

SOCIAL SUPPORT FOR MISCARRIAGE ONLINE

**Support Sought and Received Online for Miscarriage: Content Analysis of a Facebook
Support Group**

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Abstract

Miscarriage is the loss of a baby prior to 20 weeks' gestation and is the outcome of one in four confirmed pregnancies. It can be a source of significant psychological distress. Women who miscarry frequently report inadequate support from family and health professionals, turning to online support groups to meet their needs. However, there is limited knowledge about the categories of support that women who experience miscarriage seek and receive online. The present study employed content analysis to examine 270 opening posts and 3489 responding comments within an 'open' Facebook support group for miscarriage. Posts and comments were coded into five categories of social support in relation to Cutrona and Suhr's (1992) framework. Consistent with the literature on health-related online support groups, Informational Support was most commonly sought. In response to posts seeking support, Emotional Support was predominantly offered, followed by Informational Support and Esteem Support. Network Support and Tangible Assistance were least commonly offered. When seeking one support category, women usually received what they were seeking. The present study provides valuable insight into the benefits of online support groups as a solution to the sense of isolation commonly reported amongst those who have miscarried.

Declaration

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

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Finally, this thesis is dedicated to my godbrother Will, who the world lost so tragically this September.

Chapter 1: Introduction

1.1 Miscarriage Definitions and Prevalence

Definitions relating to pregnancy loss can vary worldwide. In South Australia, the term miscarriage refers to the loss of pregnancy in the first 20 weeks of gestation (SA Maternal & Neonatal Clinical Network, 2014). Additionally, a baby born with no signs of life weighing less than 400 grams is considered a miscarriage if pregnancy gestation is unknown (SA Maternal & Neonatal Clinical Network, 2014). In Australia, miscarriage occurs relatively frequently, and is the outcome of 10-20% of confirmed pregnancies. (SA Maternal & Neonatal Clinical Network, 2014). In the United States of America (USA), the location of the Facebook support group examined in the current research, miscarriage is also defined as the natural termination of a baby prior to 20 weeks' gestation (American Pregnancy Association, 2019). Similarly, 10-25% of all clinically recognised pregnancies in the USA will end in miscarriage (American Pregnancy Association, 2019). As high-income countries with access to medical advancements, high-quality education and healthcare, both Australia and the USA have lower rates of preventable pregnancy loss than some other parts of the world. However, there is an extent to which miscarriages cannot be prevented.

Despite the relative frequency at which miscarriage occurs, it is difficult to ascertain an accurate prevalence rate. Many women miscarry early in gestation without having realised that they are pregnant, as the foetus can be easily mistaken for a late or heavy period (Collins, Due, & Riggs, 2014; Frost & Condon, 1996). Additionally, not all women report their miscarriage to healthcare services. The cause of a miscarriage often cannot be identified. However, certain risk factors can increase the likelihood, such as low pre-pregnancy body mass, obesity, higher maternal age, regular or high alcohol consumption or previous miscarriage (Maconochie, Doyle, Prior & Simmons, 2007). Women who bear none of these risk factors, also still experience miscarriage relatively frequently, however.

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Miscarriage can be distinguished from other forms of pregnancy loss such as stillbirth, which is defined by the World Health Organisation (WHO) as a pregnancy loss occurring at or after 28 weeks' gestation, with a birth weight of more than 400 grams (2019). Other organisations have defined stillbirth as a pregnancy loss after 20 weeks' gestation (Australian Institute of Health and Welfare, 2014). Stillbirth has been researched more extensively than miscarriage, due to the later gestational stage at which the child is lost. In Australia, stillbirth occurs in approximately 7.4 per 1000 births (Centre for Research Excellence in Stillbirth, 2016). It occurs more frequently in regional and remote communities than in inner-metropolitan areas (Parliament of Australia, 2018). In the USA, stillbirth is defined as intrauterine death and subsequent delivery of a developing infant that occurs after 20 weeks' gestation (American Pregnancy Association, 2019). It occurs in 6.25 per 1000 births (American Pregnancy Association, 2019). In Australia, similar to other high-income countries, the risk factors for stillbirth have been identified as obesity, advanced maternal age, smoking, first pregnancy, diabetes and hypertension (Parliament of Australia, 2018). However, around 25% of stillbirths remain unexplained (Centre for Research Excellence in Stillbirth, 2016).

As noted above, definitions of pregnancy loss, including miscarriage, can vary in the literature. For this study, miscarriage will refer to the natural termination of pregnancy in the first 20 weeks, as outlined by the South Australian Health Clinical Guide (SA Maternal & Neonatal Clinical Network, 2014).

1.2 Psychological Consequences of Miscarriage

Over the years, many researchers have examined the psychological outcomes of miscarriage. However, much of what is known is dated, as there has been a shift away from examining miscarriage alone to instead exploring pregnancy loss more broadly including stillbirth. There has also been a shift in focus towards grief and support more specifically.

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While the research investigating the psychological consequences of miscarriage specifically was conducted some time ago it still offers valuable insights into the psychological outcomes of this loss for women.

Miscarriage can result in considerable psychological distress for many women. The experience of miscarriage can be compared to the grief and sadness associated with losing a family member or loved one regardless of their age (Lee, 2012; McCreight, 2008). Women who have miscarried report feelings of grief, isolation, distress, guilt and anger, similar to other types of loss (Bardos, Friedenthal & Williams, 2013) Unlike other experiences of loss, women who miscarry typically are not supported to undertake any established rituals dedicated to facilitating mourning and do not usually receive a publicly acknowledged burial for their child (Brier, 2008). The mother cannot create an identity for her lost baby by naming, holding or photographing their child, as is usually facilitated for losses later in pregnancy. The lack of a physical body to mourn is central to the psychological impact of miscarriage (Frost & Condon, 1996).

For many women, feelings of loss can extend beyond the loss of life itself, to the loss of motherhood or the loss of a relationship with the expected child (Brier, 2008; Collins et al., 2014, Séjourné, Callahan & Chabrol, 2010). High levels of guilt following miscarriage, the loss of part of the self and a significant impact upon personal identity have also been noted following miscarriage (Frost & Condon, 1996). In a 2013 study that examined public perceptions of miscarriage, Bardos, Friedenthal and Williams (2013) found that of those who had miscarried, 47% felt guilty, 41% felt that they had done something wrong, 41% felt alone, and 28% felt ashamed. Of their participants 37% also felt they had lost a child. These experiences are complex and not commonly understood by wider society or those who have not experienced miscarriage. An essay by Meyer (2016) explores how common, well-meaning expressions of support such as “it just wasn’t your time”, “you’re so much better

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off’, or “good thing it happened now before it was a real baby”, actually serve to marginalise and invalidate experiences of pregnancy loss. Within the community, a lack of education, understanding or open discussion about miscarriage can heighten the sense of grief and isolation experienced by bereaved parents.

In some instances, the psychological consequences of miscarriage can extend beyond symptoms of grief and sadness to diagnosable psychopathological conditions such as anxiety, depression or posttraumatic stress disorder (PTSD). Friedman and Gath (1989) were the first to report rates of depressive disorder amongst women who had miscarried; 48% of their participants were diagnosed with depressive disorder four weeks post-miscarriage. Similarly, Garel, Blondel and Lelong (1992) reported that 51% of their participants were diagnosed with major depression three months after miscarriage.

Additionally, compared to women in the general population, one of three anxiety disorders (obsessive-compulsive disorder, panic disorder and phobic disorder) is experienced by 15.7% women who have miscarried (Geller, Klier & Neugebauer, 2001). It has also been suggested that women may experience PTSD, although prevalence rates have varied. Engelhard, van den Hout and Arntz (2001) reported that PTSD is experienced by 25% of women one month after miscarrying and 7% of women four months after the pregnancy loss. In contrast, Bowles, James, Solursh et al. (2000) found that only 1% of women who had miscarried satisfied criteria for PTSD one-month post-miscarriage.

