chapters (4 in the last 5 years) and invited journal guest editing (Music and Medicine, 2016). Alison's serve as an appointed member of the SWSLHD Arts and Health Reference Group, had formal affiliations with the MARCS Institute, and fulfils visiting appointments with the Australian Institute of Health Innovation (Macquarie University) and the UNSW Medicine. She has just secured funding for a doctoral scholarship with KidsXpress.

Associate Professor Virginia Stulz (Skinner)

is currently working in a conjoint position between Nepean Hospital and Western Sydney University in the SONM. From 2015 - 2017 she has worked as the second investigator on a national research project of evaluating organizational cultural competence in maternity care for Aboriginal & Torres Strait Islander women, commissioned by the Australian Health Ministers Advisory Council. In collaboration with other researchers. she has published 11 peer-reviewed journal articles over the past five years in areas of complementary therapies, responses to early life stress, nutrient-gene interactions and risk of bowel cancer and factors affecting birth practices.

Professor Caroline Smith is Professor Clinical Research at NICM, School of science and Health, and Research Theme Champion health and Wellbeing. Caroline has also been a CI on 36 research grants totalling \$3.21 million. Her research focusses on the evaluation of complementary therapies and medicines, and has expertise in conducting randomised controlled trials, and collaborates with colleagues in THRI and the School of Nursing and Midwifery to bring a mixed methodology approach to understanding women's experiences and an evaluation of the interventions. .She has an interest in women's health across the life span and her research has focussed on menstrual pain, infertility, pregnancy and women's cancers. She has published over 125 peer reviewed articles published in high impact journals including the Lancet, Cochrane Systematic reviews, Fertility and Sterility and Obstetrics and Gynaecology. She has over 3590 citations, and a H index of 29

Dr Christine Taylor is a Senior Lecturer and Director of Academic Workforce at the Parramatta campus of the School of Nursing and Midwifery, Westerns Sydney University. Christine is a registered nurse who is an experienced clinician and researcher. The main focus of practice and research is child and family health, and Christine has investigated parent-child relationships, coping and anxiety, as well as breastfeeding guidelines implementation and service needs for young parents. Currently Christine is working with the Cerebral Palsy Alliance regarding parent's experiences around feeding.

Associate Professor Amanda Third is

Principal Research Fellow in Digital Social and Cultural Research in the Institute for Culture and Society. Her research focuses on the socio-cultural dimensions of young people's technology use, with particular emphases on children's rights in the digital age, the intergenerational dynamics shaping technology practice, and vulnerable young people's technological engagements. She has conducted several large externally funded projects with industry organisations (Google Australia, Google UK, Starlight Children's Foundation, Telstra Foundation, Foundation for Young Australians) focusing on young people's everyday use of online and networked technologies and the potential for new technologies to support young people's wellbeing. In 2010, Associate Professor Third was appointed to lead Research Program 2: 'Connected and Creative', of the Young and Well Cooperative Research Centre. The research program Associate Professor Third leads investigates how to better connect vulnerable young people with their communities by enhancing and leveraging their technology practices and their creative engagements. She is also Chief Investigator on an Australian Research Council Industry Linkage project entitled 'Young People, Technology and Wellbeing Research Facility' that examines cross-sector knowledge brokering practices. She is a founding member of the Australian-based Technology and Wellbeing Cross-Sector Roundtable; a member of the international Digitally Connected Network: and an Expert Advisor to Global Kids Online, an initiative of UNICEF and the London School of Economics.

Dr Suza Trajkovski is a Lecturer and ECR in the School of Nursing and Midwifery at Western Sydney University. She has over 20 years experience in clinical practice, management, education and research. Her doctoral work used an appreciative inquiry approach to explore family centred care in the neonatal intensive care unit. Her scholarship and research focus is neonatal nursing, family centred care, parent/nurse experiences. building collaborations and partnerships with parents and multidisciplinary health professionals. Suza's post doctoral research is exploring migrant and refugee families experiencing neonatal services and health professional experiences caring for migrant and refugee families in the neonatal unit. Suza is well published in high impact journals, and her work has guided policy change and she regularly presents at national and international conferences.

