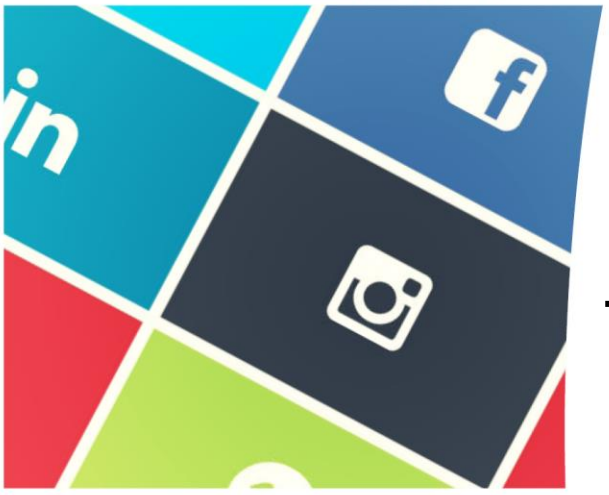
REACH

Supporting Military Families Through
Research and Outreach



Social Media Communication with Military Spouses

February, 2015

Research

Outreach

This product is the result of a partnership funded by the Department of Defense between the Office of Military Community and Family Policy and the USDA's National Institute of Food and Agriculture through a grant/cooperative agreement with The University of Minnesota.

Submitted by:

The Military REACH Team
The Research and Outreach (REACH) Laboratory
The University of Minnesota

Lynne M. Borden, PhD (PI)

Octavia Cheatum, BA

Kyle R. Hawkey, MEd

Michelle W. Kuhl, PhD

Amy Majerle, MA

Jessie H. Rudi, MA

Michelle D. Sherman, PhD (Lead Author)

Burgess Smith, MA

David Steinman, BA

Lara Westerhof, BS

Lynne M. Borden, PhD
Department of Family Social Science
The University of Minnesota
lmborden@umn.edu
(612) 625-4227

This product is the result of a partnership funded by the Department of Defense between the Office of Military Community and Family Policy and the USDA's National Institute of Food and Agriculture through a grant/cooperative agreement with The University of Minnesota.

Table of Contents

Executive Summary **1**
Introduction **2**
Stressors Faced by Military Spouses 2
Importance of Military Spouse Wellbeing for the Broader Family 3
Importance of Communication between Department of Defense and Military Spouses 4
Existing Research on Social Media Use Among Military Spouses **5**
Growth of Online Social Media Use **5**
Motivations for Using Social Media **6**
Strong-tie Weak-tie Network Theory 6
Communal Coping Theory 7
Uses and Gratifications Theory 7
Motivations for Using Social Networking Sites 8
Building Relationships and Expanding Social Connections 8
Exchanging Social Support 10
Connecting with Others Regarding Interests or Causes 11
Seeking Information and Communication 11
Other Motivations for Using Social Media 11
Military Spouses and Social Networking Sites 12
Strengths, Limitations, and Challenges of Social Media **13**
Strengths of Social Media Surrounding Communication 13
Limitations of Online Communication and Possible Challenges 14
Social Media Use and Wellbeing **17**
Social Media Use: Parenting and Health **18**
Leveraging Benefits of Existing Online Platforms **19**
Online Social Learning 19
Communities of Practice 20
Best practices. 24
Peer-to-Peer Support 24
Organizational Social Networking Best Practices **27**
Anonymity and Self-Disclosure 28
Gender Differences 28
Recruitment, Retention, and Participation 29
Online Activity 29
Conclusions and Best Practices **30**
Examination of Existing Online Platforms 30
Creation of New Social Media Sites 31
Keep Social Media Platforms Active 31
Cultural Awareness 31
Tailor Content to Meet Specific Needs 31
Safety Concerns 31
User Driven Development 32
References **33**
Appendix **A-1**

Executive Summary

In response to a request from The Office of Deputy Assistant Secretary of Defense for Military Community and Family Policy, the University of Minnesota's Center for Research and Outreach (REACH) team conducted a systematic review of the literature focused on online social networking, including online forums of communities of practice (CoPs) and peer-to-peer activities (see appendix for definitions of various terms). Approximately 260 documents were critically reviewed for use within this report, including empirical articles, relevant literature reviews, reports, and policy briefs. Because research on military spouses' use of social media is sparse, this review included a broader perspective, including research from the civilian sector.

Military spouses are a heterogeneous group, living across the world, coming from diverse backgrounds, possessing unique experiences, and facing distinct challenges. They face unique stressors as part of the military lifestyle, including coping with their Service member's long, often unpredictable duty hours and deployments, and frequent geographic moves. The wellbeing of military spouses is important to the entire family, and may be especially important for Service members and children during deployment. The Department of Defense has been both proactive and responsive to the needs of military spouses, offering many support programs for this population.

The Department of Defense specifically encourages Service members and their families to use social media, a popular, rapidly-growing mode of communication. According to the Pew Research Internet Project, as of early 2014, 97% of 18-29 year-olds and 93% of 30-49 year-olds report using the Internet. In addition, 74% of online adults use social networking sites.

Very little research exists on social media use among military spouses, with the exception of several unpublished theses or dissertations by graduate students. Research with civilian samples has found that social media sites are largely used to develop or maintain social interactions. Five categories of motivations emerged in the literature review, including: (1) developing and maintain relationships; (2) exchanging social support; (3) connecting with others regarding interests or causes; (4) seeking information and communication; and (5) other reasons (e.g., enjoyment).

Although communication via social media has numerous advantages (e.g., convenience, easy access, low-cost), research has identified several possible challenges associated with its use, including the risks of miscommunication, harm to relationships, unhealthy social comparison, security / privacy breaches, exposure to danger (e.g., cyberbullying), leaks of sensitive information, and the spread of rumors. In addition, research has documented links between social media use and both positive and negative indicators of wellbeing, demonstrating the need for additional research in this area.

Social learning, communities of practice, and peer-to-peer learning are examples of popular social networking modalities, each with unique functions, strengths, and weaknesses. Research from the business sector regarding the use of social media also has relevant implications regarding issues of anonymity and self-disclosure, gender differences, and recruitment/retention of users on social media sites. As the Department of Defense expands its use of social media, it may leverage the benefits of online communities of practice, peer-to-peer activities, and social media/learning. The Department of Defense may examine current social media utilization, grow usage in strategic areas of high potential, and address the specific needs of individual Service members, spouses, and military families.

