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# Dancing Around Infertility: The Use of Metaphors in a Complex Medical Situation

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## Abstract

People use metaphors to cognitively frame their experiences as well as to explain those experiences to others, especially in complex medical situations. However, previous research has not fully explored the extent to which metaphors may be helpful or harmful to achieving well-being. This investigation fills this gap by identifying and explaining metaphor use in the context of infertility. Guided by self-determination theory, in-depth interviews were conducted with 22 women and men who had experienced an inability to conceive a child. Analysis of participant narratives yielded 10 prominent metaphors that reflect how participants' need for competence, autonomy, and relatedness were (and were not) met during their infertility experience. Results indicate that cognitively framing the infertility experience using certain metaphors is more likely to enhance personal and relational well-being, while others may be more harmful. Suggestions for communication with doctors, partners, families, and friends are discussed.

Infertility affects approximately 7.3 million individuals (one in eight couples) in the United States and 48.5 million couples worldwide (Resolve, 2012; World Health Organization [WHO], 2012). Infertility is the inability to conceive and/or the inability to maintain pregnancy after trying to conceive for 1 year if under the age of 35 years, or 6 months if age 35 and older (Mayo Foundation, 2012). Although infertility focuses on a woman's reproductive health by definition, only 30% of infertility is attributed to female factors (Resolve, 2012). Because infertility is unexpected, the diagnosis can be devastating to individuals' well-being and is consistently rated as a major life stressor, alongside chronic illness, divorce, and bereavement (Leiblum & Greenfield, 1997). As a result, many people with infertility experience negative emotions, such as depression, anxiety, anger, guilt, frustration, and stress.

Couples are likely to benefit from social support as they adjust and cope with a diagnosis of infertility; however, there are unique challenges to interpersonal communication in this domain. One is an ongoing tension between openness and closedness (Steuber & Solomon, 2011). Couples want to receive support from others; however, disclosure of infertility can be viewed as taboo, awkward, and inappropriate because of the conflicting private,

public, and political nature of sexual and reproductive health (Bute, 2009; Reagan, 2003). When couples do disclose their diagnosis, many people report feeling frustrated by conversations about infertility (Steuber & Solomon, 2011). Such conversations can reveal divergent attitudes regarding fertility expectations and choices, including the most appropriate age for pregnancy or beliefs about contraception (Bute & Jensen, 2010). Disclosing infertility may also make it more difficult to maintain privacy boundaries on related topics, such as financial, emotional, or relational difficulties (Bute, 2009; Steuber & Solomon, 2011). Given these challenges, it can be difficult for members of the social network to provide effective support to someone with infertility (Bute, 2009).

To improve the well-being of individuals struggling with infertility, we turn to self-determination theory (SDT) and metaphor. Combining SDT and metaphor allows us to identify how communication helps or hinders individuals' well-being during the infertility experience. SDT provides an overarching organizational framework that identifies three important needs for well-being while theorizing in the area of metaphor describes how language influences cognitive framing of the infertility experience in relation to those needs. Our goals with this framework are twofold: to

identify (a) the ways in which people make sense of a complex medical experience by highlighting the important aspects of their experience, and (b) the ways in which people attempt to create common knowledge between conversational partners through a negotiation of meaning when discussing an unshared, culturally taboo experience. This is especially important in the infertility context when individuals struggle to make sense of their diagnosis while also trying to explain infertility to others in a socially appropriate way.

### Self-Determination Theory and Infertility

According to SDT, people must meet three innate needs in order to achieve psychological well-being: competence, autonomy, and relatedness (Deci & Ryan, 2000). *Competence* is defined as a need for challenge and the ability to control an environment. *Autonomy* refers to an individual's need for freedom and willingness to perform a task and incorporate it into one's personal identity. Finally, *relatedness* refers to the need for connection with others (Deci & Ryan, 2000). These needs operate as a unifying, connective process; therefore, if one of these three needs is not met, negative consequences occur. For example, if an individual encounters a situation where he or she is controlled, overchallenged, or rejected, he or she will usually begin to focus inward to cope with the issue. In some cases, people will be so burdened by one or more unmet needs that they will psychologically and socially withdraw from others (Deci & Ryan, 2000).

Complex medical situations, such as infertility, present a significant challenge to achieving well-being because of significant uncertainty about causes and ineffective treatments; changing identity and relationships; feelings of loss and decreased self-esteem; positive and negative coping mechanisms; constant decision making; and high levels of emotional, psychological, and financial stress (American Society of Reproductive Medicine [ASRM], 2011; Brashers et al., 2000). SDT is a useful framework for examining how specific messages help or hinder an infertility patient seeking to fulfill one or more needs. Furthermore, this framework may prove useful in helping people with infertility identify and communicate their needs to others. By connecting the organizational framework of SDT to the language used in metaphorical messages, it is possible to understand how patients' needs for well-being are and are not met through communication. Next, we discuss conceptual metaphors and their relationship to well-being in health contexts.

