MEDIA & COMMUNICATION STUDIES | RESEARCH ARTICLE

Authentic leadership in illness blogs: What we can learn from jaw surgery bloggers

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Abstract: This paper argues that authentic leadership theory provides a useful model for explaining the communication of orthognathic or jaw surgery bloggers. Previous studies concluded that illness blogs can empower patients, but no research considered any leadership theory as a model for blogging. For this study, 24 publicly available blogs were analyzed to find expressions that demonstrated each of the four components of authentic leadership, which are self-awareness, relational transparency, communication based upon an internalized moral perspective, and balanced processing of information. The research also analyzed blog comments to find expressions that demonstrated followers’ development of the positive psychological capacities of confidence, hope, optimism and resilience. The research points towards a new model of how this group of bloggers helps themselves and their community transit a time of change and uncertainty. The bloggers appear to be delivering positive socio-emotional leadership to similar others. To confirm the model, researchers need to run interviews and surveys with bloggers and commenters.

Subjects: Health Communication; Oral Medicine; Orthodontics

Keywords: illness blogs; e-health; authentic leadership; orthognathic surgery

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PUBLIC INTEREST STATEMENT

Illness blogs have become a popular tool for patients who wish to share stories, build community, and offer support to similar others. This article examines blogs written by jaw surgery patients to demonstrate how these people take it upon themselves to act as leaders for their community in the delivery of positive socio-emotional care. The bloggers are considered to act as authentic leaders who write with the goal of building their own and other patients’ hope, confidence, inspiration, and resilience. Building these positive psychological characteristics may be especially important when people are dealing with a health issue. The bloggers build these characteristics through becoming more aware of themselves, communicating in a transparent manner, writing from their own moral perspective, and trying to be open and unbiased when making decisions. This study and previous ones indicate that illness blogging has many positive benefits. It should therefore be encouraged.
1. Introduction of the study

Although researchers have described different reasons why people blog about health or illness, no overarching model yet exists that explains why people take up this practice and how patients benefit from it (Ziebland & Wyke, 2012). Using a sample of personal orthognathic or jaw surgery blogs, this research evaluates whether authentic leadership theory provides a useful model for explaining the practice of illness blogging. While much research describes illness blogging as empowering for patients (e.g. Heilferty, 2009; Horter, Stringer, Venis, & du Cros, 2014; Prescott, Gray, Smith, & McDonagh, 2015; Rains & Keating, 2011), no research has yet described this practice as a form of leadership. It is argued here that jaw surgery bloggers act as leaders for similar others in the provision of socio-emotional care.

Although authentic leadership is a relatively new theory, a generally well-accepted definition of it is provided by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008):

\[\text{[It is] a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development. (p. 94)}\]

Each part of this definition will be explained later. The theory is based upon research by Kernis (2003) into the development of optimal self-esteem and authenticity.

While leadership theory is most commonly developed from and applied to communication in business, governmental, and non-governmental organizations, leaders can exist in communities anywhere including those that are virtual, and a person does not need an official title to be a leader. Through a twelve-year US project on what constitutes good work, Howard Gardner (Gardner & Csikszentmihalyi, 2012) developed definitions of direct and indirect leaders that are useful for considering leadership in the context of blogging and social media. Gardner said that direct leaders are people like politicians who are designated by organizations and society to act as leaders. In contrast, he said that indirect leaders are people such as writers, scientists, and artists who lead through the symbolic products that they create. In this paper, jaw surgery bloggers are defined as indirect leaders since they are not designated to any position but rather lead through their symbolic products (their blogs) and through online engagement with interested parties. Gardner defined both direct and indirect leaders as follows:

\[\text{[A leader is] somebody who significantly affects other people, their thoughts, ... feelings, and ... behaviors. And he or she does it voluntarily ... [Leaders] create powerful stories and narratives and use those to get people to change ... These stories help us understand who we are and where we’re going ... [The stories] get us to reject the way we thought and to reject the way we behaved and to do it in a new kind of way. (pp. 258–260)}\]

Research indicates that jaw surgery and other illness bloggers significantly affect other people. Their behavior correlates well with Gardner’s definition of a leader in that they communicate voluntarily, and they tell stories that help people to see particular illnesses and treatments in new ways.