Introduction

According to the 2013 Department of Defense Demographics Report, 51.7% of the total force of the U.S. military personnel are married. At the time of that report, there were 1,076,565 military spouses, nearly half of whom were 30 years of age or younger and 34% in their 30s. Further, 92.7% of military spouses are female.

Military spouses are a heterogeneous group, living across the world, coming from diverse backgrounds, possessing unique experiences, and facing distinct challenges. Some military spouses enter marriage with familiarity with the military; they may have had a military background in their own upbringing. Other military spouses may be new to military culture, and are still learning about the distinct culture which contains its own language, traditions, and values. On the other hand, some Service members join the military after the couple has connected or wed, so both partners are indoctrinated into military culture simultaneously.

Military spouses are a heterogeneous group, living across the world, coming from diverse backgrounds, possessing unique experiences, and facing distinct challenges.

The purpose of this report is to inform the Department of Defense's online outreach and communication with military spouses by leveraging the benefits of online communities of practice, peer-to-peer activities, and social media/learning. Approximately 260 documents were critically reviewed for use within this report. Because research on military spouses' use of social media is sparse, this review included a broader perspective, including research from the civilian sector. In order to represent the most recent literature and due to the rapid changes in social media, only literature that was produced in the past decade was reviewed. In select instances, literature published prior to these dates was also included in order to ensure adequate coverage of literature.

To provide context for this information, the report begins with an overview of the demographics and experiences of military spouses. Next, the literature on the growth of online social networking is reviewed, including the demographics of social media users and the motivations and theoretical frameworks surrounding social media use. Potential strengths, limitations, and dangers of online communication are reviewed. Three kinds of social media are reviewed, including social learning, communities of practice, and peer-to-peer support; applications to military spouses are provided as appropriate. Each type of social media has unique functions, strengths, and weaknesses. The literature on the use of social media in businesses and organizations also has relevant information regarding the development and maintenance of social media that may be useful. This review concludes with research-based best practices that may be useful in determining best communication practices with military families, specifically spouses.

Stressors Faced by Military Spouses

Research has revealed several factors that can be sources of stress for military spouses. First, the nature of their military spouses' jobs can create challenges. Service members often have long, unpredictable duty hours which can interfere with involvement in family activities (Martin & McClure, 2000). Many factors can also take Service members away from the home, including Temporary duty assignments (TDY), schooling, field training, peacekeeping missions, and deployment (Schumm, Bell, Knott, & Rice,

1996). Military spouses live with the risk of their Service member experiencing injury or death in the line of duty (Padden & Posey, 2012). They sometimes assume greater household and parenting responsibilities when the Service member is dedicated to work duties.

Second, frequent geographic moves can pose unique opportunities and challenges for military spouses. Although seeing new parts of the world and experiencing different cultures can be exciting, the hassles of moving and re-establishing new homes and social networks can be stressful (Burrell, Adams, Durand, & Castro, 2006). As a result of frequent relocations, some military spouses become socially isolated due to the geographic distance from family members and the continuous effort involved in establishing new support networks with each move. These frequent moves can also create challenges for military spouses' higher education and employment, sometimes resulting in decreased income and interrupted career trajectories (Clever & Segal, 2013). According to the Defense Manpower Data Center (2013), 25% of military spouses are unemployed. Further, recent research found that military wives who were employed full time earned 25% less than their civilian counterparts (Kniskern & Segal, 2010).

Third, a specific stressor is the military spouse's experience of the Service member's deployment. Most military spouses successfully cope with the additional responsibilities during deployment (Lester et al., 2011). Some families relocate temporarily during deployment to be near family (Schumm, Bell, & Knott, 2000) which can provide additional support but can also pose unique challenges especially for school-aged children who may have to change schools during the move. Stressors vary across the deployment cycle (Lapp et al., 2010), but may include feeling that life is on hold prior to deployment. Worry, loneliness, and feeling overwhelmed by household responsibilities, and parenting challenges may be prominent during deployment. Adjusting to a new normal can also be stressful after homecoming (Bowling & Sherman, 2008). In particular, Service members' deployments to Iraq and Afghanistan have been associated with elevated rates of depression, anxiety, sleep problems, adjustment disorders, and somatization among military spouses (Burton, Farley, & Rhea, 2009; Green, Nurius, & Lester, 2013; Mansfield et al., 2010; Verdeli et al., 2008). Lengthy deployments, over 11 months, have been associated with not only more mental health problems among wives, but also decreases in at-home spousal participation in health-promoting behaviors including healthy diet and adequate rest (Padden, Connors, & Agazio, 2011).

Importance of Military Spouse Wellbeing for the Broader Family

Research in the civilian sector has clearly documented links between parental psychological health and family wellbeing (Beardslee et al., 1993; Hudson, Dodd, & Bovopoulos, 2011). Recent research with military families has documented associations between military spouses' emotional health and the broader family environment. For example, a study of 161 female military spouses found that military wives' emotional distress was negatively related to family cohesion, expressiveness, and sociability; wife distress was also positively related to family conflicts (Green, Nurius, & Lester, 2013). Thus, the wellbeing of military spouses is important when considering the overall functioning of military families.

Functioning of at-home military spouses can be very important to deployed Service members, and troubles on at home may distract them from their mission. Gewirtz and colleagues (2011) found that the largest source of stress for deployed personnel was stressors at home. Worry about these at-home problems has been identified as the largest contributor to mental health problems among deployed personnel, having a larger impact than occupational stress. Thus, Service members' concerns about home front stressors have the ability to affect mission readiness and role functioning.

The wellbeing of the at-home military spouse is especially important when children are present in the family. Although most military youth fare well with parental deployment, growing research is documenting that some children experience difficulties (Creech, Hadley, & Borsari, 2014). The at-home parent can serve as a buffer for children throughout the deployment cycle, which can reduce negative outcomes (Gewirtz et al., 2011). Research of this nature demonstrates that supporting military spouses' wellbeing can benefit the entire family.

Importance of Communication between Department of Defense and Military Spouses

The Department of Defense specifically encourages Service members and their families to use social media.

The Department of Defense has been both proactive and responsive to the needs of military spouses, and many support programs are offered. Infrastructures are provided at many local installations for military spouse support, such as Family Readiness Groups (peer support programs for military spouses and other family members). Also, military family members are often urged to participate in pre- and post-deployment events to open lines of communication and provide opportunities for support. The Department of Defense's Office of Military Community Outreach also offers Military OneSource, a phone-based and online resource that provides an immense array of supports 24 hours a day for military families. Another Department of Defense program for military spouses is the Spouse Education and Career Opportunities Program (SECO), which provides support for managing career and educational transitions. In addition, a structure to support military-family communication is the United States Air Forces' Key Spouse Program which promotes open communication between a volunteer spouse (key spouse) and unit leadership, thereby increasing awareness of community resources, enhancing unit morale, bolstering family resilience, and increasing peer-to-peer support.