### Constructing Meaning Through Metaphors

Conceptual metaphors have been defined as "understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 1980, p. 5). In communication,

two important functions of conceptual metaphors are to encourage self-understanding by giving organization to the experiences in our lives, and to promote understanding in interpersonal interactions through the negotiation of meaning (Lakoff & Johnson, 1980). By using these metaphors, individuals are able to understand abstract concepts in terms of more concrete concepts. This can be thought of as comparing concept A to concept B, in which B is used to carry the meaning about concept A through a sharing of characteristics, called "ground" (Hitchon, 1997). Abstract, nonphysical concepts such as emotional, psychological, and relational experiences (e.g., love, time) are easily understood when they can be framed in more accessible, physical concepts, such as war and money. In addition, Lakoff and Johnson (1980) explain that when people use metaphors, they "highlight" or focus on certain aspects of a concept while "hiding" or ignoring other aspects of the same concept. For example, love is *war* intentionally explains only one aspect of love (i.e., battle, pain, and sacrifice), whereas love is a *journey* explains another aspect of love—one of development and discovery. Thus, the conceptual metaphors people use to explain their experiences communicate the aspects of their experience they deem most important.

### Health Metaphors and Infertility

Metaphors are useful rhetorical devices for facilitating understanding between people when meaning is shared and negotiated. Arroliga and colleagues (2002) found medical professionals used metaphors to increase patients' understanding of complex medical procedures and to increase the speed at which medical practitioners and patients could speak. In other words, medical practitioners believed metaphors allowed for patients' deeper comprehension of treatments and diagnoses and allowed more time for patients' questions. In the context of infertility, which consists of vague and complex medical, social, and psychological reasons for the condition (Domar & Kelly, 2002), the communication of metaphors may assist conversational partners in constructing shared understanding of an infertility patient's need for well-being.

However, metaphors may not always be effective in health contexts and may hinder patients' well-being when meaning is not mutually understood between all conversational partners. For example, a seemingly positive metaphor may be interpreted negatively by one conversational partner; thus, it is important that conversational partners use the same attributes if hoping to understand one partner's experience. Bowker (1996) wrote that while experiencing cancer, she viewed the cancer as *battle* metaphor as a negative depiction of her experience: relentless and never-ending. She then expressed irritation when her friend used the *battle* metaphor to communicate he would fight the disease with her because they did not

have a mutual understanding of how the disease was impacting her. In another study, Reisfield and Wilson (2004) found that using the cancer is *war* metaphor framed the experience as consisting of winners and losers. Cancer is presumed to be the loser; however, cancer is not always curable. Those who “lose” to cancer may feel they have failed to win the battle and may harbor feelings of guilt and weakness. The examples illustrate that metaphors are interpreted differently depending upon experience, knowledge, and attitudes and might not always be useful in achieving an intended outcome. Likewise, the positive and negative meaning attributed to metaphors might impact the ways in which individuals understand and cope with illnesses such as infertility.

Despite the importance of using metaphors to communicate about the medical, psychological, emotional, and social complexity of the infertility experience, only a few studies have explored this issue. Becker (1994) showed metaphors are one way individuals resolve continual feelings of disappointment in the disruption of life’s goals by restoring order in one’s life. In addition, Friese, Becker, and Nachtigall (2006) found discourse around age and reproduction (i.e., *old eggs*, *biological clock*) primarily blames women for a lack of knowledge and unrealistic expectations and goals in regard to fertility. A third study found metaphors used to describe in vitro fertilization (IVF) include the *gambler* (e.g., winners and losers), *investment* (e.g., calculated risk-taking), and the *worker* (e.g., accomplishment and failure) (de Lacey, 2002). De Lacey argues that the metaphors in this study were shown to juxtapose infertile women, who are described as obsessive, compulsive, anxious, and uncertain, to fertile women who appear strong, persevering, and balanced.

Taken together, these studies contribute to our understanding of metaphor in the infertility experience by illustrating how the choice of metaphor and its underlying meaning may positively and negatively impact the ways in which individuals understand their diagnosis. Given that infertility is rated as a life crisis for many individuals (Leiblum & Greenfield, 1997), our study offers a unique contribution to the literature by exploring how individuals struggling with infertility use metaphorical messages to explain how their overall psychological well-being was both helped and hindered throughout the experience. Thus, the following research question is proposed:

**RQ:** How do individuals who have experienced infertility use metaphors to communicate their need for competence, autonomy, and relatedness?

## Method

### Participants

Individuals were recruited if they were 18–50 years old and had experienced infertility at one time in their lives.

Infertility was defined as not being able to successfully conceive and/or maintain pregnancy after 1 year if under the age of 35 and 6 months if age 35 and over. Other studies have only included individuals who have experienced infertility for 5 years or less (e.g., Bute, 2009; Steuber & Solomon, 2011); however, we included all women and men who have not been able to conceive or maintain pregnancy at some point in their lives in order to include diverse infertility experiences (i.e., those with biological, adopted, and no children). Participants included 22 individuals (16 women and 6 men), with 16 (72.7%) individuals reporting an annual income above \$70,000. Among these participants were eight couples (six heterosexual and two lesbian couples). Participants were recruited from a faculty and staff newsletter at a large Midwestern university ( $n = 12$ ), a local fertility support group ( $n = 7$ ), snowball ( $n = 2$ ), and a publicly accessible research database ( $n = 1$ ). Ages of participants ranged between 25 and 43 years ( $M = 33.0$ ;  $SD = 6.5$ ), with one person who did not disclose age. Among participants, 21 described themselves as White and 1 as Asian, while 16 (72.7%) were female and had a diagnosis of female-factor infertility. Ten (45.5%) individuals had reported experiencing at least one miscarriage, and 14 (63.7%) had used assisted reproductive technology (e.g., IVF, intrauterine insemination [IUI]). Three individuals (14%) did not have children, and six (27%) had adopted a child.