Although leadership is conceptualized in many different ways, Northouse (2012) said that the following components are central to it: “(a) Leadership is a process, (b) leadership involves influence, (c) leadership occurs in groups, and (d) leadership involves common goals” (p. 5). The primary leadership process that jaw surgery and other illness bloggers practice is to tell online the stories of their lives through illness and treatment. Readers then typically have the opportunity to engage with the bloggers through the commenting function available on standard blogging platforms. Regarding influence, Ziebland and Wyke (2012) have described many ways in which online health communicators including bloggers may be influencing readers. These communicators appear to be helping people with “(1) finding information, (2) feeling supported, (3) maintaining relationships with others, (4) experiencing health services, (5) learning to relate the story [of their condition], (6) visualizing disease [by seeing images of different conditions and treatments], and (7) affecting behaviour” (p. 230).
The groups that jaw surgery bloggers lead are those who follow the bloggers online. Their common goal is to successively manage their transition through treatment.

This paper will use example expressions from bloggers and commenters to demonstrate how the bloggers act as authentic leaders for interested others and how commenters commonly respond to that leadership. The paper begins with background information on orthognathic surgery and then presents a literature review on authentic leadership and its applicability to social media and illness blogging. The paper then presents the research methods and provides evidence of how jaw surgery patients use their blogs to authentically lead themselves and others.

2. Background on orthognathic surgery
Orthognathic surgery involves repositioning either or both the upper (maxilla) and lower (mandible) jaws so that the teeth of the upper jaw fit precisely over those of the lower jaw. For patients with sleep apnea, it creates greater airway space. This surgery aims to improve health and results in changes to the face. Although of course hopeful that the surgery and associated treatment will solve their problems, many patients find the experience stressful as they do not know how they will physically and psychologically respond to it, whether it will cure their problems, what they will look like across and after treatment, how others will respond to them, and how their lives will change because of it.

In the US, the average jaw-surgery patient age is 28, and 58.5% are female (Mughal, 2012). The surgery is typically given along with orthodontic treatment after a person’s jaws have stopped growing to relieve functional problems and improve facial aesthetics. Functional problems include “[tem- poromandibular joint] (TMJ) pain and dysfunction … excessive tooth wear … difficulty chewing, speaking, or breathing … [and in some cases] obstructive sleep apnea, which may result in problems with lung and heart function” (Robinson & Holm, 2010, p. 29).

Patients look to improve facial aesthetics if they perceive that their visibly different jaws and teeth are harming them psychologically and socially. This desire should not be seen as vanity since “[s]keletal disfigurement of the face has a negative effect on many aspects of life” (Rustemeyer, Eke, & Bremerich, 2010, p. 155). Many researchers argue that if people perceive their jaws and teeth as a handicap, then they are experiencing a lower health-related quality-of-life as they are suffering not only physically, but also psychologically and socially (Cunningham, Garratt, & Hunt, 2000; Rustemeyer et al., 2010). According to Cunningham, Hunt, and Feinmann (1995), “The majority of patients do not want perfection; they want to avoid being seen as ‘different’” (pp. 161–162).

Treatment is typically lengthy and tough so those who blog have much to discuss. Orthodontists typically need 12–18 months to align the teeth before surgery and then another three to six months afterwards to finalize the correction (Robinson & Holm, 2010). Also, patients must endure the surgical recovery process which takes from immediately after surgery until sometimes a few months to two years later. Although most patients report improved self-confidence, greater satisfaction with their physical image, and better social adjustment (Barbosa, Marcantonio, Barbosa, Gabrielli, & Gabrielli, 1993), up to 30% remain unadjusted as long as 24 months after surgery (Türker, Varol, Ögel, & Basa, 2008).

The surgery is not common. Therefore, blogs obviously provide a helpful method for geographically dispersed patients to find one another. In 2012 in England, 2,718 people received treatment (British Association of Oral & Maxillofacial Surgeons, [BAOMS], 2013, p. 2), and from 2000 to 2008 in the US, 108,264 people (Mughal, 2012) were treated.