The Department of Defense specifically encourages Service members and their families to use social media, and they have developed a Social Media Guide (Department of Defense, n.d.). The Department of Defense encourages people to use social media to gain information, create and maintain supportive relationships, and share opinions about military life. Content on these media platforms can range from promotion of social connections to spousal employment issues to communication in the wake of a crisis or disaster. This guide lists numerous existing social media initiatives, pages, and resources on various social media platforms, including some on Facebook, Twitter, iTunes, Military OneSource, LinkedIn, Pinterest, and others. Numerous social media guidelines are described to ensure that postings are appropriate for Service members and families, including prohibitions on profane, graphic, explicit or racial comments; bans on solicitations or advertisements and material referring to illegal activity, and spam; and encouragement of users to take responsibility for the content of their posts. The Guide also lists recommendations for users on how to keep their information safe (e.g., refrain from posting information about specific dates, locations, or causalities), increasing privacy settings on social media, protection passwords and other personal information.

The Department of Defense has set goals for developing strategic plans for social media, with the intent of such efforts reducing military spouse unemployment. Specifically, according to the 2013 Department of Defense's Plans for the Support of Military Family Readiness' Annual Report to the Congressional Defense Committees, in fiscal year 2014 the Department of Defense intends to improve "communications with military spouses by continuing to execute a comprehensive strategic communication plan including social media" (p. 19-20) as part of its goal of reducing military spouse unemployment rates. This report also reflects the Department of Defense's commitment to increasing

communication in the following recommendation: "Recommend that the Department of Defense improve communication of existing services to Service members and families, and further analyze how end-users within the Reserve Component, geographically dispersed, and Active duty Service members and families who live on and off installations learn about services available to military members and their families" (p. 5).

Existing Research on Social Media Use Among Military Spouses

Very little research exists on social media use among military spouses, with the exception of several unpublished papers by graduate students. Krenzer's (2013) masters thesis analyzed military spouses' postings from 10 Facebook pages connected to Fort Bliss. Themes that emerged in the postings included using social media to acquire or provide information, to seek support, and to discuss upcoming events.

A dissertation (Desens, 2013) examined the kinds of social support messages that were posted on discussion boards for significant others of Service members. Almost half (49%) of the posts sought informational support, and 42% sought emotional support. The types of support sought varied across the deployment cycle, with requests for emotional support highest during deployment and requests for information highest prior to deployment.

Very little research exists on social media use among military spouses.

Elliott's (2011) master's thesis involved an online survey of spouses at two military installations; the return rate was very low and the sample size was very small (4.5%, N=206). The questionnaire assessed whether Facebook is a helpful component of Army spouses' coping during a Service member's combat deployment. Spouses' use of Facebook was positively related to perceived online social support; further, perceived online emotional support was positively related to resilience.

Finally, Rea (2014)'s dissertation involved individual interviews via Skype with ten married military Marine Corps spouses, focusing on the role of social media in their families. Although spouses appreciated the ability to communicate and connect with others, they also described distressing aspects of social media use (e.g., stalking, derogatory postings, and discovering upsetting information during deployment before the news is public). Wives expressed interest in the Department of Defense providing information on social media about financial management, online safety, and coping with Service member's deployment and reintegration.

Growth of Online Social Media Use

According to the Pew Research Internet Project, as of early 2014, 97% of 18-29 year-olds and 93% of 30-49 year-olds report using the Internet. In addition, 74% of online adults use social networking sites and 19% use Twitter. Facebook is by far the dominant platform, used by 84%of 18-29 year-olds and 79% of 30-49 year-olds (Duggan & Smith, 2013). In mid-2013, 22% of American adults used LinkedIn, 21% used Pinterest, and 17% used Instagram. Since 2008, the number of people using social networking sites has nearly doubled (Hampton et al., 2011).

In the civilian population, Baby Boomers (born between 1946 and 1964), Gen X (born between 1965 and 1980), and Millennials (born between 1981 and 2000) use the internet for different functions, and their frequency of use varies (Cohen, 2013). Millennials, constituting 24% of the U.S. population and sometimes termed the founders of the social media movement (Neilsen, 2014), represent the highest

social network penetration of any generation (Cohen, 2013). Since 2013, Millennials have comprised more than half of all United States Twitter users, and they represent the highest numbers of Facebook users (Cohen, 2013; Lenhart et al., 2010). Social networking site users ages 18-29 are more likely to maintain a profile on more than one social networking site than older users (Lenhart et al., 2010).

Nearly 75% of Gen X internet users used social networking sites in 2012. Specifically, over 65% of Gen X internet consumers used Facebook and 14.7% used Twitter (Cohen, 2013). Baby Boomers tend to have the lowest utilization rates of the three age cohorts, and they tend to use social networking sites to stream and download digital video (Cohen, 2013).

74% of online adults use social networking sites, a number that has nearly doubled since 2008.

Minimal research exists regarding social media use among military personnel. One study reported that online social networking among military personnel has more than tripled in the past five years (Matthews-Juarez, Juarez, & Faulkner, 2013). A recent study by RAND of 3,479 Air Force personnel examined use of information and communication technology (ICT); 45% of surveyed Airmen indicated they use social media for non-work purposes. In addition, 15% reported playing video games daily; 8% use instant messaging, online chat rooms, and forums; 6% use video chat; and 3% use blogs every day (Miller et al., 2014).

A nonscientific online survey of 5,100 military family respondents in November 2012 was conducted by the Blue Star Families organization (Blue Star Families, 2013). This was an online convenience sample, so results may not generalize to all military personnel. Further, results may be biased because participants were recruited via social media. However, 88% of respondents reported that they used social media to connect with friends or family, and 61% used social media to connect with other military families. Further, 72% of respondents indicated that social media was essential in communicating with their Service member during deployment. Similar to members of the general population, families of military service members in this survey described Facebook as the most popular social networking site. Though military families are using online social networking to connect with their deployed Service members and other families, 61% of respondents said their Service member's unit used email to disseminate information; 37% of family members said they got updates from the unit via social media.

Motivations for Using Social Media

Many people in Western, industrialized societies use social media, including military personnel. Research has identified numerous reasons why people use social media which will be described below. To frame this review of motivations, three relevant theories are presented, including the strong-tie, weak-tie network theory, the communal coping theory, and the uses and gratification theory.