Psychological outcomes have been shown to endure for some time. Conway and Russell (2000) found that the majority of women and partners still experienced feelings of loss up to four months after miscarriage. Lok and Neugebauer (2007) reported psychological symptoms that persist for six months to one year following miscarriage. Finally, Brier (2008) found that grief is intense, but the intensity reduces after six months.

While psychological difficulties can arise and may endure, not all women are predisposed to experiencing psychological morbidity following miscarriage. Researchers have explored risk factors that heightened the likelihood of psychological morbidity following miscarriage. For example, Lok and Neugebauer (2007) found that a history of psychiatric illness, childlessness, lack of social support or poor marital adjustment, prior pregnancy loss, and ambivalence toward the foetus are key factors in predicting poor psychological outcomes for women who have miscarried.

Even if diagnostic criteria are not met, symptoms of anxiety and depression, as well as grief, guilt and sadness, are frequent following miscarriage. Symptoms may subside over time, but the loss of a child to miscarriage is not usually forgotten.

1.3 Support Needs

Women who have been impacted by miscarriage have been found to be in significant need of professional and social support (Bellhouse, Temple-Smith, & Bilardi, 2018; Bellhouse, Temple-Smith, Watson & Bilardi, 2018; Conway, 1995; Rowlands & Lee, 2010; Séjourné et al., 2010). The stigma that surrounds seeking support following a miscarriage often prevents access to the desired, and needed, level of support. While family members may be willing to acknowledge the mother's grief, this support is not always enduring (Rajan & Oakley, 1993). Women are often made to feel as if there is an expiry date on the period for which they are allowed to grieve (Leppert & Pahlka, 1984). It has been concluded that miscarriage is not socially recognised in the same way as the death of a child or family member lost later in life (Collins et al., 2014) despite the fact that the gestation length has been shown to have no association with the experience of psychological distress if a pregnancy is lost (Bellhouse, Temple-Smith, Watson & Bilardi, 2018).

According to the literature, women experience a lack of support not only within their community but amongst the health professionals with whom they interact. Women commonly

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describe a lack of emotional support and sensitivity within healthcare settings (Bellhouse Temple-Smith, Watson et al., 2018; Conway, 1995; Cuisinier et al., 1993; Evans, Lloyd, Considine, & Hancock 2002). What has been identified as beneficial in the grieving process is receiving validation from others that a child has been lost (Corbet-Owen & Kruger, 2001; Rowlands & Lee, 2010; Swanson, 1999). Additionally, many women have reported that speaking to other women who have miscarried was the most helpful support that they received (Rajan & Oakley 1993; Rowlands & Lee, 2010). It can be surmised from the literature that women who experience miscarriage need support in the form of social recognition, the ability to talk to those who have shared a similar experience, and a sensitive and understanding approach from health professionals.

1.4 Social Media and Online Support Groups

With the advent of social media, online communities are becoming a part of everyday life for many people. Online communities are described as “virtual social space(s) where people come together to get and give information or support, to learn or to find company” (Preece, 2001, p.349). Social networking websites such as Facebook are accessed by millions of people worldwide. As of 2015, 65% of adults were using social media sites inclusive of Facebook, Twitter and LinkedIn (Pew Internet Research Centre, 2015). Social networking sites such as Facebook offer features that facilitate the creation of online support groups. More than 36 million people are members of an online support group in the USA alone (Pew Internet Research Centre, 2015).

Such online support groups are becoming increasingly popular as a means for people with health issues to access support and share mutual experiences (Farmer, Bruckner Holt, Cook, & Hearing, 2009). Benefits of these support groups include the ability to overcome geographical limitations, the sense of anonymity for those concerned about stigma, and the availability of support at any hour of the day (Coulson, Buchanan, & Aubeeluck, 2007).

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Additionally, online support groups for health concerns allow individuals to gain access to insights, new perspectives and information that diverges from what is available to them in their own community. Online support groups have been described as a unique source of reassurance, in addition to emotional and informational support for those coping with health concerns (Namkoong et al., 2012).

In the context of miscarriage, women who miscarry may experience disenfranchised grief; the emotion experienced when individuals suffer a loss that is not publically acknowledged, recognised or mourned (Doka, 2009). The circumstances of death limit the sympathy that society is willing to extend to those grieving a miscarriage. For these reasons, there is a stigma attached to women sharing their experience and seeking help. Like other stigmatised groups, those impacted by miscarriage can benefit from an online support community (Doka, 2009; Gold, Boggs, Mugisha, & Palladino, 2012).

Participation in an online support group can alleviate the sense of isolation commonly reported amongst women who have experienced miscarriage (Bellhouse et al., 2018; Gold et al., 2012). Pang et al. (2018) found that women seek psychological and emotional support through reading about others' experiences and through sharing their stories online. The body of literature concerning online support groups is growing; however, few studies specifically focus on the benefits they might have for those impacted by miscarriage. Identifying the types of emotional support that are effective in assisting women or their partners after a miscarriage has been outlined as a top research priority (Prior et al., 2017). Additionally, Van der Houwen et al. (2010a) found that bereaved support-group participants tended to use online peer support as a replacement for professional and social resources in coping with their loss. Therefore, it is essential to understand the contents of support being sought and provided in this context specific to miscarriage.

1.5 Social Support Framework

Numerous studies exploring online support groups in a health context have employed Cutrona and Suhr's (1992) Social Support Behaviour Code in the analysis of their data (Atwood, Friedman, Meisner, & Cassin, 2018; Braithwaite, Waldron, & Finn, 1999; Coulson et al., 2007; Couraris & Liu, 2009; Mohd Roffeei, Abdullah, & Basar, 2015). In this framework, five categories of social support, Informational Support, Emotional Support, Esteem Support, Network Support and Tangible Assistance, and 27 sub-categories are proposed. Thus, the framework, described in more detail in the Method, enables researchers to comprehensively explore experiences of support. This framework has been used successfully in the context of Huntington's disease (Coulson et al., 2007), HIV/AIDS (Couraris & Liu, 2009), Autism Spectrum Disorder (Mohd Roffeei et al., 2015), disability (Braithwaite et al., 1999) and bariatric surgery (Atwood et al., 2018). In each of these populations, Informational Support was identified as the most common category of support being offered within online support groups. Emotional Support was the second most frequent support category offered. It is anticipated that these findings are likely to be replicated in the present study.

1.6 Current Study

The broad aim of the present study is to explore how those impacted by miscarriage use an online support group to seek and gain support. While many researchers now often examine pregnancy loss more broadly, this study will focus on miscarriage alone. There are profound and unique challenges faced by those impacted by miscarriage, such as the lack of a body to mourn, and the increased stigma surrounding support seeking. This study also aims to determine the specific categories of social support most commonly sought and provided within a Facebook support group for miscarriage. It will also examine the relationship

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between support sought and received. That is, whether there is congruence or divergence between the specific support category that posters seek and receive.

Content analysis applying Cutrona and Suhr's (1992) framework, will be undertaken to ascertain the frequency of each support category (Informational Support, Emotional Support, Esteem Support, Network Support and Tangible Assistance). Based on previous studies which have employed this framework to examine Facebook support groups, it is predicted that Informational Support and Emotional Support will be the most frequently sought and offered support categories within the chosen online group (Atwood et al., 2018; Braithwaite et al., 1999; Coulson et al., 2007; Couraris & Liu, 2009; Mohd Roffeei et al., 2015). In the context of miscarriage, no other study has examined the relationship between support sought and received employing content analysis in an online support group. Therefore, it is difficult to make predictions about the expected findings. However, based upon the large amount of informational and emotional support that has been noted in past studies of online support groups, it can be expected that posters may receive high quantities of these two support categories relative to their needs. The findings of the current study may enable greater understanding regarding the categories of support women impacted by miscarriage most desire and may lead to ideas about how healthcare providers and services can be oriented to better meet those needs.