As will be discussed, the chief concern of jaw surgery bloggers is how to cope with the many physical, psychological, and social changes that jaw surgery treatment brings. For these bloggers, the period of treatment and recovery is unique and outside of their usual lives. It requires new means for living. Through blogging, these patients lead themselves and others through this period to a new beginning.
3. Literature review on authentic leadership, its use in social media, and aspects of its use in illness blogs

This section defines authentic leadership and then reviews literature on the use of it in social media and illness blogs. As will be discussed, leadership in social media is a little researched area. According to Johansson and Mordenfeld (2013), “there is no significant previous research on the … relationship between social media and authentic leadership or even the connection between social media and leadership theories in general” (pp. 6–7).

As stated previously, authentic leaders are people who foster positive development or growth for themselves and their followers (Walumbwa et al., 2008). This growth occurs through the following four actions: (1) developing their own and others’ self-awareness, (2) being relationally transparent, and (3) making decisions that are based upon their internalized moral perspective and (4) balanced processing of information. In helping themselves and others to develop, authentic leaders draw from and promote the positive psychological capacities of confidence, hope, optimism, and resilience (Luthans & Avolio, 2003), and they promote a positive ethical climate. It is useful to consider how each of the four parts of authentic leadership relate to jaw surgery blogging and illness blogging in general.

According to Ilies, Morgeson, and Nahrgang (2005), self-awareness:

refers to one’s awareness of, and trust in, one’s own personal characteristics, values, motives, feelings, and cognitions … and includes knowledge of one’s inherent contradictory self-aspects, and the role of these contradictions in influencing … thoughts, feelings, actions and behaviors. (p. 377)

Research has shown that people can increase their self-awareness by writing personal narratives (e.g. Ridgway, 2001; Turkle, 1999), which is what jaw surgery and other illness bloggers do. Since blogs typically allow followers to tell their stories, too, all blog contributors have an opportunity to grow through blogging.

As defined by Kernis (2003), relational transparency is about “endorsing the importance for close others to see the real you, good and bad” (p. 15). The fact that illness bloggers typically disclose intimate details of their lives with illness in publicly-available blogs indicates that they are aiming to be relationally transparent. Research papers on many different types of illness blogs describe the types of issues that the bloggers discuss (e.g. Do Rego Barros, Silva Sousa, & Turrini, 2013; McCosker, 2008). Bloggers also often include personal photographs so that followers can see examples of what the illness and its treatment look like.

An internalized moral perspective refers to how people may regulate themselves using their own values and moral standards and not those of an external group or society (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, & Walumbwa, 2005). Jaw surgery and other illness bloggers appear to use their own values and moral standards when telling their stories and interacting with followers. For example, by voluntarily making a choice to blog, patients are acting upon their own values and moral standards to communicate with similar others in society.

Regarding the fourth component of authentic leadership, which is balanced processing, Gardner et al. (2005) explained that when people use it to evaluate information about themselves, “they are able to more objectively evaluate and accept both positive and negative aspects, attributes and qualities of themselves, including skill deficiencies, suboptimal performance, and negative emotions” (p. 356). When people exercise balanced processing, they are demonstrating openness to learning and hearing others’ stories. The mere fact that a person would write or engage with a jaw surgery or other illness blog indicates that the person is willing to exercise at least some balanced processing.

Luthans and Avolio (2003) noted that authentic leadership may develop through critical or trigger events “that stimulate positive growth” (p. 247). These events may be negative, such as
life-threatening illnesses, or positive, such as voluntarily travelling to an entirely new culture. Many jaw-surgery patients see their treatment as a critical event that has both negative and positive aspects, and that changes their lives. The treatment therefore inspires them to blog for themselves, the jaw surgery community and interested others. It appears to spark the development of authentic leadership.

This review now turns to look at specific research on whether and how people develop authentic leadership through their use of blogs and social media. Only two studies were found that directly explored the link between the development of leadership in people and their use of social media. In one of these studies, Bertoncini and Schmalz (2013) explored the perception that social media was encouraging authentic leadership behaviors among members of the millennial generation, who are people born from 1982 to 2000. In the other study, Hanuscin, Cheng, Rebello, Sinha, and Muslu (2014) researched the use of blogging in the personal development of year-nine US physics teachers who were learning to become teacher leaders. These studies are discussed below.