Strong-tie Weak-tie Network Theory

According to the strong-tie weak-tie network theory, social networks are composed of two forms of relationships: strong ties and weak ties. Strong tie networks are characterized by close interpersonal relationships (e.g., family, good friends), and weak tie networks are characterized by relationships that are not considered to be close despite frequent interaction (Granovetter, 1973; Wright & Miller, 2010; Wright, Rains, & Banas, 2010). Although strong tie networks are important for our wellbeing, they are often insufficient for individuals facing stressful life situations (e.g., spousal deployment, life threatening illness). In this instance, weak tie networks serve to decrease uncertainty associated with stressful

events and often increase resiliency and coping (Wright & Miller, 2010; Wright et al., 2010). Weak tie networks increase coping by being a source of objective feedback and informational support from others facing similar situations. Typically weak-tie networks involve a lower risk, as people tend to share less personal information and emotions with these connections. Social networking sites are frequently used to develop and maintain weak tie networks (Kuss, 2011); however, social networking sites can also be used to support strong-tie networks (Stefanone & Jang, 2007).

Communal Coping Theory

Communal coping occurs when a group of people pools their resources to deal with adversity. The theoretical model of communal coping states that people become more resilient when they consider uncertainty and stress to be a shared problem that can be overcome as a group. This resiliency reduces the negative effect of a stressor (e.g., spousal deployment) on health and wellbeing (Afifi, Felix, & Afifi, 2011; Afifi, Hutchinson, & Krouse, 2006; Lyons et al., 1998), as the information and support received from others is seen as a critical coping resource (Maguire & Sahlstein, 2012).

Communal coping plays a unique role in families experiencing family-related stressors (e.g., parental/spousal deployment, divorce). Although many of these events require that the family work together to solve the problem, relationships between families are not always equal, and children cannot accept equal responsibility. For instance, divorced parents may not want to share financial concerns with their children, as children are not expected to solve the family's financial problems (Afifi et al., 2006).

The communal coping theory supports the idea that military spouses facing stressful situations (e.g., spousal deployment) may experience heightened resiliency and fewer negative outcomes if they share the experience of deployment with other military spouses (Krenzer, 2013). Therefore, the creation of communities in which military spouses can communicate with peers may minimize negative outcomes associated with stressful life events. Social networking sites provide opportunities for connections and offer a medium in which individuals are able to share their concerns at their convenience and in a manner that is less threatening than in-person communication.

Uses and Gratifications Theory

Uses and gratifications theory (Rubin, 2002) suggests that individuals make purposeful choices about technology and social media use based on specific psychosocial needs. Uses and gratifications theory has been applied extensively to the study of online social networking sites such as Facebook and MySpace (e.g., Kwon, D'Angelo, & McLeod, 2013), as well as the use of communication technologies with peers (Chang & Heo, 2014).These studies find that among teens and young adults, the primary uses of social networking sites, text messaging, and email are relationship maintenance, communication, entertainment, and information seeking.

Military spouses facing stressful situations may experience heightened resiliency and fewer negative outcomes if they share the experience of deployment with other military spouses.

Motivations for Using Social Networking Sites

Social networking sites are more frequently used when individuals find them trustworthy, informative, and easy to navigate (Kuss, 2011; Lin & Lu, 2011). Users of social networking sites tend to have high experience with these sites, high levels of autonomy (Hargittai, 2007), and high technical competence (Kuss, 2011). Further, individuals tend to have positive attitudes toward social networking sites, with attitudes being impacted by high self-efficacy, high self-esteem, and feeling that one "fits in" on the site (Gangadharbatla, 2008). Research has revealed that people often participate in social media to develop or maintain social interactions. Five specific types of motivations emerged in the literature review, including: (1) building relationships and expanding social connections (Grieve et al., 2013; Smith, 2011; Stefanone & Jang, 2007); (2) exchanging social support (Eichhorn, 2008; Nicholas et al., 2009; Quan-Haase & Young, 2010); (3) connecting with others regarding interests or causes (Joinson, 2008; Kuss, 2011; Smith 2011); (4) seeking information and communication (Allen & Naughton, 2011; Taylor et al., 2012; Walker & Rudi, 2014); and (5) other reasons.

Building Relationships and Expanding Social Connections

Social media provides tremendous opportunities for people to connect with others in their hometowns, across the country, and across the world. In fact, Facebook's stated goal is to "to give people the power to share and make the world more open and connected" (www.facebook.com). Online platforms can provide separate social mediums in which to develop and maintain relationships (Grieve et al., 2013). Online communication and relationships can supplement face-to-face interactions, build a sense of connectedness, and broaden people's horizons. Further, some people derive benefits from such connections (see details below about correlates of social media use).

This social connectedness function of social media is consistent with the Social Capital Theory (Ellison, Steinfield, & Lampe, 2007; Kuss, 2011). Social capital is defined as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Kuss, 2011, p. 3534). This theory posits that people with larger social networks have more social capital (Valenzuela et al., 2009).

Research identifies two kinds of social capital, including bridging and bonding types. Bridging social capital involves weak connections among people that are based on information sharing rather than emotional support; this form of social capital offers a wide range of opportunities and access to broad knowledge. Bonding social capital pertains to strong social ties, usually among family members and close friends. Close bonds sometimes evolve among groups of military spouses, and social media may be used to strengthen these supportive relationships within an existing community of spouses. Social network sites allow users to build both kinds of social capital, and users may find both kinds beneficial in different situations. For example, some situations may be highly personal, and spouses may only want to share information and solicit feedback from an inner circle of confidants. In other circumstances, spouses may actually feel more comfortable anonymously asking a wider range of unknown people about a specific challenge. Thus, each kind of social capital may have a distinct purpose and use for military spouses.

Joining social networks to keep in touch with old friends and strengthen bonds with existing people are ways of intentionally increasing one's social capital. Investing in social networks results in the development of trust and reciprocity norms, which facilitate engagement in group activities/tasks, and

increases access to information and opportunities (e.g., job postings). In this way, social capital can improve individuals' wellbeing and quality of life.

Research has specifically examined people's stated motivations for social media use, and the following five reasons pertain to strengthening relationships.

Staying in touch. Over 90% of social media users state that they use social networking sites to stay in touch with family and friends (Smith, 2011). Maintaining interpersonal relationships is one of the strongest predictors of social networking use (Cheung, Chiu, & Lee, 2011), with the large majority of university students using these sites to maintain their offline relationships and stay in touch with friends they do not see frequently (Kuss, 2011). Social networking sites are used to maintain social connections, keep in communication with others (Joinson, 2008), enhance existing relationships (Stefanone & Jang, 2007), remain involved in others' lives (Quan-Haase & Young, 2010), and as "virtual people-watching" (Joinson, 2008). The RAND survey of Airmen described above found that 65% of Airmen use social media to keep in touch with family and friends; further, almost half of them use it to stay in touch with other Airmen (Miller et al., 2014).