Chapter 2: Method

2.1 Participants and Online Support Group Selection

Participants for this study were Facebook members who made opening posts and/or commented on posts within the chosen Facebook page between July and December 2018. The name of this page has been omitted to protect the identity and privacy of posters. The page, managed by three administrators, originates in the USA. At the time this thesis was written, the page had 115,576 likes and 113,750 followers. This page was selected above similar pages for several reasons. The page appeared to have a high level of engagement with a large number of likes and follows, and a high frequency of opening posts and comments. A high level of activity has been acknowledged by Pector (2012) as a characteristic of a well-functioning, high-quality online group. The information being shared within the group was relevant to miscarriage and appeared sincere. The administrators took measures to protect poster anonymity, as well as to firmly outline the conditions of engagement in order to avoid misuse of information. They specified that the page did not intend to offer medical advice or treatment and emphasised that the page is intended to function as a source of social support, the topic of interest for the current research. Additionally, being an 'open' page, it is publicly available to read, post or comment, avoiding the ethical constraints of a 'closed' group.

Due to the anonymous nature of this research, it has not been possible to obtain specific demographic data about participants. However, it can be inferred that the majority of participants, if not all, are women. The chosen Facebook page facilitates online support for those who have experienced miscarriage, suggesting that participants were predominantly female. Although the page originated in the USA, due to the nature of social media, participants can post within the page from anywhere in the world. Subsequently, it was deduced that the participants within this group are likely to be a representative sample of women who have experienced miscarriage. Previous research examining online support

groups for bereavement has also shown that the majority of users are North American or European, women, young, and experiencing greater degrees of grief and emotional loneliness than non-users (Van der Houwen, 2010a). Additionally, Gold et al. (2012) discovered that out of over a thousand users of eighteen online support forums for perinatal loss, the majority of users were white, well-educated women who engaged with the sites frequently. This research can also inform understanding about the likely types of participants in the current research.

Opening posts and comments from July to December 2018 were collected from the page, deidentified and placed within an Excel document for analysis. This period was selected as it was anticipated that engagement from group users (such as 'likes' and comments) would have ceased. This resulted in 270 opening posts and 3,489 associated responding comments being obtained for analysis.

2.2 Ethical Considerations

Research involving social media posts raises ethical considerations. At the time of posting on social media, the user is unaware and therefore, cannot consent to their posts being used for research purposes (British Psychological Society, 2017). However, it has been noted in the literature that personal discourse on the internet is public and not subject to human participant constraints (Sudweeks & Rafaeli, 1996). This study examined data freely available in the public domain. The study analysed opening posts and comments made within an 'open' as opposed to 'closed' Facebook group. As the comments included in the chosen Facebook group were shared 'publicly', they were considered to be public information as outlined by Facebook in their user guidelines. Therefore, while ethics approval may not have been deemed essential, as participants could potentially be reidentified by clicking on their profile, the researcher considered it appropriate however to gain ethics approval from the University of Adelaide School of Psychology Ethics Sub-Committee (Approval number 19/12). All data utilised in this study has been deidentified to ensure the anonymity of

participants and prevent misuse of data. As mentioned above, the specific Facebook group examined has also remained unnamed to protect the identity and privacy of online posters.

2.3 Data Analysis

Content analysis was employed to investigate the categories of support sought and received by members of the Facebook online support group. Cutrona and Suhr's (1992) Social Support Behaviour Code was used in the coding of the data. This model was selected for several reasons. First, it has previously been used successfully in the analysis of health-related social media posts and comments. Second, it has been shown to incorporate the social support categories most frequently encountered within the social support literature. Finally, it is a simpler, more intuitive version of other existing social support frameworks of this nature.

Cutrona and Suhr (1992) proposed five support categories of social support: Informational Support (messages that convey knowledge or facts to reduce uncertainty), Emotional Support (messages that express empathy or support the emotional expressions of the recipient), Esteem Support (messages that help improve the recipient's self-concept, confidence, and rights as a person), Network Support (offers to broaden the recipient's social network by connecting him or her to other individuals with similar interests or situations) and Tangible Assistance (the provision of specific material aid or service to assist the recipient). Various subcategories, which are detailed below in Table 1, exist within each category. The subcategory 'listening' was excluded from the present study as it did not apply to the online environment being examined. Additionally, the subcategory 'Physical Affection' was adapted to 'Virtual Affection' to also reflect the online nature of the present study. Similar adaptations have been successful in past research that employed Cutrona and Suhr's (1992) Social Support Behaviour code in the analysis of online support groups (Coulson, 2007; Mohd Roffeei et al., 2015). Finally, the subcategory 'Other' was also added within each of the

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broader support categories to enable coding of any posts that did not fit appropriately into the pre-existing subcategories.

Three analyses were undertaken. First, content analysis using deductive reasoning was undertaken to determine the frequency of each support category sought within the chosen Facebook page. A total of 270 opening posts were coded to identify the categories of support that posters were seeking from the group. Opening posts could be coded to multiple overarching support categories. Based on the nature of the data, they were not coded into subcategories as the specific support subcategory desired was often not clearly evident.

Second, a total of 3,489 responding comments within the chosen online support group underwent content analysis using deductive reasoning to gather frequencies and qualitative data in the form of responding comments that illustrate support subcategories. Each responding comment to the 270 opening posts examined was coded into various support categories as well as their respective subcategories. Each comment was coded into one or more of the five categories and subcategories, employing a dichotomous rating scale of 1 = support category or subcategory present, and 0 = support category or subcategory absent. Since many comments included multiple support categories, each comment was able to be coded to as many support categories as were present. For future reference an 'audit trail' was employed in the coding procedure to note how ambiguous or unusual comments were coded. An audit trail, first conceptualised by Halpern, (1983), is an essential component in conducting rigorous qualitative research. It allows the researcher to record and organise information throughout the research process, strengthening the credibility and reliability of observations (Lincoln & Guba, 1985). This process was instrumental in ensuring consistency in the coding of comments in the present study.

Third, analysis was undertaken to assess the relationship between the categories of support sought and received. From the 270 opening posts, 141 opening posts seeking only

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one support category and 83 posts seeking two support categories, were identified. Posts that did not explicitly seek support or sought more than two support categories were excluded from this analysis. The aim was to examine whether women received the specific support category they sought and whether this still occurred when two support categories were sought. Again, support subcategories were not included in this analysis as it was often difficult to determine the specific subcategory of support that the poster was seeking. Frequencies of support category present within each category of support sought were calculated.

Finally, when conducting qualitative research, it is important to note the researcher's subjective views, biases and preconceptions, and the impact that this can have upon data analysis. Self-reflexivity is the process of engaging in honest and transparent self-awareness that leads to more sincere research (Braun & Clarke, 2013; Tracy, 2010). The researcher is a young female who has no personal experience with miscarriage or pregnancy loss and does not have any children of her own. This may have influenced how opening posts and responding comments were coded into their respective support categories and subcategories. Despite a lack of personal experience, the researcher engaged in extensive reading concerning miscarriage and support needs to inform her ability to interpret the posts and comments in a way that the poster hoped to be understood. Additionally, having not experienced a miscarriage herself, the researcher was able to approach the research with a detached level of objectivity. Finally, in consideration of the reliability of the data, 10% of the findings were co-coded by the researcher and the supervisor. A high level of inter-rater agreement was achieved (100% for opening posts and 95.51% for responding comments).