Bertoncini and Schmalz (2013) ran a web-based survey with millennial university students and alumni to test the perceived relationship between social media use and the four dimensions of authentic leadership. Regarding the development of self-awareness through social media, they found the following:

The majority only agreed … that social media makes them aware of their impact on people, while disagreed … that social media gives them the opportunity to reflect on their strengths and weaknesses …, and makes them aware of their emotions and personal goals or personality. (p. 78).

Therefore, the researchers found that social media use was not fully helping most millennials to become more self-aware.

Regarding transparency, most respondents agreed with most of the survey statements as follows:

[While] they think that social media usage increases the chance to represent a distorted self-image to others, … at the same time they make sure to represent nothing but their real self, especially with people they are close to … They also make … sure to share information and expressions of their true thoughts and feelings, but most of them disagree on the fact that social media enables them to narrow the gap between how they view themselves and how others view them. (p. 79)

Therefore, the researchers found that social media use was not fully helping most millennials to become more self-aware.

Regarding using their own moral perspective and balanced processing in making decisions, the researchers found that “millennials demonstrate beliefs that are consistent with their actions and [that] enable them to take input from different points of view” (p. 80). This study therefore indicates that most millennials perceive that social media use encourages some but not all aspects of authentic leadership. The researchers commented that the relationship between social media use and authentic leadership warranted further study and that their contribution provided just a start.

The research by Hanuscin et al. (2014) sought to understand the affordances of blogging in the development of teacher leaders. In this study, teacher leaders were defined as experienced teachers who “work beyond the classroom, supporting other teachers as learners and leaders, and encouraging others to improve their practice for the benefit of all students” (p. 207). The researchers reported that “[t]he individualized nature of the blogs … provides a means for personal growth and reflection” (p. 220), which indicates that blogs afford the development of self-awareness. The researchers also reported that “[t]he public nature of blogs … exposes teachers to diverse viewpoints, experiences, and contexts … [and contribute] to meaningful dialogue and social support”, which indicates that the blogs aid in balanced processing of information (p. 220). Therefore, this research indicates that at least two aspects of authentic leadership, self-awareness and balanced processing, may be developed through personal blogging.
Much research on illness blogging supports the idea that this blogging is good for people, that blogging supports the positive psychological capacities of confidence, hope, optimism, and resilience. For example, Chung and Kim’s (2007) online survey of 113 cancer patients and carers who interacted with or hosted blogs found “that blogs function primarily as tools for emotion management and information-sharing rather than as tools for problem-solving or prevention and care” (p. 304). The researchers found that patients are not using blogs to circumvent the medical system but to work alongside it. Emotion management and information sharing are both healthy and empowering things for cancer patients and their carers to do.

In another study, Rains and Keating (2011) surveyed 121 health bloggers to evaluate whether bloggers could gain “social support and achieve some of the health benefits of supportive communication” (p. 512). These benefits are “health self-efficacy, perceived social functioning, purpose in life, personal growth, and [reduced] loneliness” (p. 523). The results showed some evidence that bloggers do perceive support from their readers, particularly when bloggers post more frequently and receive at least one comment on each post. The results also found a positive association between perceived social support and two of the benefits of supportive communication, health self-efficacy and personal growth. The benefits of improved health self-efficacy and personal growth both align with the authentic leadership characteristic of self-awareness. The study also found that when bloggers had low support from friends and family but felt socially supported by readers, they also gained the benefit of feeling less alone, which aligns to some degree with the authentic leadership characteristic of relational transparency. The study concluded that all health bloggers may feel socially supported through their blogs, but those who perceive the least support from friends and family have the most to gain.