### Procedures

Interviews were conducted separately and face-to-face at an interview location where participants felt most comfortable (e.g., coffee shop, campus office) and lasted approximately 60 to 90 minutes. Two interviews were conducted over the phone, though we found no differences between face-to-face and phone interviews in amount and type of information disclosed by participants. For couples, separate interviews allowed all individuals to speak freely about their infertility experiences without the influence of their partner. Once participants were interviewed, they were asked to refer other individuals coping with infertility. This snowball sampling method is consistent with the recruitment strategies of previous infertility research (Bute, 2009).

A semistructured interview format, which included a demographic questionnaire and an interview guide, was used in this institutional review board (IRB)-approved study. Each interview focused on the same issues and topics, but the semistructured guide allowed the interviewer to explore unique responses by participants (Patton, 2002). In each interview, individuals were asked to describe their intrapersonal and interpersonal experiences with infertility. Participants also completed an information sheet that asked for demographic information (e.g., gender, age, marital status, ethnic background, education, employment status, and household income).

### Data Analysis

All interviews were transcribed verbatim. After each interview was transcribed, we read through each transcript two to three times. To remain open to all possible theoretical ideas present in the discourse during data analysis, grounded theory was initially used (Charmaz, 2006). Following Creswell (2009), we completed data analysis by simultaneously “gathering data, making interpretations, and writing reports” (p. 184). Then, we began initial coding to observe any themes that began to emerge in the data (Charmaz, 2006). We labeled these themes based on our unit of analysis, which was any meaningful thought ranging from a sentence to a paragraph pertaining to infertility. Next, we engaged in memo writing, which included summarizing the interview, interpreting the meaning behind the data, and identifying any gaps within our coding. We did this after each interview and compared each interview to the data already collected. The purpose behind this method was to identify patterns and new ideas in our data (Charmaz, 2006).

Once broad themes were identified among the data, focused coding was used to identify the most prominent themes found during initial coding. At this stage, we recognized that people were expressing their need for well-being in regard to the three main needs expressed in self-determination theory: competence, autonomy, and relatedness. At the final stage, axial coding, we designated subthemes that related to the main themes (Charmaz, 2006). It was here that we recognized the prominence of metaphors in the data and how people were using them to express similar thoughts and emotions in similar ways (e.g., to convey threats to competence). Because of these theoretical connections, we combined the two theoretical frameworks and organized metaphors under the categories of competence (i.e., control), autonomy (i.e., choice), and relatedness (i.e., connection to others) to guide our connection of the infertility experience to the need for well-being. A codebook was created.<sup>1</sup> Once we settled on this theoretical framework, we continually compared and analyzed our data until we reached saturation (i.e., no new information or themes appearing in the data) (Charmaz, 2006).

## Results

### Metaphors and Psychological Well-Being

The results of the research question identified 19 metaphors that individuals used to communicate their need for competence, autonomy, and relatedness. Among individuals who have experienced infertility, seven metaphors were used to express a need for competence; eight were used to express a need for autonomy; and four were used to express a need for relatedness (see footnote 1). To

thoroughly explain the connection between SDT and metaphor, we focus on 10 primary metaphors in the following. Primary metaphors were defined as the most commonly used metaphorical themes appearing in the data.

**Competence.** All metaphors for competence described negative experiences with infertility. In expressing the need for competence, individuals used three primary metaphors to focus on individuals' inability to control emotions and treatment outcomes and effectiveness: *job*, *game*, and *roller coaster*. The *job* metaphor framed individuals' infertility experiences as setting a goal of pregnancy but having little control over achieving that goal despite concentrated efforts. *Job* gave meaning to infertility in two ways: (a) to describe the constant stress that accompanied the pressure to perform (i.e., trying to conceive) and the management of that stress, and (b) to express feelings of failure in accomplishing the goal of becoming pregnant. When using the *job* metaphor to describe the pressure to perform, individuals explained their relentless drive toward future success and the belief that hard work and more education were necessary to achieve their goal of pregnancy. This often left individuals such as Jessica, 31, framing the experience in terms of *job* as maximizing her potential for conception. Because of medicinal side effects, numerous doctors' visits, financial constraints, and physical pain from treatment, she explained that sex was not about intimacy or connecting with a partner; it was about achieving the goal of conception: “I was pretty, let's do this, it's a business, it's a transaction, it got to be very, it's a job, it's not fun, it's a job. And, that was bad.”

Because participants who used the *job* metaphor focused on the overwhelming stress involved in the experience, many individuals also talked about needing to feel competent in managing infertility stress and balancing it with the rest of life's obligations. People felt that they became consumed with infertility (i.e., tight schedules, required doctors' appointments, learning as much as possible about causes and treatments of infertility) and often needed breaks and vacations from thinking and talking about infertility. Many individuals, like Cecelia, 37, used *job* to discuss the numerous responsibilities within infertility:

For fertility patients, it's such a planned out, researched, like it's almost like a job. It can become a job for people because there's so much you have to learn, trying to find the right physician, really knowing what your body is doing every month. And, so not getting stressed out about it.

Nearly all individuals mentioned failure, or incompetence, as being particularly frustrating especially when individuals felt that they were doing “all of the right things.” Many participants mentioned that their feelings of failure increased when others seemed to successfully become

<sup>1</sup> Contact the corresponding author for more information.

pregnant and when it seemed that the more they failed at conceiving, the harder they tried. This was particularly salient for the women interviewed, many of whom felt it was their job to carry a baby. After several cycles of infertility treatments, Mandy, 33, began to internalize the failure: "I remember one night, it just got to me, and I just sat there and I just started bawling at the computer because it was just like, I just felt like a failure and wondered why my uterus just wouldn't cooperate." Thus, infertile individuals used *job* to express a need for competence when trying to conceive a baby, manage infertility stress, and balance infertility in relation to other life demands.