Connecting with old friends. Over 85% of social media users use social networking sites to connect with old friends (Smith, 2011). Specifically, research has reported that Facebook users enjoy reconnecting with people whom they have lost contact (Joinson, 2008).

Over 90% of social media users state that they use social networking sites to stay in touch with family and friends.

Connecting with family. Social media also allows family members to stay connected, particularly those who are geographically dispersed, and family members report that social networking sites support long-distance family relationships (Tee, Brush, & Inkpen, 2009). Today, increasing numbers of families are creating family pages on social networking sites, sending round-robin family messages on social media, sharing family pictures on these platforms, and report the ability to actively sustain relationships with extended family members online (Tee et al., 2009). Communicating with family is often cited as the most important reason for online participation among older adults, who are encouraged to go online to connect with their children and grandchildren (Karavidas, Lim, & Katsikas, 2005).

Making new friends. As well as connecting with old friends, over 40% of social media users use social networking sites to make new friends (Smith, 2011). In addition, people frequently use these sites to learn more about others they met offline and meet or view the profiles of new people (Joinson, 2008; Quan-Haase & Young, 2010).

Finding potential romantic or dating partners. Many social networking sites offer users the opportunity to meet potential dating or romantic partners. Users of these sites report joining the site to meet other singles and to make friends (Joinson, 2008; Quan-Haase & Young, 2010; Smith, 2011).

Exchanging Social Support

Social media also provides forums in which people can both offer and benefit from social support. Social support is well documented in the literature as an important component of overall wellbeing, and people can obtain support from a range of outlets (e.g., families, friends, institutions, communities, organizations) (Davis & Calitz, 2014).

Social support can be especially important during times of life stress, and military spouses may derive great benefit from others during challenging times such as geographic moves or deployments. According to the Buffering hypothesis, social support can buffer the negative effects of a wide range of life events, including, but not limited to, physical health problems, retirement, bereavement, loss of a job, pregnancy, and geographic moves (Cobb, 1976; Cohen & McKay, 1984). Research has documented that high social support results in better functioning despite adverse conditions, and a lack of social support can contribute to physical illness and psychopathology (Schaefer, Coyne, & Lazarus, 1981).

Social networking sites provide a safe space for individuals to share their problems with others and to receive advice from others while maintaining a comfortable emotional distance.

Although there are many kinds of social support (Cohen & McKay, 1984), several kinds are most relevant to social media. First, appraisal support includes helping others re-evaluate a situation. This helps individuals cope with stressors by altering their perception of the threat of a situation or altering their perceived ability to cope. For example, military spouses can help each other when facing difficult times by providing empowering messages about their ability to cope and providing realistic information about the threats of danger faced by Service members. Second, esteem social support pertains to encouragement related to one's sense of self/esteem. At times, military spouses feel overwhelmed during deployment due to the increased responsibilities at home; some spouses doubt themselves and their abilities during these times. Military spouses can affirm and provide esteem social support to each other by validating their strengths, resilience, and abilities, even during difficult times. Finally, belonging social support refers to a sense of being part of something bigger than yourself. This kind of social support can be especially helpful when people feel alone. For example, military spouses sometimes feel isolated during challenging times, especially during deployment. National Guard and Reserve families who often have less access to other local military families also sometimes struggle with a sense of isolation. Military spouses can provide belonging social support via social media, increasing allegiance to the military, bolstering their sense of community, and providing reassurance during times of heightened stress.

Social networking sites are often used to form online support groups, particularly for individuals with chronic health conditions or other unique needs. Participants in online support groups offer various types of social support to their peers, including informational, emotional, network, instrumental, and esteem support (Eichhorn, 2008). Participants of online support groups enjoy sharing their own stories and experiences, and they value being able to offer emotional and instrumental support to others (Nicholas et al., 2009). Furthermore, people often use social networking sites to show their affection for others through encouragement, showing care/concern, thanking others, and helping others (Quan-Haase & Young, 2010).

Social networking sites provide a safe space for individuals to share their problems with others (Quan-Haase & Young, 2010) and to receive advice from others while maintaining a comfortable emotional distance (Colineau & Paris, 2010). These sites are commonly used when people are concerned about the

stigmas associated with their problems (i.e., mental health; DeAndrea, 2014). Social networking sites such as Caring Bridge (caringbridge.org) can also afford users opportunities to exchange social support when an individual is facing health problems.

Connecting with Others Regarding Interests or Causes

About half of social media users use social networking sites to connect with others who have shared interests and hobbies (Smith, 2011); however, men tend to use Facebook for these purposes more than women (Kuss, 2011). People often use Facebook to organize and join events and groups for individuals with similar interests (Joinson, 2008). Furthermore, discussions in online health-related support groups revolve around common interests. For example, one study of an online peer support network for adolescents with chronic kidney disease found that adolescents who shared common interests were able to connect more quickly and frequently with one another than those who did not share interests. Furthermore, many of these adolescents were able to form meaningful and supportive relationships through the recognition and discussion of shared interests (Nicholas et al., 2009). People use social networking sites to connect with public figures through comments, pictures, and posts (Smith, 2011).

Seeking Information and Communication

Social media also affords users tremendous opportunity to exchange information in a rapid, efficient, low-cost manner (Allen & Naughton, 2011). Some research also shows that individuals use social networking sites or online discussion forums to seek information and learn from others. For example, a study found that 85% of parents who use online discussion boards reported using them to seek information about child development and parenting, and 51% reported using online discussion boards to help identify a problem (Walker & Rudi, 2014). Approximately 61% of parents who read blogs reported doing so to seek information and advice.

The power of social media as a vehicle for transmitting information may be especially useful in the wake of a crisis or disaster. Many modes of communication can become disrupted in the wake of a serious event, and people often long for accurate information. Social media that provides timely, accurate information can be incredibly reassuring to military spouses. Some research has examined the benefits of social media after a tropical cyclone (Taylor et al., 2012); in this study, Facebook was used as a kind of psychological first aid to promote resilience among community members. The researchers found that Facebook users felt more connected to each other and appreciated the opportunity to give and receive support via this mode.

Social media also affords users tremendous opportunity to exchange information in a rapid, efficient, low-cost manner.