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Table 1

Definitions of Social Support Behaviour Codes

Support Category	Sub-category	Definition
Informational Support	Suggestion/Advice	Offers ideas and suggests actions
	Referral	Refers the recipient to some other source of help
	Situation appraisal	Reassesses or redefines the situation
	Teaching	Provides detailed information, facts, or news about the situation or about skills needed to deal with the situation
	Other	
Tangible Assistance	Loan	Offers to lend the recipient something (including money)
	Direct task	Offers to perform a task directly related to the stress
	Indirect task	Offers to take over one or more of the recipient's other responsibilities while the recipient is under stress
	Active participation	Offers to join the recipient in action that reduces the stress
	Willingness Other	Expresses willingness to help
Esteem Support	Compliment	Says positive things about the recipient or emphasises the recipient's abilities
	Validation	Expresses agreement with the recipient's perspective on the situation

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	Relief of blame	Tries to alleviate the recipient's feelings of guilt about the situation
Network Support	Other	
	Access	Offers to provide the recipient with access to new companions
	Presence Companions	Offers to spend time with the person, to be there Reminds the person of availability of companions, of others who are similar in interests or experience
Emotional Support	Other	
	Relationship	Stresses the importance of closeness and love in relationship with the recipient
	Virtual affection	Offers virtual displays of affection
	Confidentiality	Promises to keep the recipient's problem in confidence
	Sympathy	Expresses sorrow or regret for the recipient's situation or distress
	Understanding/empathy	Expresses understanding of the situation or discloses a personal situation that communicates understanding
	Encouragement	Provides the recipient with hope and confidence
	Prayer	Prays with the recipient
	Other	

Note: Cutrona and Suhr (1992). The subcategory 'Listening' has been removed from the framework for the purposes of this study, as it is not relevant to an online setting. Additionally, the subcategory 'Physical Affection' has been adapted to 'Virtual Affection' to reflect the online nature of this study. Finally, the subcategory 'Other' has been included within each overarching support category to encompass comments that do not fit within the pre-existing categories.

Chapter 3: Results

3.1 Support Categories Sought

Of the 270 opening posts, 189 opening posts directly seeking support were identified. The remaining posts consisted of general housekeeping messages from the administrators, in addition to messages where posters provided encouragement to other posters in the form of poems, photos, images or inspirational quotes. One opening post (and its associated comments) made by a well-known singer was excluded from the analysis. This post was publicised across multiple locations on Facebook, not just within the chosen Facebook page. Subsequently, this post had more responding comments than the entire dataset combined. It was impossible to determine which comments were made within the online support group by posters, and which were made by members of the general public within other contexts. Therefore, this post was excluded from the analysis.

The support seeking posts were coded into each of the five categories of social support to examine support sought and received by members of the chosen Facebook online support group. Posts were often made by the group administrators, after receiving a private message from a poster detailing the message they would like to share. This format was usually followed to ensure confidentiality if it was desired.

Table 2 shows the frequency counts for each support category. Multiple support categories could be present within each opening post. Informational Support was the support category most commonly sought, present in 67.7% of posts which was followed by Emotional Support, present in 50.3% of the analysed posts. Esteem Support was sought in 7.4% of cases, followed by Tangible Assistance (1.1%) and Network Support (1.1%).

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Table 2

Frequencies and Percentages for Each Support Category Sought in Opening Posts (n=189)

Support Category	Count	% of Total
Informational Support	128	67.7%
Tangible Assistance	2	1.1%
Esteem Support	14	7.4%
Network Support	2	1.1%
Emotional Support	95	50.3%

Note: Counts do not add up to 189 and percentage values do not add up to 100% as more than one support category was often present within each opening post.

The following section provides examples of opening posts, coded into each of the support categories, where posters were seeking support from the online support group. All extracts were transcribed verbatim and are presented as posted by their authors, including with any spelling and/or grammatical errors.

3.1.1 Informational Support

Informational Support seeking was the most predominant support category sought within the chosen Facebook group, present in 67.7% of posts analysed. It was characterised by posts that sought information or guidance from other posters for a range of concerns. Many posts sought Informational Support in the form of a referral, asking to be guided towards another source of information or support:

“Asking for a friend. Does anyone know of any resources that help pay for burial or cremation in Phoenix Arizona?”

Other posts sought Informational Support relating to medical information or advice:

“My last period was in Aug and I still haven't started yet. I took 3 pregnancy tests and all were negative. My periods lately have been abnormal but I have never missed one. Anyone experience this ? Advice would be appreciated!!”

Additionally, posters sought Informational Support in relation to honouring the loss of their child:

“My angel babies 1 year anniversary is tomorrow. I want to do something to remember him/her. What's a good idea to do on short notice?”

3.1.2 Tangible Assistance.

Tangible Assistance was sought infrequently within the chosen Facebook support group. It was present in only 1.1% of posts analysed. It was only directly sought on one occasion without other support seeking categories present. The following posts seeks Tangible Assistance by asking for donations of baby hats for her local Neonatal Intensive Care Unit as a means of honouring her lost child:

“Good morning to all. October is for Infant and Pregnancy Loss Awareness. I would like to honor my baby by making no sew throw blankets and collecting (new) baby hats for the NICU at a hospital near me. I am looking for donations to make it a great honor for the child I lost. Being this page has helped me since my miscarriage, I would like to extend this offer to the other Miscarriage Mama fans here. If you are interested in donating something, please message me so we can figure out the best way to receive the donation and I can add your angels to the list! Thank you all!”

3.1.3 Esteem Support.

Esteem Support was present in 7.4% of opening posts that sought support. Posters that sought Esteem Support frequently sought to relieve their feelings of guilt about grieving their lost child, and the impact that that grief has upon their everyday lives. One poster described her guilt and anger relating to moving on with her life without her expected children:

“Can u please post..

My husband and I have worked hard to buy a house for our family so we don't have to rent anymore. Moving day is tomorrow and I'm feeling sad and alittle angry. This house would have been perfect for the three of us plus our twins that we lost back in March. I am so excited to be able to get our oldest daughters room put together but can't help but think that “guest” room should be a nursery. I feel bad for feeling like this but it's not fair I want my babies with me on earth healthy and in my belly until our October/ November due date.”

Another poster that sought Esteem Support described her guilt relating to grieving her own child's loss at a friend's baby shower. This poster sought validation from other posters that these feelings are valid and normal:

“I had a miscarriage like a month ago and I went to my friends baby shower because I wanted to support her and be there for her. Does it make me a horrible person if it made me sad during it”

3.1.4 Network Support.

Network Support was infrequent within opening posts analysed, present in 1.1% of posts. There was one instance of Network Support that was not sought in conjunction with

another support category. The poster requested access to Network Support in the form of direct and private contact with another poster who was willing to provide support:

“Fan question

Is there anyone willing to chat with me about my loss? I’m needing someone to talk to for support (note fan was advised Admins are available by messaging the inbox)”

3.1.5 Emotional Support.

Emotional support was the second most frequent support category sought, present in 50.3% of posts analysed. Posters that sought Emotional Support often expressed grief and sadness, opening up to the support of other posters who might relate to their experiences:

“Every time I think I’m okay I’m not. I should be holding a new born right now. My relationship is so rocky. My life is terrible. All I want is my child. I’m mentally exhausted (crying emoji)”

Some group members requested specific forms of Emotional Support such as prayer. Many group members requested that other group members pray, either as a tribute on the anniversary of their loss, in the hope that they will conceive again or that a subsequent birth will be successful, or to acknowledge a more recent loss:

“Fans I have a personal prayer request for you. A dear family friend lost their newborn Friday. Please say a prayer for their family. Thanks.”

3.2 Categories of Support Received Through Responding Comments

The 3,489 responding comments analysed in relation to the 270 original posts were also examined to understand the categories of support received by posters, as although some

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opening posts did not directly seek support, group members responded by providing support. Some responding comments that did not provide support to other group members were excluded from the analysis. Typically, these comments consisted of insulting or undermining comments towards other group members. More than one category of social support was often present in a single comment, and this was accounted for in the analysis. Amongst the 3,489 comments, 5,561 accounts of support were identified and coded into the relevant category and subcategory. Table 3 shows the frequency at which each support category and subcategory occurred. Informational Support and Emotional Support proved to be the support categories most frequently offered. Emotional Support occurred most frequently, present in 85.4% of comments analysed. Informational support was present in 62.2% of comments analysed, followed by Esteem Support in 7.7% of comments. Network Support (6.7%) and Tangible Assistance (0.3%) were the least frequently offered support categories within the chosen Facebook support group.