The second competence metaphor, infertility as *game*, focused on the inability to control the outcome of their infertility. Individuals who used *game* framed their experiences in terms of winning and losing, describing the odds and chances of success, cutting losses, feeling cheated, experiencing the luck of the draw, feeling that the "deck was stacked against us," and focusing on the winning prize. For example, when hoping to be matched with an adopted child as a way to resolve their infertility, Sara, 35, mentioned that sometimes she felt that she and her husband were in competition with other families who were able to conceive biologically. They were happy to find an out-of-state adoption agency that preferred couples who are experiencing infertility because, she explained, "Not that other couples don't deserve to adopt, but you kind of feel like you're already being cheated."

Another way people connected *game* to the need for competence was in their perceived inability to control factors that related to their infertility. Sara's husband, Rick, 35, used *game* to explain their bad luck with infertility, such as his wife's diagnosis of endometriosis, "It's the luck of the draw, why does she have it? We don't know." He and Sara were able to conceive their son after years of treatment, but they were not successful in their attempts to conceive a second child. Their doctor thought their best chance for success would be to try very soon after their first child, but Rick felt unsure of the outcome: "So it was less than a year that we tried to conceive again, but while breastfeeding, we thought the deck is stacked against us even more." Thus, participants used *game* to express their incompetence in controlling their infertility outcome as well as the factors contributing to their infertility.

The next metaphor, infertility as *roller coaster*, related infertility to an inability to control the direction and intensity of one's emotions. Common phrases included "ups and downs, highs and lows," and "top and bottom." One couple, Patrick, 36, and Michelle, 32, had tried to conceive for nearly 2 years, an effort that included two IVF procedures. They ultimately decided to adopt and now have a 2-year-old son. Patrick explained infertility as an experience that differs depending upon the day: "It's difficult. It's going to involve lots of highs and lows. You'll have good days where things are going well, and other days where everything falls apart. And, that's part of where the uncertainty comes in I

suppose." Michelle explained that the IVF procedures were particularly tough on her. She entered into her first IVF procedure thinking that it would work because she was young and the doctor was optimistic. She conceived, experienced momentary elation, but lost the baby a few weeks later, an emotional experience she was unprepared to deal with:

So, after the first [IVF], the miscarriage was very difficult. I remember telling my husband, "Even with all of the physical pain of the IVF, I can do that part again, [but] I will not go through this again." Just to finally feel like it was something that you had finally achieved and then to have it just kind of go away. It's like, you get to the top of the roller coaster and you go all the way back down to the bottom. That was awful.

As explained earlier, participants used *roller coaster* to describe their inability to control their emotions as they experienced infertility treatment and outcomes associated with those treatments. In sum, individuals primarily used three metaphors *job*, *game*, and *roller coaster*, to explain their need for competence during infertility. These three metaphors focused on the negative experiences of infertility and people's perceptions of themselves as ineffective in controlling the outcome and environment of their infertility efforts.

**Autonomy.** In expressing the need for freedom and choice in participating in a task and assuming an identity, individuals used eight metaphors to express how their need for *autonomy* was both hindered and met. Four primary metaphors were used: infertility as *journey*, *stalemate*, *battle*, and *illness*. People connected *journey* to infertility and autonomy for two opposing reasons: (a) to explain infertility as a path and identity that they did not willingly choose, and (b) to explain their willingness to allow infertility to transform their identity. All individuals who used the *journey* metaphor saw their lives and identities negatively disrupted by infertility. Similar to Becker's (1994) findings, individuals reported desired expectations that their lives would follow a predictable, linear path with specific milestones, such as college graduation, marriage, and birth of children. To conceptualize their travel through life, participants used phrases such as "down the line, next, down the road," and "cross that bridge." Another way participants, such as Cecelia, used *journey* was to compare their timeline to others their age:

It's kind of like you're a step behind because unless you make a decision that you don't want children, which is perfectly fine, you're always in this kind of almost like a catch-up ... you see everybody else kind of moving on with their lives.

However, later in the interview she talked about how a mental health counselor suggested that she use the *journey* metaphor to free herself of the linear expectations she had for life and instead transform her identity by focusing on growth, development, and independence from cultural expectations. Cecelia said that as she confronted the identity

challenges within infertility, she reminded herself that:

This is your experience and your journey and it's going to be in your own time. It's not based on your society's time that you need to do this and this comes next, and if this doesn't happen, then it's not going to happen. Or if it doesn't happen in the timeframe that you want it to 'cause everybody wants to have everything so planned out in their life and it just doesn't happen that way. I think that's probably been the most positive thing and you have to try to remind yourself of that, that for whatever reason, this is your experience and a lot of good things have come out of this for me.

The second autonomy metaphor, infertility as *stale-mate*, highlighted individuals' perceptions of existing in a no-win situation, which led to unwillingly making decisions during the infertility experience. Participants who used this metaphor focused on the feelings of "being stuck"; "feeling trapped"; hopelessness; and being in a situation in which the individual was out of options, losing, or giving up. Individuals often felt that at a certain point in their experience spending money to conceive a child seemed pointless and wasteful, but that they did not know what to do because all options seemed to result in dissatisfaction and resentment. Bridget, who did not disclose her age, spoke of the decision she and her partner, Mandy, made to stop treatment during their secondary infertility experience. To continue on with treatment meant sacrificing more money for a possibly fruitless venture, while stopping meant that they might have ended treatment too soon because it was uncertain if Mandy could have more children:

I don't know that she couldn't ever have kids again, but I think the need, the amount that we would have to put forward in order to, money-wise, time-wise, and everything was too great. And, we had to make that determination to stop for money.