As another example of the positive nature of blogging, Horter et al. (2014) conducted research on a blogging project established by Medecins San Frontieres (MSF) to empower multi-drug-resistant tuberculosis (MDR-TB) patients. Through interviews with bloggers, project staff members, and World Health Organization (WHO) and MSF stakeholders, the researchers found that blogging: (1) helped patients to follow the treatment, (2) gave patients alternative support, and (3) allowed patients to express themselves and feel empowered. As discussed, the relationships that bloggers established with followers motivated bloggers to continue with the treatment, which indicates that they were developing resilience. According to this study, MDR-TB bloggers felt encouraged by followers’ supportive words and did not want to disappoint readers by stopping treatment. Further, bloggers felt that if they continued treatment, similar others would do the same. Bloggers were thus able to act as role models, which is a type of leadership. Blogging also provided patients with a helpful distraction from their treatment and its side effects. It also helped patients to gain a sense of solidarity, feel less isolated, find a place to share information about treatment, and find a space in which to give others hope. Blogging also provided the patients with an opportunity to feel more positive about what they had achieved. Those who were cured could look back on their blogs and feel a sense of achievement. According to the research, some even gained a sense of a “positive celebrity status” (p. 6). The researchers found only positive consequences of illness blogging. This research therefore supports the notion that illness blogging can help people become more confident, hopeful, optimistic, and resilient.

4. Methods
To conduct this research, the researcher first collected a list of publicly available jaw surgery blogs. To create the list, the researcher located blogs by searching from 1997 forward on the phrase jaw surgery blog in Google search. The year 1997 was selected for starting since the term weblog first appeared in that year (Blood, 2002). The searching was conducted from June to August 2014. Only blogs written specifically to document a person’s personal journey through the surgery were included. Blogs were also located by searching links included on bloggers’ pages. All blogs were written in English by single authors who documented their experience of jaw surgery. All bloggers had obstructive sleep apnea or jaw deformities that could not be treated with orthodontics alone, and did not have post-traumatic deformities, cleft lip and palate, or other named syndromes. Finally, the blogs located were available to everyone, requiring no site registration or membership to read. They
therefore contained information that was freely available to all, information that the bloggers chose to make public. Therefore, this paper gives the bloggers’ names and URL addresses as other researchers have done (e.g. McCosker, 2008; McCosker & Darcy, 2013). Blogs from which the researcher took quotes are listed at the end of this paper.

In this study, 241 blogs were found of which 203 were written by females and 38 by males. The earliest blogs were written in 2003. While the bloggers represented a range of occupations, many were students or worked in the information technology industry. Among the group were stay-at-home mothers, a lecturer, a doctor, a dentist, and an ice hockey player. The bloggers’ ages ranged from 17 to 61. Most of the bloggers were located in the US (136), but others were from the UK (37), Canada (28), Australia (7), Southeast Asia (4), the Philippines (2), Sweden (2), and New Zealand (1). The countries for 24 of the blogs were indeterminable.

From the 241 blogs found, 24 richly written blogs were selected for analysis. This purposeful selection followed qualitative research advice by Babbie (2011), which is to identify participants who have extensive knowledge and rich experience within the topic under study. The 24 blogs selected for this research were written by men and women of different ages and from different countries. The blogs contained posts that told a person’s complete story of surgery and recovery to at least 90-days after surgery. Many of the blogs spanned several years and contained hundreds of posts and comments. Each blog was read in its entirety.

In qualitative research, analysis typically begins with a particularly rich example. For this study, two early blogs provided the starting points. One of these blogs was written by Roger Arrick who began writing in 2003 and the other was written from 2005 to 2014 by Erin Galbraith. As early jaw surgery bloggers, both Arrick and Galbraith can be considered to be innovators of this genre. The researcher then collected expressions of authentic leadership from the remaining bloggers and commenters to provide evidence of how the authors were acting as authentic leaders and how commenters were responding to this leadership. As listed in the references, other blogs from which quotes were taken were written by people writing anonymously or under their first names or pseudonyms as follows: John, Cupertino Joe, Graham, Gordon, Anonymous (Experiences with Adult Orthodontics and Orthognathic Surgery), Michelle, Andy, Makay, and Stephanie. Example of the following types of expressions were collected from the blogs: (1) authors’ reflections on how they desired to or actually increased their self-awareness through blogging, (2) authors’ statements on how they desired to or did achieve relational transparency through blogging, (3) commenters’ expressions of appreciation for authors’ relational transparency, (4) authors’ expressions of using their own moral perspective in blogging, (5) authors’ expressions of balanced processing of information in blogging, and (6) commenters’ expressions of having become more hopeful, confident, optimistic, or resilient as a result of participation with a blog. Conclusions were drawn about the usefulness of authentic leadership theory as a model for explaining the act jaw surgery blogging.