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Table 3

Frequencies and Percentages for Each Support Category and Subcategory Provided in Responding Comments (n = 3,489)

Support Category	Sub-category	Count	% of Total
Informational Support		2171	62.2
	Suggestion/Advice	600	17.2
	Referral	131	3.8
	Situation appraisal	19	0.5
	Teaching	432	12.4
	Other	989	28.3
Tangible Assistance		9	0.3
	Loan	0	0
	Direct task	4	0.1
	Indirect task	0	0
	Active participation	3	0.08
	Willingness	2	0.05
	Other	0	0
Esteem Support		269	7.7
	Compliment	99	2.8
	Validation	102	2.9
	Relief of blame	68	1.9
	Other	0	0
Network Support		234	6.7
	Access	0	0
	Presence	77	2.2
	Companions	38	1.1
	Other	119	3.4
Emotional Support		2978	85.4
	Relationship	0	0
	Virtual affection	50	1.4
	Confidentiality	2	0.05
	Sympathy	383	11
	Understanding/empathy	968	27.7
	Encouragement	382	10.9
	Prayer	300	8.6
	Other	893	25.6

Note: Counts do not add up to 3,489 and percentage values do not add up to 100% as more than one support category was often present within each responding comment.

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The following section describes the coding of the responding comments providing support into the respective support subcategories. All extracts were transcribed verbatim and are presented as posted by their authors, including with any spelling and/or grammatical errors.

3.2.1 Informational Support.

Informational Support was divided into five subcategories; 'Suggestion/Advice', 'Referral', 'Situation Appraisal', 'Teaching' and 'Other'. 'Suggestion/Advice' was present in 17.2% of comments and included messages that gave directive instruction to the recipient or advised a course of action. Members within the chosen group made a range of suggestions aimed at directing the poster towards a specific solution. Some group members provided advice relating to conception:

"Stop "trying" I focused on it for a year and the second I stopped tracking and trying I got pregnant."

Others guided group members with advice for everyday life, for example one group member offered a way to describe a miscarriage to a child:

"I have nephews that age- tell her the baby got sick and couldn't get better"

Some group members provided advice for navigating the emotions associated with miscarriage, with a particular emphasis on self-care:

"Don't fight how you feel. Try and find a way to understand it <3 <3 <3... late night baths always help me xxx"

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‘Referrals’ were present in 3.8% of comments analysed within the group. They consisted of comments that directed group members to some other source of help. Most commonly, comments that provided a referral directed members towards medical doctors and specialists:

"I would definitely seek the help of a fertility dr.. multiple miscarriages and not being able to get pregnant after 6 mos to a yr. It is time. Good luck!"

"Maybe try seeing a therapist? I know for me it helped being able to talk about it freely and not worry about judgment. I went through it 4 times"

There were also several referrals that directed members towards alternative medications. For example,

"Take raspberry leaf supplements"

One group member provided a referral to assist with the practical aspects of miscarriage, guiding another group member towards an organisation that could relieve the financial burden:

"See if the Department of Public Welfare will help with burial costs. Thank GOD the county assistance office (welfare) helped me here in Philly because I wouldn't have had they money to burry her"

‘Situation appraisals’ were relatively infrequent, occurring in 0.5% of comments analysed. They consisted of comments that challenged the poster’s perspective on their situation. One group member questioned the perspective of another in regard to disability, framing it as valuable in teaching life lessons:

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"A baby is a baby, a human is human regardless of disability. So what if your baby has down syndrome? It'll teach your son valuable lessons in the most humble way. Patience, respect, unconditional love and so much more. It's honestly one of the best things that can happen"

Another group member challenged another group member's perspective surrounding their medical understanding and implementation of that knowledge:

"Whoever gave you that info doesn't know what they're talking about. They don't build up and they die after a few days. The vagina is self-cleaning you should never have to use one unless directed by a doctor and most would never tell you to."

Comments that gave support in the form of 'Teaching' provided detailed information to participants based on facts. Teaching was present in 12.4% of comments analysed. In these comments usually, group members offered medical information that was specific and factual:

"They just insert water into your Fallopian tubes and flush them out. Very easy."

"If you went off birth control that can cause abnormal periods as your body adjust hormone levels"

Several comments within the teaching subcategory provided group members with information about the realities of miscarriage and coping with its impact in everyday life:

"Everytime is different"

"I have had 3 miscarriage's and the nerves never go away"

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The final category of Informational Support, 'Other' occurred frequently throughout the dataset. It was present in 28.3% of comments analysed. Upon analysis of this category, two categories of Informational Support emerged that could not be classified into the pre-existing informational subcategories: 'Seeking Clarification' and 'Personal Experience'. 'Seeking Clarification' was characterised by comments that requested further detail or information from the poster in order to be able to provide adequate support. These requests were usually regarding medical information, leading to its classification into the overarching Informational Support category. Frequently group members sought clarification about physical symptoms and medical procedures:

"Have you been tested for the mthfr mutation?"

"What do they give you for the contractions?"

"Are you having any bleeding?"

Secondly, 'Personal Experience' as an emerging subcategory of Informational Support was characterised by comments that provided informational support to the poster based on personal experience. These comments were excluded from the 'Teaching' and 'Suggestion/Advice' subcategories, as the information was not presented as fact and usually did not propose a course of action. Comments that provided informational support based on personal experience were frequent throughout the dataset. These comments frequently pertained to conception and healthy pregnancy:

"My doctor had me on an aspirin regiment for a while too due to blood clot issues"

"I use dollar store tests they are cheap and seem to work great for me."

"I have PCOS and it took me and my husband a little over two years to get pregnant and clomid helped me get pregnant."

3.2.2 Tangible Assistance.

Tangible Assistance was relatively infrequent in the dataset. It comprised of six subcategories: 'Loan', 'Direct Task', 'Indirect Task', 'Active Participation', 'Willingness' and 'Other'. Only 'Direct Task', 'Active Participation' and 'Willingness' were identified amongst the comments analysed. 'Direct Tasks' were present in 0.01% of the total comments analysed. The majority of these comments took the form of group members joining the support seeker in prayer upon request. Typically, the poster would request that group members pray for their child or light a candle on their behalf as a means to alleviate their distress. Only prayers that occurred as a response to a direct request were coded as a 'Direct Task'. Group Members would commonly express their prayers in the form of a 'gif' or 'emoji' of a candle, angel or praying hands.

'Active Participation' was present in 0.08% of comments analysed and included comments that involved group members expressing their desire to join the support seeker in an activity to mutually reduce their distress as seen in the comments below:

"Love this . would love to participate"

"(name removed)...we should do something to remember our angels when we going to get tatted <3"

"(name removed)...MONDAY COME WITH ME AND (name removed"

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‘Willingness’ was present in 0.05% of comments in the dataset and included comments where group members expressed their desire to help in any way that was necessary. For example,

"Please let us know if you need any extra emotional support."

"It may sound weird, but I just thought I could help a lil.. Hope I helped you a lil. I try to help ppl when I think I can."

3.2.3 Esteem Support.

Esteem Support consisted of four subcategories: ‘Compliment’, ‘Validation’, ‘Relief of Blame’ and ‘Other’. No comments were classified as ‘Other’. ‘Compliment’ was present in 2.8% of the comments in the dataset. It came in many forms but typically emphasised strengths and positive attributes within group members as evidenced in the comments below:

"...You are stronger than you think. Positive vibes and prayers coming your way,"

"...You are a fantastic friend for going. Hang in there."

"...I commend you for being a strong supportive friend. During this time."