Many couples made the decision to stop treatment based on finances, which only increased the feeling that they were restrained in their reproductive choices as well as their monetary choices compared to couples who conceived children without spending thousands of dollars. One woman, Vickie, 43, conceived her son unexpectedly at 40 after 5 years of trying to conceive and while waiting to start IVF. She explained that she and her husband "were already so far over our heads. I mean, we're still paying him off. We laugh about, 'Sorry about college. You know, we spent all of our money having you.'" Likewise, participants used *stale-mate* to describe society's judgment of infertile individuals no matter what option they chose to treat or resolve their infertility (i.e., assisted reproductive technology or adoption). Jenny, 32, who has been trying to conceive her first child for 2 years, said she has read articles that have criticized people for pursuing expensive infertility treatment procedures as well as for considering adoption, resulting in her feeling that no matter how she chooses to build her family, others find her choices unacceptable:

I read something recently about adoption in general being terrible because young women who get pregnant unintentionally might feel like they can't have an abortion because of their families or religious values or whatever and so they are kind of forced into giving up the baby. You know, because they're told that they can't take care of it. So, it's putting almost a trafficking angle on it and it's like, well you can't do anything. You can't proceed with treatment without someone being like, "Should you really be spending money on that?" or "You know, wouldn't that money be better going toward taking care of a child that's already born?"

The third metaphor that expressed the need for autonomy was infertility as *battle*. Using this conceptual metaphor, people chose to assume a military identity while protecting themselves and others from emotional pain, fighting for a joint cause, and experiencing the invasion of treatments. Many people mentioned the experience of healing and surviving, being wounded, and dealing with scars. Kim, 36, talked about people's desire to fight the battle of infertility by themselves, but that a mental health counselor was necessary to facilitate healing from the infertility experience, much like soldiers returning from war.

You know, if you just purely soldier through infertility and don't sort of identify and process all that happens through that experience, your chances of being the best parent you can be to that child I think are diminished if you're not doing it with an experienced professional.

Several individuals, such as Michelle, described infertility treatments as an invasion of their bodies, but that they willingly entered into treatment after becoming used to the feeling of their bodies being attacked from the outside:

I remember just thinking to myself, "I would never do fertility stuff. It's such an invasion into your life to try and achieve something that may never happen. Oh, I would never do it." ... But, when you're doing these little incremental increases in procedures and invasions of your body and your lifestyle and all that, it gets easy to just sort of take that one little next step.

Individuals also described their experience as participating in boot camp, and approaching infertility with levelheadedness and detached emotions in order to remain strong, protective, and focused on the goal of conception. Jenny said the only way she could deal with the emotional intensity of the infertility experience was to separate herself from it:

For the most part, I think I just kind of detach from it. Just sort of don't think about it except for when something is immediately happening, like every once in a while. But for the most part, I just kind of, healthy or not, just sort of put it in a box and put it away.

The fourth metaphor, infertility as *illness*, framed infertility as a medical condition that happens to individuals through no choice or fault of their own. Many participants mentioned that they incorporated infertility as a medical condition into their identity and as a result, they

believe infertility requires the same sensitivity, validation, and acknowledgement that other conditions receive. For example, comparisons were made to autism, being on a spectrum, terminal illness, cancer, feeling as a patient, and having a disability. Michelle explained her choice to view infertility as a serious illness: "I treat infertility almost like cancer. It's not something that anyone deserves. It's not something that people get because of something they did. And, I tell people that often times react as if the person just told you they have cancer." In addition, Torie equated the inability to have children to having a disability, a condition that impacts both her personal and social identity. She explained that people do not willingly choose to have a disability; therefore, others should be sensitive to her condition when talking about their ability to have children or announcing their pregnancy:

Do you have to every time that you walk by somebody, and you don't know whether or not they've tried to have a baby or if they're able to have a baby, and here you are, "oh I'm pregnant." Well, that's obvious. Congratulations. I know that it's a joyful experience but at the same time, it's kind of a sick analogy, but if someone lost their leg, you don't go around saying, "Oh I've got two legs, I can run."

Thus, the metaphors infertility as *journey*, *stalemate*, *battle*, and *illness* were used by participants to express their need for freedom and choice in participating in tasks and assuming the identity of infertility. All four metaphors conceptualized negative experiences and illustrated how autonomy needs were not met. However, the *journey* metaphor was the only prominent autonomy metaphor that was used to describe both negative and positive experiences with the need for autonomy during infertility. *Journey* explained how messages may help infertile individuals recognize their choice in viewing their experience as resulting in a unique path to family building, one that does not conform to others' expectations and has a satisfactory ending.

**Relatedness.** The third need for psychological well-being, *relatedness*, was primarily communicated through three metaphors: infertility as *dirty secret*, *dance*, and *club* to describe their connection and lack of connection with others. In infertility as *dirty secret*, participants believed their infertility should be kept from others either because they thought it was inappropriate and/or too private to share or because they felt others were embarrassed and uncomfortable hearing about it. In their interviews, individuals talked about hiding their infertility, only sharing it with a close circle of friends, feeling that others believed it should be "swept under the rug," and feeling that they should not "air their dirty laundry." When Sara and her husband Rick told his family about their infertility, she explained that they reacted as though infertility was one of those topics that should never be talked about:

Rick comes from a very large, very conservative Catholic family where you never talk about girl parts or you don't talk about problems. You pretend that your life is perfect, so when we first told them about the infertility, his dad's response was "We'll never mention it again." And, I just sat there, going, "Excuse me?"