5. Results and discussion
This section presents and discusses example expressions of the different components of authentic leadership in the sample of jaw surgery blogs.

5.1. Expressions providing evidence of increased self-awareness through blogging
As stated earlier, self-awareness is about having knowledge of oneself or trust in oneself. At the beginning of their blogs, some authors expressed that they were writing to manage their thoughts and emotions through treatment or to keep a record of their physical changes. Taking time to reflect on what one is concerned about and how one is changing both indicate deliberate attempts to increase self-awareness.

As an example of the above, Michelle expressed that she had decided to blog with the aim of managing her thoughts and emotions, which would be therapeutic or healthy for her. She wrote:
As I walked the pups this morning, it dawned on me that I should start blogging about my upcoming jaw surgery … Why? Because when I’m not thinking about the environment or my job, I’m thinking about this surgery. So as opposed to ignoring this reality, I’ll instead chronicle this experience … hopefully, blogging about … [it] will be a therapeutic exercise for me, and … maybe it’ll [also] be helpful for someone … similar.

Through “chronicling” her experience in a blog, Michelle was trying to gain more control of her thoughts and emotions about the unknown and stop rumination. She was aware that the treatment was occupying her thoughts and therefore planned to use the blog to write them down.

As another example of how a blogger thought that he could stay or become more self-aware through blogging, John expressed that he wanted to use a blog to document his progress through treatment. He wrote: “I want to keep a record for myself and track my own progress, experience the before and after as it were”. Keeping a record would allow this blogger to be aware of where he had come from and how he had changed.

At the conclusions to their blogs, many authors expressed different ways in which they had grown as people through both the surgery and blogging. Knowledge of one’s personal growth through a process indicates self-awareness. Some expressions of personal growth were as follows: Some bloggers expressed how fortunate they were to undertake surgery and come through it so well; some expressed that everyone who undertakes the surgery has a different reason for doing so and that orthodontists and surgeons cannot guarantee specific results; some expressed how committing to a blog takes effort, and that, as life returns to normal, time must be set aside to continue blogging; and some expressed how blogging can help people develop more concern for others. On this last point, Arrick wrote that through blogging he had become more interested in others. He said, “Being a geek, I’m an introvert and have never been much of a people-person, but this experience has profoundly changed me for the better. There’s something special about being connected to others through a common mission”.

5.2. Expressions providing evidence of the desire for and achievement of relational transparency in blogging

As stated, relational transparency is about wanting others to see the real you. This desire appears to be a natural outcome of bloggers’ moral perspective of desiring to help others by sharing their stories, which is discussed later.

Makay’s blog provides a useful example of a jaw-surgery blogger’s desire to become relationally transparent. She stated, “I hope that my life will somehow … enthrall you, and thus lead you to following [my blog]—so that I may come to know you, and … you may come to know me as I openly express myself.” Makay wanted to use her blog to interest people with stories of her life through jaw surgery so that they would become regular subscribers and openly communicate with her.

Bloggers tried to be relationally transparent by disclosing intimate details of their treatment. For example, Gordon wrote, “I am blogging my small adventure here … to give those prospective jaw surgery people a candid take on the whole process, hopefully providing all of the necessary details”. Near the start of their blogs, authors typically disclosed the history of their condition and how it impacted upon their lives. They later discussed treatment plans, progress, setbacks and outcomes. Personal reactions to the treatment were gradually revealed (e.g. pain and its management; swelling and bruising; emotions and mood; issues with speech, food, eating, and weight; how their faces changed), and stories were told of visits with medical providers, time in the hospital, and insurance issues and costs. The bloggers posted many photographs of themselves. They also discussed commenters’ stories. Some bloggers used self-deprecating humor, delivering humorous text, photos, and comics.