‘Validation’ was present in 2.9% of comments analysed and included comments where group members agreed with the support seeker’s perspective. These comments frequently validated enduring feelings of grief following miscarriage:

"...miscarriages aren't easy to go through"

"I second this. Grief is a cloud that hangs around for life."

Similarly, 'Relief of Blame' validated the feelings of support seekers, however there was a focus on alleviating their sense of guilt, frequently relating to the length of time that they had been grieving, exceeding what they believe to be socially accepted. 'Relief of Blame' was present in 1.9% of comments and included sentiments such as:

"I think it's still very fresh allow your self time to grieve. Me all grieve different Cut urself some slack"

"It's not wrong to feel that way. I still feel that way 2 years after losing our son."

3.2.4 Network Support.

Network Support comprised of four subcategories: 'Access', 'Presence', 'Companions' and 'Other'. No examples 'Access' were found in the dataset. 'Presence' was identified in 2.2% of comments analysed. It occurred when group members provided direct offers to be there for other group members either in person or in a private online chat:

"I'm here to chat if needed. Just msg me anytime."

"You can pm me, ive had 2 miscarriages.. You're in my thoughts and prayers!!"

'Companions' was present in 1.1% of comments and included instances when group members reminded other group members of the fact that they are not alone, and many people are experiencing the same challenges they are facing. It was very common for group members to identify themselves as 'one in four', the statistic of women who miscarry. Many group members claimed this label as a uniting and identifying factor. For example:

"...Just know that 1 in 4 women miscarry and you are never alone hun. <3 <3 <3"

"...(name removed) your not alone, I am mother of seven angels two sets of twins hugs"

The subcategory 'Other' was present in 3.4% of comments that were analysed. Comments that consisted of a Facebook 'tag' were coded into this subcategory. It was deemed by the researcher that this form of social support linked individuals to services with which they may not have previously engaged. Additionally, individuals who made opening posts could be connected with group members for whom the content was most relevant. The 'tagging' function was viewed as a vital form of Network Support that did not adequately fit into the previous three subcategories. To protect the confidentiality of posters, no examples of 'tagging' are included in this section, as it would allow them to be identified.

3.2.5 Emotional Support.

Emotional Support was the most frequently occurring category of social support present within responding comments. It comprised of eight subcategories: 'Relationship', 'Virtual Affection', 'Confidentiality', 'Sympathy', 'Understanding/Empathy', 'Encouragement', 'Prayer' and 'Other'. There were no accounts of 'Relationship' detected within the dataset. 'Virtual Affection' was present in 1.4% of total comments analysed. Due to the online nature of the present study, comments coded into this subcategory consisted of written representations of physical affection. This subcategory also included 'gifs' and 'emojis' that represented two people engaging in physical contact. Examples of comments coded within this subcategory include:

"Ladies I am deeply sorry for both of your losses. Sending hugs your way"

"...Virtual hugs. I know how hard it is, stay strong"

‘Confidentiality’ was present in 0.05% of comments analysed. It included instances where group members reassured other group members that the information discussed would remain confidential, whether between the two individuals or within the confines of the Facebook support group. Evidence of this can be seen below:

"I'm here if you would ever like to talk. It would not go any further than between us"

"(name removed) ... could I message you for some tips? I'm currently pregnant and I just need to talk. being that this group is super supportive and confidential"

‘Sympathy’ occurred relatively frequently within the dataset, present in 11% of responding comments. There were both written expressions of sympathy as well as ‘gifs’ and ‘emojis’ that helped posters to express their sympathies. For example, images of broken hearts or crying faces were frequently coded into this subcategory. Written expressions of sympathy frequently included comments that expressed great sadness in relation to the circumstances of the poster:

"Touching. Really made me tear up. Poor mommas"

*"So heartbroken for you. So very sorry for your loss she is beautiful little angel.
Sending prayers to u"*

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‘Understanding/Empathy’ was the second most frequently identified subcategory, present in 27.7% of responding comments analysed. It included comments that expressed understanding through a personal anecdote. For example:

"Oh god I remember when that happened with my loss. It broke my heart all over again."

"Its just so tough! I lost mine before i miscarried because they felt i was a liability as well as i had missed days when i was in the ER"

It also included comments that expressed directly that group members understood how other group members were feeling and what they were going through:

" ... I know how ur feeling"

"I'm in the same boat"

‘Encouragement’ was present in 10.9% of comments within the dataset. This subcategory predominantly included comments that instilled hope and confidence in other group members that they would be able to conceive again:

"You will! Don't give up! I had a miscarriage too October 2018 and on Wednesday I had my rainbow baby <3 <3 dont lose hope"

"Fingers crossed"

"...I hope you get your one <3"

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The subcategory 'Prayer' was present in 8.6% of responding comments analysed. It included both written messages of prayer in addition to 'emojis' 'gifs' and photos that posters used to express their prayers for the group member. The following comments exemplify written messages of prayer:

"You didn't fail at all. Sending you healing prayers."

"Prayers for u and ur family and ur beautiful angel"

"Lord please comfort this family father (prayer emoji)"

The final subcategory of Emotional Support, 'Other', was present in 25.6% of responding comments analysed. Three types of comments were consistently coded within this subcategory. First, comments that expressed gratitude were frequent and did not adequately fit any pre-existing subcategory:

"Thank you! I just set up an appointment <3"

Secondly, comments that were posted as a tribute to a lost child were also coded into this subcategory. Tributes could occur in writing or through images and usually included a name, date of birth or a memory of the time elapsed since the loss of the child. For example:

"20 Weeks ☹️ We still Miss You (name removed) !!!"

*"My sweet angel would of been due October 8th. Forever in my heart sweet baby!
[image]"*

Third, responding comments that included an expression of congratulations or love were also included in this subcategory as these types of comment were not a clear fit for any of the other Emotional Support subcategories.

3.3 Relationship Between Support Sought and Received

3.3.1 One Support Category Sought

In addition to examining the categories of support that group members sought and received, the relationship between support sought and received was also examined. 142 opening posts were identified where the poster was seeking only one category of support. These posts were examined in relation to the support received in responding comments. Within each of the five subcategories of social support, the support category offered was almost always consistent with the support category that was sought, with the exception of Esteem Support, where posters often received a greater proportion of Emotional Support. Table 4 demonstrates the frequency with which each support category occurred in relation to the support category that was sought.

Congruency was shown most often in the area of Emotional Support. When only requesting Emotional Support, it was offered in 70.9% of cases. The following opening post exemplifies Emotional Support seeking in the form of prayers:

“I go Wednesday for my high risk scan for our rainbow baby please we could use some extra prayers that everything is alright! Much love ladies.”

The responding comments posted in response provided Emotional Support that corresponded with the original request of the group member. For example:

“Sending prayers!! We had our rainbow baby in July and I understand the panic of these scans and the dr visits in general!!”

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“Prayers sent... I go Friday for my date scan for my rainbow baby... I know how ur feeling”

Congruency was also shown in the area of Informational Support. Of the opening posts that only sought Informational Support, it was offered in 62.3% of cases. This congruency is exemplified in the following example. The opening post seeks Informational Support relating to conception:

“5 years ago I lost my angel. I spent the first 3 years trying. We decided to stop trying still with no luck. We are ready to try again but also take any extra steps we have too. I go to the doctors next week however I was hoping to get advice from rainbow mamas that have gone through the same challenges. What did you use to help conceive!? I am ready more then ever to be a mommy. I'm so scared I'll never have the opportunity”

The responding comments provide Informational Support directly in relation to the support category that was sought in the opening post. For example:

“I used the clear blue ovulation tests. Unfortunately due to my age I guess, I miscarried and had a late miscarriage at 15 weeks. I plan to use the ovulation test again. I got pregnant right away using them.”