Other Motivations for Using Social Media

Enjoyment. Social networking sites are used as a relaxing and fun pastime (Quan-Haase & Young, 2010). Users enjoy the ability to share personal information on these sites (Joinson, 2008), as well as the communication, social interactions (Kuss, 2011; Nicholas et al., 2009), and applications (e.g., games, puzzles; Joinson, 2008) offered by these sites. Enjoyment of a social networking site is a strong predictor of continued use (Cheung, Chiu, & Lee, 2011; Lin & Lu, 2011).

Normative pressures. A survey of Facebook users found that 85% joined Facebook because a friend suggested it, and 49% stated that they joined because their friends and family members are on Facebook (Quan-Haase & Young, 2010). Furthermore, a survey of university students found that 61% used social networking sites because all of their friends do (Kuss, 2011). Moreover, research suggests that individuals will continue to use social networking sites as long as others use these sites (Cheung, Chiu, & Lee, 2011; Kuss, 2011).

Military Spouses and Social Networking Sites

Social media may be especially useful to military spouses for several reasons. First, due to the frequent geographic moves that are inherent to military lifestyle, social media can afford spouses opportunities to maintain friendships with families from previous duty stations more easily and economically than before. Spouses can gather information online about new assignments prior to moving, and stay connected to groups and friends around the world. In addition, military spouses whose Service members are in the National Guard or Reserves and do not live on or near military installations may find social media to be especially beneficial. Due to some Guard and Reserve families' geographic distance from other military families, the ability to connect online with others who share their experience can be very meaningful and beneficial. Due to their distance, they may have less access to face-to-face services, so the online supports may be helpful. Online communication among military spouses can also be facilitated due to the shared understanding of the military culture, including abbreviations, language, and norms. Such shared experience can foster a sense of togetherness among military spouses (Krenzer, 2013).

Only a small amount of research regarding social networking among military spouses exists, and this work consists of unpublished student theses or dissertations. However, this work suggests that military spouses' motivations for social network use are similar to those of civilians. Because the military population is comprised of a significant number of Millenials and Generation X'ers, it is reasonable that military spouses would have similar motivations to the civilian population. The two motivations for social network use among military spouses discussed in this small literature include:

Staying in touch. Military spouses also use social media to stay connected with family and friends. Social media can be especially useful for maintaining contact with deployed spouses and other military spouses (Rea, 2014).

Seeking support. Military spouses use social networking sites to connect with others who understand what they are experiencing and who can provide support when needed. Furthermore, military spouses use social networking sites to seek informational support (e.g., status of their deployed spouse), formal resources in their areas, including local points of contact and resources (e.g., family readiness groups, military and family life consultants, chaplains) and emotional support (e.g., connect with peers whose spouses are also on a dangerous mission; Dessens, 2014).

In summary, social media use has grown exponentially over the past decade, and people use social media for a variety of reasons, largely related to relationship building and maintenance. As the Department of Defense broadens its use of social media for military spouses, it may be useful to consider specific strengths, limitations, and dangers of social media.

Strengths, Limitations, and Challenges of Social Media

The Department of Defense promotes the use of social media by military personnel, using it for strategic online engagement and even recruiting (Matthews-Juarez et al., 2014). However, as noted above, very little research has examined the correlates of social media use among military families—for Service members, military spouses, children, or family units.

As the Department of Defense increases its use of social media for communicating with military spouses, it may be helpful to review the growing literature base that describes both the numerous strengths and challenges of online communication. However, it is important that these findings be taken in context as most of the research has been done with civilian samples. Much of the existing work involves first person testimonials or small studies using convenience samples. As recently expressed by Matthews-Juarez and colleagues (2014), "research is urgently needed to determine the manners and circumstances under which social media have a positive or negative impact on the social and emotional health and wellbeing of members of the armed forces, their families, and loved ones" (p. 774). Research is mixed regarding the power of social media to connect people or isolate them (Davis & Calitz, 2014), and to alleviate or exacerbate stress (Matthews-Juarez et al., 2013); it is likely that a range of outcomes may be associated with social media use depending on a wide range of factors, including motivations for use, nature of disclosure, types of media used, and safety precautions.

Research is mixed regarding the power of social media to connect people or isolate them, and to alleviate or exacerbate stress. It is likely that a range of outcomes may be associated with social media use depending on a wide range of factors.

Strengths of Social Media Surrounding Communication

Many military spouses grew up with advanced technology, so communicating in this manner is very comfortable, and at times even preferred. The structure of social media affords users many advantages to other forms of communication. Most social media sites are highly accessible, as they are available at all times. Social media can typically be accessed from a range of media sources including desktop computers, smart phones, and tablets, allowing great flexibility in their use. While motivations for use tend to be relationship-oriented, additional applications are being developed and used. For example, the broad accessibility makes social media especially useful for some people who cannot attend face-to-face support programs or appointments, such as those with physical disabilities, chronic illness, mental illness (Davis & Calitz, 2014), and those living in geographically remote areas. Social media can also be useful for people with busy family commitments (e.g., military spouses caring for household duties, employment, and children's activities). The flexibility also allows people to seek out information, support, and resources at times and places that are convenient for them, thereby overcoming the challenges surrounding fitting scheduled meetings or activities into already full schedules.

Social media also allows people to provide and receive immediate feedback, support, and information quickly, usually from anywhere in the world. Many social networking sites involve instant interaction, allowing users to participate in real-time events anywhere around the globe. This ability to have such immediate communication can be especially helpful for military families as a means of staying connected during separations, including deployments. Once the infrastructure is created, communication can be inexpensive, overcoming costs associated with other forms of communication.

In addition, many social media platforms allow for communication with a large number of people at the same time from around the globe. As noted in the following section, this structure allows for the formation or strengthening of social bonds in groups, and can support collaborative problem-solving (Bingham & Conner, 2010).

Limitations of Online Communication and Possible Challenges

Despite the numerous benefits and functions of social media, it is also important to consider limitations of online communication and potential challenges surrounding its use. The online world can offer people contact with a broad range of groups and communities, some of which may be sources of tremendous support but others could involve real danger. Seven categories of potentially limiting factors emerged in the literature, each of which is described below.