5.3. Commenters’ expressions of appreciation for authors’ relational transparency

Some commenters expressed appreciation for bloggers’ relational transparency. For example, a commenter on Andy’s blog wrote, “I … really admire your courage about ‘putting it all out there.’ It’s
not an easy decision to let others into our personal lives to witness all of our feelings of self consciousness for whatever reason."

Other commenters expressed appreciation for the sheer amount of information that bloggers were willing to share. A commenter on Graham’s blog wrote, “Your website ... has WAY more information than I found in years of casual conversations with dentists, Google searches ..., and preliminary consultations with surgeons ...”

5.4. Expressions of moral perspectives on blogging

Many patients expressed their own moral reasons for blogging about their surgery. In choosing to blog, patients exercised their personal moral responsibility to do the following: help similar others by telling their story, keep family and friends informed, educate more broadly about jaw surgery, and encourage broad sharing of health information.

Regarding the moral responsibility to help others through storytelling, an anonymous blogger wrote the following in 2003 (Experiences with Adult Orthodontics and Orthognathic Surgery):

When I was doing my research, I was astounded at the lack of web resources for my condition, and I decided to create this webpage to help towards filling that ... void, at least in terms of personal accounts. One of the most interesting sites to me was a page (since taken down) that chronicled someone else’s experience with one of the same surgeries I had. It made me feel better that I was not the only person undergoing this process, and also helped prepare myself better for my own treatment by learning from what he had already gone through.

The above blogger wished to fill a hole in available information by describing her lived experience of treatment. Having found only one other personal account, she thought she should contribute her experience, too, to help similar others prepare for the unknown and understand that they were not alone. She was expressing a moral desire to help similar others.

As another example of this responsibility, Arrick wrote:

Really, it’s a tad bit selfish to go through all of this - the condition that lead to it, the discovery, the decision-making process, the panic, the healing process, and all that without sharing your experience with others.

Arrick expressed a moral responsibility to share stories of illness.

Some bloggers expressed a desire to make their stories humorous to help others through recovery. For example, Joey wrote, “Though the reasons for jaw surgery and the recovery experiences vary greatly, I found blogs to be informative, encouraging, and a little humorous at times ... people find the good/humor in their inconvenient state after their surgery”. The idea that humor and laughter may help people by relieving anxiety and tension is supported by many studies (e.g. Abel, 2002; Kuiper & Martin, 1998; Moran, 1996). Therefore, those bloggers who wished to provide humor were demonstrating sensitivity towards similar others. Abel’s (2002) review of humor and stress research found that “a good sense of humor is related to muscle relaxation, control of pain and discomfort, positive mood states, and overall psychological health including a healthy self-concept” (p. 366). Each of these aspects is beneficial.

Other bloggers expressed that they were blogging in part to keep family and friends informed of their treatment. For example, Graham said, “I’ve documented, briefly, my 90 day road to recovery ... for family and friends to follow along.” Keeping family and friends informed may of course help ease people’s minds that their loved one has safely undergone surgery. It may also allow them to adjust to the person’s changed face. For the first few weeks after surgery, the faces of jaw-surgery patients typically look traumatized. In their book on face transplants and identity, Bluhm and Clendenin (2009) discussed the need for better encounters between the facially traumatized and non-traumatized, writing:
Burn victims, and other folks with severe facial trauma ... must experience very difficult episodes of social staring and avoidance ... [I]f our most basic human interactions with another are vis-à-vis their face, then exhibiting discomfort at a missing or severely distorted face is not necessarily an indication of rudeness or insensitivity ... Missing here is a creative transition for both the disfigured and nondisfigured. (p. 21)

When jaw surgery patients invite family and friends to follow their blog, the patients are offering a type of “creative transition” for all involved to become accustomed to their changed face. Through a blog, the patient acts as a leader in preparing others for what to expect when next they meet. They can see the patient at any point in transition.

Some patients wanted to use their blogs to educate others about the need for jaw surgery. For example, Gordon wrote:

I’m ... undergoing double jaw surgery ... So what does that mean to all of you with perfect jaws? The bottom jaw grows out farther than the top jaw, so what’s to be said about the myriad of problems is: “That ain’t right.”

Many people may not understand why others would put themselves through this surgery. Therefore, some patients used their blogs to explain why the surgery was necessary.