“Even if you're not "trying", stick with your prenatles. Try to be a healthier you. My dr immediately put me on Progesterone & an additional dose of folic acid (my prenatles had 800mg, she wanted me @ or over 1000mg)”

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“I tried for two years, got pregnant with my angel. After we lost Keegan we tried 4 more years, and I’m 23 weeks with my rainbow girl. I used progesterone cream. My progesterone was low. I got pregnant the very first month using it. After 6 years of trying!”

Congruency was also shown for Network Support in the one post that directly sought this support category. There was also only one instance where Tangible Assistance was sought in the absence of other support categories, however there were no responding comments associated. Finally, Esteem Support was often provided in 36.2% of instances where it was directly sought. However, this was superseded by Emotional Support, which was present in 42.2 of responding comments when Esteem Support was directly sought.

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Table 4

Comparison Between Support Category Sought in Opening Posts and Support Received in Responding Comments for Posters Requesting One Support Category (n=142)

Support Sought	Support Received	IS		TA		ES		NS		EM	
		Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total
Informational Support (n=87)	2084	1298	62.3	1	0.05	73	3.5	30	1.4	682	32.7
Tangible Assistance (n=1)	0	0	0	0	0	0	0	0	0	0	0
Esteem Support (n=3)	83	16	19.2	0	0	30	36.2	2	2.4	35	42.2
Network Support (n=1)	31	0	0	0	0	1	3.2	20	64.5	10	32
Emotional Support (n=50)	1163	236	20.3	1	0.09	67	5.8	34	2.9	825	70.9

Note: IS= Informational Support, TA= Tangible Assistance, ES= Esteem Support, NS= Network Support, EM= Emotional Support. The total number of posts included in Table 4 do not add up to 189 (total posts included in analysis) as the same posts were included in multiple categories when comparing support sought and support received in posts requesting one form of support.

3.3.2 Two Support Categories Sought

Secondly, 83 posts were identified that directly sought two support categories. In this analysis only Informational Support was shown to be predominantly offered to those who were seeking it (in addition to another support category). Every other support category did not receive the predominant support category examined. Table 5 demonstrates the comparison between support sought and support received in posts requesting two categories of support. Posts that did not directly seek support and posts that sought three support categories were excluded from this analysis as there were only two such posts.

Informational Support and Emotional Support were the support categories most frequently sought in conjunction. The following opening post exemplifies support seeking for both of these support categories in relation to advice for feelings of anxiety surrounding conception following a miscarriage:

“#trigger Please post anonymous!

I miscarried last October at 5 weeks. My boyfriend and I recently decided to start trying again. I'm so nervous and I feel like it's all I think about and I keep worrying I want it to happen so bad. Any advice mamas??”

Responding comments associated with this post frequently provided both Informational Support and Emotional Support, as was originally sought. For example:

“I just miscarried last night and have my appointment next Tuesday as soon as I get cleared we are gonna start trying don't get discouraged. Keep trying and stay positive praying for you (love heart emoji)”

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“I just had surgery for a ruptured ectopic pregnancy yesterday and as soon we get the go ahead well try again. (Btw if you ever think ita ectopic get it taken care of before it comes to surgery awful pain worse then actual child birth)”

However, compared to when only one support category was sought, there was less congruency between opening posts and responding comments when two support categories were sought. For example, the following opening post also sought Informational Support and Emotional Support, yet received no responding comments:

“Question. Has anyone here had a spleinc artery rupture? I had one at 18 weeks pregnant almost a year ago, almost died myself and my sweet baby girl fought for her live for 5 days in me before losing her on Thanksgiving day. I know the condition is extremely rare and I'm extremely lucky to be alive (so the doctors tell me, I lost 6.5-7 literally of blood). My main question is, if there's anyone here who has had his happen, survived like me and had a baby after recovery. We recently started trying again after getting the clear from 3 different medical teams but I'm petrified of going through something like this again. The doctors said what happened to me can't repeat itself seeing as the ligated my artery but I'm still a hot nervous mess. I don't know if there's hope for me getting pregnant or if I should just accept the fact that I'm done having babies.”

As demonstrated in Table 5, when two support categories were sought, it was less likely that posters received what they were seeking compared to when they sought one support category.

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Table 5

Comparison Between Support Category Sought in Opening Posts and Support Received in Responding Comments for Posters Requesting Two Support Categories (n = 83)

Support Sought	Support Received	IS		TA		ES		NS		EM	
		Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total
Informational Support (n=29)	510	316	62	0	0	17	3.3	24	4.7	213	41.8
Tangible Assistance (n=1)	6	1	16.7	2	33.3	0	0	0	0	3	50
Esteem Support (n=11)	203	77	37.9	0	0	30	14.8	1	0.5	95	46.8
Network Support (n=0)	0	0	0	0	0	0	0	0	0	0	0
Emotional Support (n=42)	765	385	50.3	2	0.3	40	5.2	26	3.4	312	40.8

Note: IS= Informational Support, TA= Tangible Assistance, ES= Esteem Support, NS= Network Support, EM= Emotional Support. The total number of posts included in Table 5 do not add up to 189 (total posts included in analysis) as the same posts were included in multiple categories when comparing support sought and support received in posts requesting two forms of support. For example, posts seeking Informational and Emotional Support were included within both Informational Support and Emotional Support.

Chapter 4: Discussion

4.1 Overview of Findings

This study sought to understand how women impacted by miscarriage seek and receive support online. Content analysis was employed using deductive reasoning to gather frequencies and qualitative data. The predominant support categories that emerged in the analysis were Informational Support and Emotional Support. Informational Support was predominantly sought, as is consistent with Couraris and Liu's (2009) content analysis of online HIV/AIDS self-help groups. In response to this, Emotional Support was most frequently offered, followed by Informational Support. Esteem Support and Network Support were less predominant and Tangible Assistance even less so. These findings are consistent with prior studies that have investigated online support groups using Cutrona and Suhr's (1992) framework (Atwood et al., 2018; Braithwaite et al., 1999; Coulson et al., 2007; Couraris & Liu, 2009; Mohd Roffeei et al., 2015). As women commonly report inadequate support in real life from family, friends, health practitioners and their community, it is highly valuable that there is an online space available where support needs can be met.

Women within the chosen Facebook support group clearly benefited from high levels of Emotional Support in relation to their miscarriage. Cutrona (1990) sought to understand whether certain forms of social support are more beneficial than others following specific kinds of stress. They developed an 'optimal matching model' as a response to this question. According to this model, emotional support is most beneficial and likely to be offered when the recipient is experiencing stressful circumstances that are not subject to their control. Alternatively, Informational Support is most beneficial when the recipient is in control of the situation and can put the information to use. The current findings are consistent with this model. Miscarriage, in many cases, can be categorised as an 'uncontrollable event'. There is often no known cause or action the mother could have done to prevent its occurrence.

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Additionally, the support most frequently offered to women in the selected Facebook support group was Emotional Support. Cutrona (1990) proposes that Emotional Support is most valuable in this instance as it provides comfort and healing. This suggests that women within the online support group chosen for analysis predominantly received the support category that was most beneficial for their circumstances. Similar findings have been confirmed by Braithwaite et al. (1999) when examining online support groups for people with disabilities.

The lack of Tangible Assistance sought and offered within the group can potentially be explained by the fact that an online context makes it more challenging to connect with people from the online world in a physical sense. As the group can be accessed and contributed to across the world, real or perceived geographical limitations are likely to be a barrier to the provision of Tangible Assistance. Esteem Support and Network Support were still notable in the dataset, although not as much so as Informational Support and Emotional Support, which are known to be the primary supports offered in online support groups across the literature.