Risk of miscommunication. Although the online modality of communication has tremendous benefits, the very structure of this forum can create opportunities for break-downs in communication. For example, asynchronous online communication cannot transmit nonverbal cues and other body language that are important ingredients of face-to-face communication such as tone of voice, facial expressions, timing, and context. Although emoticons and other online tools attempt to convey some of the emotional tone of the message, these, too, can be misinterpreted be and sources of confusion. Thus, messages can be experienced by the receiver in a different tone or context than was intended by the speaker. This lack of cues can increase the potential for miscommunication and problems in accurately interpreting the true intention of the message (Bryon, 2008; Henline & Harris, 2006; Hertlein & Stevenson, 2010). Further, many times the recipient does not read the message until hours or days after the message was sent; this delay in communication can also introduce confusion and misunderstandings in conversations (Bryon, 2008).

Despite the numerous benefits and functions of social media, it is also important to consider limitations of online communication and potential challenges surrounding its use.

Potential harm to relationships. Although military spouses can derive great social support from each other via online communication, it is also important to be aware of the potential for damage to relationships through this medium. The specific ways in which hurtful communication can occur depend on each social networking site. For example, Facebook allows users to friend and un-friend each other, to post on each other's wall, and to create open or closed groups of communities. Each of these activities can be used in a way that damages relationships, either intentionally or unintentionally.

Research has found that people tend to be more disinhibited online than in face-to-face conversation (Suler, 2004). People may be more likely to give negative feedback online than in person, and then lack the opportunity to follow-up on the speaker's intended message or heal the slight to the relationship.

Across social media platforms, people may express strong opinions that differ from others; these expressions of disagreement can become emotionally charged and can be detrimental to relationships. For example, in Krenzer's (2013) research with military wives, women shared that

some people's posts were counterproductive to group cohesion, citing examples of enhancing a sense of segregation based on military rank.

Further, some research has documented negative correlates of social media use on marriages and intimate relationships. Partners may engage in online stalking and monitoring of each other, may feel jealous or threatened by each other's online interactions, and may experience misunderstandings in online communications as happens in other kinds of relationships. Due to the confluence of factors that affect relationship functioning and the inability to define temporal relationships among these variables, causal inferences cannot be drawn regarding online communication and couples' wellbeing (Muise, Christofides, & Desmarais, 2009).

Risk of unhealthy social comparison. Social media can feed social comparison. Reading online posts can increase people's insecurity and self-doubts when they compare themselves to others. For example, research shows that viewing posts that have differing views about the profile owner's weight status significantly impacts body satisfaction and psychological wellbeing among women (Taniguchi & Lee, 2012). Spouses may feel badly about themselves when they read about other spouses who appear to be coping more effectively with a certain stressor, or may become overly interested with group norms and strive to live up to particular social standards viewed on social networking sites (White & Lehman, 2005).

Social media can feed social comparison. Reading online posts can increase people's insecurity and self-doubts when they compare themselves to others.

Security and privacy risks. Security and privacy are issues that also pertain to materials posted. People often justifiably worry about disclosing sensitive information online. Information posted on the internet is permanent and never completely disappears even if one deletes it (Department of Defense, n.d.). Therefore, caution is justified regarding information posted on the internet. Also, social and legal threats of disclosing too much information online are present (Nosko, Wood, & Molema, 2010). Thus, online forums for military spouses need to contain appropriate levels of security, and education about appropriate content for posting may be useful.

Exposure to danger. Online communication and relationships may expose users to unknown dangers. Due to the anonymity of many social media platforms, people can portray themselves in any way they wish. They can create imaginary selves, and develop deceitful relationships with others (Hertlein & Stevenson, 2010). These kinds of distortions can create opportunities for dangerous interactions.

Social media users may also encounter unwanted online sexual solicitation and risky sexual online behavior (Baumgartner, Valkenburg, & Jochen, 2010), both of which can be sources of distress (Kowalski, Limber, & Agatston, 2012). Perpetrators may groom both adult and child victims online by creating make-believe relationships, stalking, and sometimes luring them into in-person meetings which can be fraught with danger (Kuhl et al., 2014).

Cyberbullying is another online phenomenon that can be detrimental for social media users. Although this behavior is oftentimes associated with bullying among youth, it can occur across all ages, and may have distressing consequences (Ayden et al., 2012; Kowalski, Limber, Limber,

& Agatston, 2012). According to a 2014 Pew Research Center study, 44% of 18-29 year-old and 21% of 30-49 year-old internet users reported having been treated unkindly or attacked online.

Anecdotal reports of military spouses' experiences of cyberbullying appear in the public media, attesting to the existence of this problem among military spouses and the potential for negative impacts. For example, an April, 2014 media item from Hampton Roads, Virginia, described a Facebook page called "Dear Dependa" which contained pictures and comments allegedly posted by military spouses. The posts ridiculed women who allegedly married into the military for the prestige, benefits, or money (Simmons, 2014). These posts were experienced as bullying and were hurtful to many military spouses, hundreds of whom reported it to Facebook as harassment, eventually resulting in Facebook removing this page from their website.

The RAND Air Force survey described previously found that 25% of Airmen reported having been exposed to cyberbullying in the past year (Miller et al., 2014). Further, those who had witnessed such bullying were less likely to rate their own emotional health as excellent (37%) than those who had not witnessed it (50%).

Excessive use with negative consequences on functioning. Social media usage also poses risks for excessive use which can result in problems in numerous domains of functioning. Although social media can simply serve as a distraction for some people (Allen & Naughton, 2011), over-involvement in online activities can create problems.

The literature base on social media use and addiction is small, but preliminary findings are noteworthy (Kuss & Griffiths, 2011). Research has documented correlations between loneliness and social networking site game addiction including both frequency of game use and session length (Wan, 2009). People who are looking for a sense of belonging may be at higher risk for developing addiction (Pelling & White, 2009), and people high in extraversion and low in conscientiousness may demonstrate higher addictive tendencies and spend more time on social media (Wilson, Fornasier, & White, 2010).

The RAND survey of Airmen found that 6% of participants met criteria for problematic internet use (on the Generalized Problematic Internet Use Scale 2). In addition, those with problematic use were more likely to report poorer mental health, including depressed mood and loneliness (Miller et al., 2014).

Risks of leaks of sensitive information and spread of rumors. Finally, an area that has received little empirical attention to date but may have special significance to the military is the risk of leaks of sensitive information and the spread of rumors on social media. The Department of Defense's Social Media Guide (n.d.) lists social media guidelines, including specific instructions for leaders, Service members, and families. This Guide provides explicit instructions about the necessity of protecting operational security information (OPSEC). However, social media forums provide an online venue in which military spouses may share confidential information; such postings are likely unintentional breaches of security due to lack of knowledge, but may pose risks to the military.

Further, unmonitored communication on social media can provide vehicles for the spread of rumors, which can impart information quickly to a large number of users and cause considerable

distress and confusion. Awareness of the risk of rapid dissemination of information and rumor control can be challenging but important.