Arrick used his blog not only to share his story but to encourage others to share illness stories generally so that everyone might learn from their experiences. He noted that no one, not even the best doctor, knows everything and that therefore it is in everyone’s interest to share information:

We’ve all heard the stories about a friend or family member that had a strange ailment, went to a dozen doctors who couldn’t figure it out, and ultimately discovered the problem and/or solution on their own or with the help from a non-Doctor friend. The human body is so ... complex ... It shouldn’t surprise us that it’s impossible for any single ... Doctor to know and understand each piece of this ... puzzle ... [O]nly the patient has lived in their own body for a lifetime ... and often [he or she has] unique insight into what’s going on ... Expectedly, forums eventually appeared for medical issues ... Forums allowed everyday people who suffered from similar illnesses to get educated at a level never before possible ...

Arrick envisioned illness blogging and other health-information sharing on the Internet as critical contributions to health knowledge in which everyone could participate and benefit. He thought it was everyone’s responsibility to share.

5.5. Expressions providing evidence of balanced processing in blogging
To review, balanced processing is the ability to be unbiased in decision-making, to gather information from others and consider it fairly. When bloggers asked information-related questions of readers, they appeared to be exercising at least some level of balanced processing. Bloggers asked questions about many aspects of followers’ treatment. Some bloggers even asked followers what they thought about the blogger’s changed appearance and what aspect of the treatment they would like the blogger to write about. For example, Makay asked, “So what do you think about my transformation thus far? Any questions for me to answer?” By asking others what they thought of her new look, this blogger was seeking feedback on how others’ perceived her treatment. By asking if anyone had any questions for her, she was considering others’ ideas about what they wanted to hear. This question asking indicates that the blogger was at least somewhat open to ideas and that she would consider others’ ideas in her decision-making.

5.6. Commenters’ expressions of hope, confidence, optimism, and resilience
Authentic leadership stems from a desire to build hope, confidence, optimism and resilience in others so it is useful to consider whether commenters expressed these feelings towards the jaw surgery bloggers. As found in this research, commenters commonly expressed how people’s blogs gave
these positive psychological capacities, which indicates that commenters often do see bloggers as authentic leaders. For example, a commenter on Arrick provided an example of how his blog delivered hope. The commenter wrote, “Sleep apnea has made me tired, irritable, and sluggish … Your statement about going another 40 years like this rang true. … your blog … has given me HOPE.”

Some commenters expressed that bloggers’ stories boosted their confidence in the treatment. For example, a commenter on Andy’s blog wrote:

I … had my … [jaw-widening surgery] … two weeks ago. Your story boosts my confidence as I am now also going through the phase where people are staring. I just smile and ask hey whats up! Knowing this is only temporary and reading success stories such as yours motivates me.

Many commenters expressed that other people’s blogs inspired them to write their own blogs. For example, Cupertino Joe wrote: “I found Roger Arrick’s … blog incredibly helpful and it inspired me to share my experiences with those who might be interested.”

Many commenters also expressed that people’s blogs helped them to continue with their treatment, which indicates that these blogs can promote resilience. For example, a commenter on Galbraith’s blog wrote, “your blog has helped me get through some … difficult days. It let me see that I was not the only one going through this. There are good … and bad days. The good days make it all worth it.” As another example of how these blogs promote resilience, a commenter on Stephanie’s WiredLady wrote, “I wanted to … thank you for your humor. You are hilarious!! You rock and keep me going when I feel down.”

6. Conclusions
The example expressions of how selected jaw surgery bloggers used the four components of authentic leadership and how commenters responded to that leadership indicate that authentic leadership theory is useful for explaining jaw surgery blogging and perhaps illness blogging in general. As discussed, patients provided evidence for increasing their self-awareness through blogging, and for communicating in a relationally transparent manner based upon their own moral standards. Patients also provided some evidence that they were using balanced processing of information in their blogs. Also, many commenters expressed that they gained hope, confidence, inspiration, and resilience by participating with the blogs. The next research step is to survey or interview jaw surgery and other illness bloggers to further determine how well their characteristics match those of authentic leaders. Illness blogging appears beneficial for both writers and readers. As such, the practice should be encouraged.
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