The most prevalent support subcategories offered within the online support group were Informational Support (Other), Understanding/Empathy, and Emotional Support (Other), Understanding/Empathy and Emotional Support (Other). It is notable that two of the most prominent subcategories identified were not part of Cutrona and Suhr's (1992) original framework but rather were added by the researcher. These additions were required as there were support subcategories present with the online support group that could not be explained by the pre-existing subcategories. Within Informational Support, two major subcategories emerged; 'Seeking Clarification' and 'Personal Experience'. 'Personal Experience', in particular, was extremely prevalent. Group members received significant Informational Support through hearing about what has been tried and tested by other group members. Those who did not have factual or medical information to provide, they were able to assist via

personal anecdotes. Similar findings have been noted by Evans, Donelle and Hume-Loveland (2012) in their content analysis of online discussion groups for postpartum depression. They found that many participants used ‘personal anecdotes’ to convey information rather than reference traditional educational sources like pamphlets or books. Evans et al. (2012) concluded that ‘story telling’ rather than fact could be an important educational strategy. In light of the significance of the ‘Personal Experience’ subcategory within the current dataset, it might be worth considering extending Informational Support to include this additional subcategory in an adaptation of Cutrona and Suhr’s original (1992) framework, or in future research that applies this model to an online setting.

When examining whether women received the support categories they sought, it was found that they were more likely to receive what they desired when asking for one support category as opposed to two. In the literature, support received in online forums has been discussed in more depth than support seeking methods online. Pang et al. (2018) found that in an online context, women are passive information seekers. They are likely to search for causes and preventative strategies to inform future pregnancies. Women seek information that is presented in an easy to understand manner that is not overly clinical, which is informed by credible sources (Pang et al., 2018). Women also look for psychological emotional support by reading about others’ experiences and by sharing their own stories online. However, little information exists in the literature that characterises how women seek support online for miscarriage. The present study can add to the literature on this topic by confirming that Informational Support is generally sought, and by demonstrating that when seeking one support category, they generally receive what they are seeking. When extending this search to two or more support categories, the likelihood that the responses given are relevant to their needs is reduced. Future research can be oriented towards understanding the ways that

women seek support online and the support seeking strategies that yield the information that is most beneficial to their needs.

4.2 Strengths and Limitations

The findings of this research should be considered in light of its strengths and limitations. A strength of the present study was the use of an established social support framework in the analysis of the data. This study is the first to examine social support for miscarriage utilising Cutrona and Suhr's (1992) Social Support Behaviour Code. This provides a unique insight into the categories of social support sought and received online by women who have miscarried, in a way that is comparable to the online support experiences of individuals impacted by other health concerns. Another strength of the present study was its large sample size. Use of publicly available Facebook data enabled the analysis of 270 opening posts and 3,489 responding comments. This sample size is comparable, albeit slightly larger than that examined in many other studies examining online support groups in relation to Cutrona and Suhr's (1992) framework (Atwood et al., 2018; Braithwaite et al., 1999; Coulson et al., 2007; Couraris & Liu, 2009; Mohd Roffeei et al., 2015). Finally, inter-rater reliability in the coding of the data was another strength, as it reduced the subjectivity that can occur with an individual coder.

One of the main limitations of this study was the use of a Social Support Behaviour Code that was not specifically oriented towards an online setting. However, efforts were made to best adapt the model for suitability to an online setting. The subcategory 'Listening' was omitted from the framework, and five additional 'Other' subcategories were added to encapsulate responding comments that could not be coded within the pre-existing subcategories. The original subcategory 'Physical Affection' was also successfully adapted to 'Virtual Affection'. This enabled the researcher to capture all textual representations of affection expressed.

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Using the framework in an online setting presented the challenge of coding gifs, images and emojis, as well as virtual expressions of physical affection such as ‘xx’. The researcher coded these message formats consistently, in a way that best encapsulated the support that the poster intended to convey. However, future research could seek to develop a Social Support Behaviour Code that is more tailored to an online format. Another limitation to note is the uneven distribution of subcategories within each of the main social support categories. Emotional Support included eight subcategories, almost double the number of subcategories included in the other four support categories. This raises the question of whether the large number of subcategories increased the likelihood of Emotional Support being the most prevalent support category throughout the dataset. Additionally, the types of responding comments that characterised Emotional Support (Other), one of the most common subcategories offered, were frequently offered in addition to other expressions of support. For example, a ‘good luck’ or ‘thank you’ at the end of the message was characterised as Emotional Support (Other). The fact that multiple support categories could be present within each opening post or responding comment is likely to explain some of the prevalence of this subcategory and Emotional Support generally within the dataset.

Finally, this study only examined one Facebook support group. Examining data across multiple online support groups could potentially have yielded slightly different results. However, the large number of comments included for analysis, and the high level of accessibility of this group, provides data that is likely to be characteristic of the experiences of women across many online support groups from different parts of the world.

4.3 Implications of Findings

4.3.1 Practical Contributions.

This study provides evidence for online support groups as a viable source of support for women impacted by miscarriage. Online support groups can be seen as a platform for

women to share their experiences and reduce the sense of isolation commonly reported. This information could be useful for General Practitioners and other health practitioners when making recommendations regarding follow up support to women who have miscarried. Additionally, it could also be useful for health practitioners to guide their patients towards online support groups a supplementary source of support. It is also important that greater efforts are taken in the healthcare system to support women who have miscarried both in the short- and long-term. The literature tells us that women's support needs in this context are currently not being met. Online support groups provide a solution to this issue; however, they are not a replacement for appropriate medical care.

This study can also inform pre-existing support programs by highlighting women's predominant support needs. Additionally, online support groups have the potential to be seen as a platform for health organisations to communicate accurate health information to counteract the misinformation that is commonly provided. Lewandowsky et al. (2012) discuss the psychology of misinformation and how difficult it can be to correct false beliefs. Efforts to correct misinformation can 'backfire' and, in turn, strengthen the false belief. Therefore, specific recommendations made by Lewandowsky and colleagues (2012) should be followed in correcting any misinformation. Finally, the rapid growth of online support groups will hopefully reduce the stigma surrounding seeking support for miscarriage, as it becomes normalised, and society becomes aware of its prevalence and significant impact.

4.3.2 Theoretical Contributions.

This study provides further support for Cutrona and Suhr's (1992) Social Support Behaviour Code in its applicability to online support group settings, despite recommendations for slight adaptations. This study provides a unique insight into the relationship between the support women seek and receive online. It contributes to the body of knowledge on social support for miscarriage and highlights online support groups as an excellent source of such

support. This study provides validation for Cutrona's optimal matching model (1990), in that Emotional Support proved to be the most relevant and necessary support category for miscarriage as a stressful event outside of the woman's control. Finally, this study provided theoretical support for the necessity of an additional Informational Support subcategory to capture information provided based on personal experience (as is consistent with the findings of Evans et al., 2012).

4.4 Conclusions and Future Directions

Future directions for research could include a content analysis spanning across multiple online support groups for miscarriage, as the present study only examined one. Additionally, it could be beneficial to develop a Social Support Behaviour Code that is specifically oriented towards online settings as Cutrona and Suhr's (1992) framework was not designed for this purpose. It could also be beneficial to adapt the pre-existing Social Support Behaviour Code (Cutrona & Suhr, 1992) to incorporate 'Personal Experience' as a subcategory of Informational Support. Future research could also be directed towards investigating the accuracy of Informational Support provided within online settings. Although group members might find comfort in knowledge, and potential solutions to their problems, there is a risk of harm if the information is not medically sound. Future research could also extend to a thematic analysis of Facebook support group messages to gain a deeper understanding of the experiences and support needs of women who have miscarried. Finally, while some researchers have looked at partners (Collins et al., 2014) and grandparents (Lockton, Due & Oxlad, 2019) support needs, future research could examine whether these groups also seek support online.

It is hoped that the findings of this study may inform further research as well as clinical practice regarding how the support needs of women who have miscarried are approached and acknowledged. Additionally, it is important that women impacted by

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miscarriage become aware of online support groups as a viable support option to connect to others sharing a similar experience. It is also desired that the present study contributes to society's understanding about the experience of miscarriage, and in turn increases sensitivity, kindness and awareness directed towards supporting women who have miscarried and their partners and family members.

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