Participants who framed infertility as a *dirty secret* also talked about the difficulty of connecting with others who have experienced infertility because it is often unknown who has experienced it. Likewise, information about alternative treatments and doctors was not often given to patients by doctors, so individuals felt that the only way to receive this information is to have it passed on to them from those who experienced it before them. However, this created a communication dilemma as sharing their infertility with others often resulted in hurt feelings, which reinforced the desire to keep their infertility hidden. Johanna, 34, talked about how she and her husband had initially shared more information with others, but then after her first miscarriage and subsequent unwanted advice, she kept all information about infertility treatments and emotions between herself and her husband. However, she also mentioned that the secret then became too much to bear and it began changing how they interacted with others:

I told my husband where I don't even want your family to know when we're trying again. I don't want them to know when the injections start, I just don't want people to know. Let's just keep this between us, so we don't have to deal with the outside world and what they say and how it makes me feel. I just felt like it was adding so much more to me, that I was like, let's just keep it between you and I if you're fine with that. And, he was for a while. And, then I realized that he wasn't really opening. I don't know. It just changes your relationships so much.

The second relatedness metaphor, infertility as *dance*, conceptualized the communication about infertility as having clearly defined roles (e.g., partner, teacher, coach) and consisting of delicate moves (e.g., tiptoeing, walking around on eggshells, dancing around the issue). Many people talked about the difficulty of discussing infertility with others because they felt that although partners, doctors, and supportive others wanted to help them, most people were "afraid of saying the wrong thing." Patrick, Michelle's husband, used *dance* to explain the tension between revealing and concealing infertility information in conversations between partners, family members, and friends during their years of trying to conceive, including two IVF cycles. He explained that no one knew how to approach the topic, including the people experiencing infertility:

There's always kind of the dancing around, do we want to talk about it? Do you not want to talk about it? Can we talk about it with our friends? Do you not want us to talk about it with our friends? That kind of thing. I guess the lack of kind of formal ways of talking about this. The



lack of consensus of how to talk about it. Because some infertile people are going to be very open about it and talk about it with anyone that has a question about it, but there's going to be others who don't want to talk about it at all because it's very intensely private and they may be mourning or whatever. So that's probably another problem that a lot of people have: Is this a person who wants to talk about it? Or who doesn't want to talk about it? Are they going to get mad at me if I bring it up?

His wife, Michelle, used *dance* to describe the difficulty in being a partner during infertility. During treatment cycles, it was very difficult for her to remain connected to Patrick because she became consumed with her emotions and physical reactions to medications, which he could not feel:

You know, you lose your partner. Because you really do become like a different person because everything you think about, everything you talk about with your schedule, especially your intimate life, just becomes completely controlled by somebody else. So, I'm sure that he lost a partner for the whole time that we were doing this.

In infertility as *club*, participants communicated that they felt a sense of belonging to an organization based on the shared experience of inability to conceive a child. They felt that infertility created a bond between people who had experienced it; however, rules and norms existed within the group about how to talk and behave. For example, people felt that they were members of a community, sorority, and sisterhood with similar interests and experiences, used a different language than nonmembers, felt pressure to conform to the expectations of members, were kicked out once they became pregnant, and felt like they were "coming out" to others about their infertility. Like the *journey* metaphor, people used the *club* metaphor to discuss their negative and positive experiences. Luke, 30, and his wife Jessica had experienced infertility for 1.5 years before successfully undergoing IVF. He explained infertility as "an awful club that no one would join by choice," but that this membership also allowed them to easily share the difficulty of their experience with others who understood it. Individuals also used the *club* metaphor to illustrate how members advocated for each other. Michelle discussed how she tried to be honest about her emotions when speaking with people, even if they were uncomfortable, because she wanted to make it easier for other women with infertility to share their experiences:

It feels like you have sort of this sorority of women who are dealing with this and [when] you get to help another person hear a really hard piece of information, you're like, "OK, I did something good for the sisterhood."

Thus, participants used infertility as *dirty secret*, *dance*, and *club* to discuss their need for connection with others during the infertility experience. Participants used all metaphors to communicate a lack of connection with others,

*club* to communicate an enhanced connection with those who experienced infertility, and *dance* to discuss the delicate ways people maintain connection when talking about infertility.

## Discussion

This study sought to further our understanding of the role of communication in the infertility experience. Because of the taboo nature of infertility and the predominant cultural view that sexual and reproductive health is a matter of privacy, individuals often struggle to talk about infertility in socially appropriate ways (MacGeorge & Wilkum, 2012). Individuals report feeling frustration, awkwardness, discomfort, and tension, which often results in topic avoidance and a feeling of social isolation (Hinton, Kurinczuk, & Ziebland, 2010). The results of the current study echo previous findings about the difficulty of describing the depth of pain, anxiety, and sadness associated with infertility and add to the literature by showing that individuals turned to metaphorical language when literal language was insufficient to explain and frame the complexity of their experience. Therefore, where it may be difficult for an individual to effectively communicate abstract emotions (e.g., feeling unstable, disconnected, insecure, out of control), concrete conceptual metaphors such as *roller coaster*, *dance*, *club*, and *illness* may successfully explain important aspects of their infertility experience in more socially acceptable ways.

### Theoretical Implications

Considering metaphorical messages from an SDT perspective may offer a way to improve communication about infertility by eliciting more effective coping for individuals experiencing infertility while also creating shared meaning in conversations about infertility. Because infertility consists of medical, emotional, psychological, and social complexities, many individuals in our study mentioned that they engaged in various coping styles, including emotion-focused (i.e., changing one's internal response to infertility) and problem-focused strategies (i.e., changing the behavior or environment in some way) (Balneaves & Long, 1999); however, coping with infertility stress remained a challenge and they did not know how to tell others what they needed in order to achieve well-being. The current study provides a framework that provides insight into how individuals understand their complex medical experience, why they may experience difficulty when talking to others about a taboo topic, and how they may improve communication to more effectively meet their needs for well-being.

This study acknowledges the ongoing difficult decisions individuals make in disclosing and discussing their infertility (Bute & Vik, 2010). Like previous studies, this study found that part of their responses depended upon

the meaning assigned to the other person's questions or comments (Bute, 2009). In our study, most people wanted to reveal their infertility or to continue in ongoing discussions about infertility but felt that they were making others uncomfortable or that others did not understand the emotional sadness and anxiety that accompanied infertility. Bute (2009) found that women responded to questions about their infertility status with direct and indirect disclosures, lies, and responses that would point out others' rudeness. Adding to those findings, the current study found that individuals with infertility turned to metaphors to carefully communicate about a taboo topic that may be regarded as inappropriate. They used metaphors to initiate talk about their infertility as well as to respond to others' insensitivity or discomfort, which suggests that they may be exhibiting a higher level of communication competence. Metaphors appear to be regarded by individuals as somewhere in between direct and indirect disclosures and offered a way to navigate the reveal-and-conceal dilemma when managing their infertility information (Steuber & Solomon, 2011), while making themselves and others feel more comfortable. Most individuals in our study said that discussing the physical and medical aspects of treatment (e.g., describing procedures and medicines) was easier than discussing the emotional aspects. Metaphors may allow individuals who experience infertility to communicate their abstract feelings/emotions more clearly to a person who has never experienced it by choosing to compare it to a relatable experience (e.g., riding a roller coaster, working hard at a job).

The current study also shows that individuals used metaphors to communicate specific needs for well-being (e.g., a desired identity) in a socially appropriate way when discussing taboo topics. For example, in situations where individuals may feel uncomfortable and vulnerable telling others directly that they feel emotionally hurt and sad because they do not want pity, they may choose to incorporate an identity of a soldier in order to communicate the sadness of their experience but also their inner emotional strength. By evoking images of a soldier returning from battle, people may explain their fragile psychological and emotional state to others as a way to ask for sensitivity without pity, while also attempting to bring cultural legitimacy to the hidden experience of infertility by comparing it to the public experience of cancer. Participants' decisions to use metaphors may have been conscious or unconscious; however, the intention was the same: to elicit others' understanding of their situation and need for well-being while minimizing discomfort for themselves and others.

Finally, by framing the infertility experience in terms of competence, autonomy, and relatedness, individuals may meet those same needs through the communication of metaphors. For example, Peterson and Sterling (2009) found that African American children with asthma used certain metaphors to explain how they controlled their symptoms, and thus used metaphors as a way to become more

competent and autonomous in managing their health. The current study replicates and extends this finding by showing that metaphors enable individuals to meet their needs for well-being. For example, individuals who used the *roller coaster* metaphor to explain their inability to control their emotions may actually be meeting a need for competency by effectively describing their complex emotional experience. Likewise, for individuals who were resentful of their infertility and subsequent treatments, the use of autonomy metaphors may have helped meet their need for autonomy through their communicative attempts to control and frame their infertility identity (e.g., *journey, illness*). Finally, individuals may have met their need for relatedness with metaphors by creating understanding with others about their condition, including explaining their feelings of isolation (e.g., *club*) and shame (e.g., *dirty secret*).

### **Practical Implications**

This study has many practical implications and recommendations: First, individuals who are experiencing infertility may be able to frame their needs in terms of competence, autonomy, and relatedness when determining meaning for themselves as well as discussing their well-being with supportive others. This understanding may lead to empowerment and increase in self-esteem. Identifying metaphors may be especially important for individuals who do not want to seek counseling (like several of our interviewees) but who instead want to use self-help resources (i.e., books, magazines, online articles) to facilitate healing. Second, medical professionals (i.e., physicians and mental health counselors) could listen for the types of metaphors used by patients to determine which needs are most important to their well-being. They might be able to help individuals renegotiate old metaphors as well as create new metaphors to more positively structure their thoughts and actions about infertility. Third, mental health counselors could tailor their responses and reframe metaphors to address the specific needs that patients express. For example, Cecelia's experience in using *journey* to negatively describe her perception that she was not in the stage of life in which she wanted to be was reframed by a mental health counselor to mean that she now had the option of taking ownership of her infertility experience and using it to transform herself while freeing herself of cultural expectations. Because her need for autonomy was addressed and validated, Cecelia found the new meaning of *journey* (renegotiated as an expression of her autonomy) to be helpful in her coping and understanding of her infertility experience. Finally, analyzing metaphors within SDT could begin to explain why individuals experience infertility differently. Perhaps some infertile women struggle with competency, but feel autonomous and connected to others. Do these women experience infertility differently than women who struggle with all three needs or a different combination of needs? Linking this framework to important outcomes for well-being (e.g., life satisfaction,

physical health, anxiety/depression) may help explain why infertility can be devastating for some and a challenge to overcome for others.

Framing patients' needs in terms of competence, autonomy, and relatedness may also explain why certain types of responses from others are not helpful in facilitating well-being. For example, when physicians or supportive others heard patients explain that they were stressed because of infertility, many participants explained that they were given the advice "try to relax." Although relaxation was offered as a way to help with stress, participants found this type of advice to be frustrating, perhaps because it was not addressing their need for competence. Participants explained that they tried to relax, but the experience was so stressful because of timing intercourse, arranging doctor's appointments, and taking hormone medications that "try to relax" fell short of specifically addressing the fact that they felt their experience resembled a job. If employees are stressed at work, "try to relax" would not suffice as a way to cope with the pressure; therefore, it seems that infertility framed as a *job* may function the same way. Instead, it may be more helpful to meet their need for competence by increasing their perception of competence. For example, if individuals are focused on the stress, pressure, and failure of infertility through a *job* metaphor, they can be directed to other activities that will meet their need for competence as well as redefine goals from "I will get pregnant" to a more realistic goal of "I will try everything I can and do my best to become pregnant" to mitigate the feeling of failure and raise perceptions of effectiveness and control. Thus, our study suggests that by paying attention to metaphorical messages, individuals and supportive others may be able to more easily identify communicative and behavioral actions that would help individuals meet their need for overall well-being. This awareness may then lead individuals to reframe their experience in a more positive light in order to increase their understanding, acceptance, and ultimately coping and healing during infertility (Kirmayer, 1993).

### **Limitations and Future Directions**

This study interviewed 22 individuals to begin to explore the metaphors used by people who have experienced infertility and link it to their need for well-being. These specific metaphorical themes may differ in type and number with other participants. For example, the average income for our sample was \$70,000 to \$90,000, with 27% of individuals having earned a college degree as their terminal degree and 59% having earned a graduate degree. For some of the participants in this study, IVF was an affordable reality because they worked at a company or institution that offered insurance coverage for infertility or were able to independently afford treatment. However, we found that this limitation of the study did not significantly impact their use of metaphor. For example, even

when individuals did not feel as restrained in their choices as far as affordability of infertility treatment in comparison with participants in a lower income bracket, they still used metaphors to express their lack of autonomy. They may have felt restrained in their choices because of religious prohibitions or because one partner wanted to stop treatment while the other partner wanted to continue, thus creating a stalemate for an alternative reason. Other metaphors and challenges with infertility may be more salient for individuals with other socioeconomic statuses, education levels, and ethnicities; however, it is important to point out that metaphors appeared in all three need categories. This finding suggests that no matter the sample, individuals may struggle with one or all needs for different reasons, but that all three needs are important to the infertility context.

This was the first study linking infertility to metaphors and the need for competence, autonomy, and relatedness, and much work needs to be done to continue to improve communication surrounding infertility. Although this study identified the metaphors used within the infertility context, it did not address the effectiveness of these metaphors in facilitating coping and healing for individuals experiencing a complex medical condition such as infertility. Future research should consider the impact of metaphors on individuals' coping. For example, most metaphors in this study describe negative experiences with infertility. It may be that some metaphors increase anxiety while others mitigate it. Future researchers could build on the current study by analyzing the combination of metaphors used by individual patients to explain how and why individuals struggle with one or all needs for well-being during infertility. Such an investigation could consider other factors that may contribute to the prominence of certain metaphors for individuals with infertility, such as frequency and availability of social support, type of infertility treatment, family communication style, and marital stability. By learning why people use certain metaphors and combinations of metaphors during infertility, infertile individuals, supportive others, and medical professionals may be able to more quickly deconstruct the meaning that individuals have created about infertility in order to use infertility to increase well-being and bring about transformation in their lives.

The current study also shows how our culture and experiences guide and therefore limit the metaphors we use (Krieger, 2013; Krieger, Parrott, & Nussbaum, 2011). For example, *job* was used to emphasize pressure, stress, and performance. This may be particular to our Western ideal of capitalism, where we believe that the harder we work, the more we succeed (Harvard Medical School, 2009). This may also explain why individuals in our study made comparisons to higher education and learning when talking about their infertility. In the infertility context, this metaphor did not communicate enhanced psychological well-being and in fact was used by interviewees to discuss

their feelings of ineffectiveness and failure in pursuing the goal of conceiving children. In Western countries, our job performance and level of education are a large part of our identity, which may partially explain why infertility becomes a large part of individuals' identity. Western cultures value a belief in internal health locus of control, where individuals control their lives, rather than fate or chance (Wrightson & Wardle, 1997). Using a culture-centered approach to explore the meaning of fertility and infertility in other countries (Basnyat & Dutta, 2012), it would be interesting to see which metaphors for well-being (i.e., competence, autonomy, and relatedness) are most salient among infertile individuals across cultures.

## Summary

The goal of this study was to help ease the communicative burden for individuals experiencing infertility by elucidating the ways in which people have negatively and positively framed their experiences in relation to well-being. This study furthers our current knowledge of metaphor by allowing us to understand and organize the reasons people may or may not be experiencing psychological distress during infertility. Further, by helping individuals identify and renegotiate the meaning behind the aspects they can control (competence), the freedoms they have in relation to their identity and choices (autonomy), and the relationships they can cultivate and develop (relatedness), people may more effectively use metaphorical messages to help themselves and others cope with the complexities of infertility.

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