Research with military spouses (Desens, 2013) has documented that learning information on social media can be especially distressing. A case study in this dissertation described a military spouse who learned that her deployed husband was injured, via a Facebook post. The spouse described how this mode of learning the news was unfortunate, and added to her distress.

Social media has the potential to afford military spouses a wide range of benefits. However, this form of communication has some inherent limitations and actual risks, all of which are important to understand and proactively attempt to minimize for military spouses.

In summary, social media has the potential to afford military spouses a wide range of benefits, and they may find many elements of online communication to be helpful. However, this form of communication has some inherent limitations and actual risks, all of which are important to understand and proactively attempt to minimize for military spouses.

Social Media Use and Wellbeing

Research on social media has grown tremendously in the past two decades. Numerous advantages and disadvantages of this form of communication have been documented, but many questions remain. A key debate in the field is whether social media functions to connect or isolate people (Davis & Calitz, 2014), when and how it can promote wellbeing or cause distress. Research has documented links between social media use and both positive and negative indicators of wellbeing, and additional research is needed.

An important caveat in reviewing this literature is that evaluating the quality and impact of a social networking site is difficult. The presence of many posts, or social support messages, does not necessarily translate to a positive impact or user satisfaction. The benefit truly depends on the user's evaluation of the support messages, specifically if the recipient experiences the feedback as useful. Messages experienced as helpful may buffer stress, while detrimental feedback can actually exacerbate stress. The impact and utility of the feedback depends on many variables, including the type of relationship that is offered, the type and quality of offered support, the nature of the online interactions, and the degree and nature of stress experienced by the seeker (Goldsmith, 2004).

The debate continues about the links between social network use and functioning, with evidence for some variables reported in the literature for both positive and negative outcomes. Correlations have been reported between increased social network use and many negative indicators, including increased loneliness (Burke et al., 2010), increased social isolation (Al-Dubai et al., 2013; Nie & Erbring, 2000; Turkle, 2011), increased jealousy, envy, and surveillance behaviors (Krasnova et al., 2013; Nitzburg & Farber, 2013), increased depression (Nie & Erbring, 2000; Turkle, 2011), increased rumination and excessive comparing oneself to others (Feinstein et al., 2013), decreased life satisfaction (Krasnova et al., 2013; Kross et al 2013), lack of meaningful relationships (Nie & Erbring, 2000; Turkle, 2011), and decreased available time for in-person relationships (Henline & Harris, 2006; Nyland et al., 2007). One study documented physical health correlates of social media use including musculoskeletal pain, headache, and eye irritation (Al-Dubai et al., 2013). Other researchers examined academic functioning among college students, reporting more social media use being related to lower GPAs and less time

spent studying; 74% of the students reported that Facebook use had a negative impact on their academic performance via procrastination, distraction, and poor time management (Kirschner & Karpinski, 2010).

On the other hand, some research has documented positive relationships between social media use and wellbeing; however, most of these studies emphasize that the outcome is dependent upon the user's motivation for use and specific online activity. Studies have reported associations between increased social media use and decreased depression and anxiety (via increased social connection; Grieve et al., 2013); improved overall life satisfaction; increased social trust, civic engagement, and political participation (Valenzuela, Park, & Kee, 2009); decreased loneliness (but only when family/friend support were low; Rains & Keating, 2011), and decreased depression (but only for those who used the internet to seek support, not for those attempting to meet new people who experienced increases in depression; Bessiere et al., 2008).

Data on the correlates of social media use and wellness are mixed, and further research is needed to clarify the relationships.

The recent RAND survey of Air Force personnel found that over 60% of participants felt that social media has a positive impact on their overall wellbeing and life satisfaction. Further, 62% of surveyed Airmen indicated that social media was the most important form of communication for their social and mental health when they are away from their home station (Miller et al., 2014).

Thus, data on the correlates of social media use and wellness are mixed, and further research is needed to clarify the relationships. As noted above, research will need to consider a range of factors in studying the topic (e.g., motivation for use, specific site and mode of communication, nature of feedback) as outcomes appear to differ across these variables.

Social Media Use: Parenting and Health

Two areas in which social media has rapidly grown in the past decade include parenting and physical health. Although these topics are not central to this review, relevant information can be gleaned that may inform the Department of Defense's work with military spouses.

A recent systemic review of 38 studies of internet-based peer support programs for parents (Niela-Vilen et al., 2014) found that parents appreciated the accessibility of the support and found the parenting information to be helpful. However, the evidence for the effectiveness of this online support was inconclusive. Outcomes differed by parent gender. For mothers, participation in online support activities provided emotional support, information, and appreciation of being part of a social community. On the other hand, fathers appreciated the information, humor, and support for transitioning into the fatherhood role. Although parents were satisfied overall and no harmful effects were reported, the researchers conclude that further experimental research is needed to document the effectiveness of online peer support in effecting actual behavioral change in parenting.

The past decade has also witnessed tremendous growth in the use of online communication for physical heath purposes. Three meta-analyses regarding online communities related to physical health and health behavior change are noteworthy. First, Eysenbach and colleagues (2004) did a meta-analysis of 45 studies of online communities related to health; they found no robust evidence on health benefits of virtual communities or peer-to-peer online support. Second, Laranjo and colleagues (2014) performed a

systematic review and meta-analysis of social networking site utilization and health behavior change (e.g., weight loss, exercise, smoking abstinence). This found a "slight positive effect" of social networking site use and health behavior change; however, they noted that considerable heterogeneity in outcomes emerged across participants. Finally, Williams and colleagues (2014) conducted a meta-analysis of randomized control traits of social media interventions promoting healthy diet and exercise behaviors. They concluded that studies of social media interventions to date relating to healthy lifestyles tend to show low levels of participation and do not show significant differences between groups in key outcomes (weight, exercise).

In sum, across both parenting and health communication, users report satisfaction with the online platforms and describe some self-reported benefits; however, robust, comprehensive research using a range of methodologies is needed to establish whether social media improves parenting and health communication, both in the short and long term (Moorhead et al., 2013). Examination of ways to improve the quality and outcomes of online communication is needed.

Research has documented that people use social media for a wide range of purposes, and this form of communication has inherent strengths and potential challenges. This report will now describe some existing structures for online communication, including a review of each mode's purpose, key functions, strengths, potential weaknesses, and best practices.

Leveraging Benefits of Existing Online Platforms

As the Department of Defense grows its use of social media with military spouses, review of existing online platforms may be useful. Some social media sites have been highly successful, and the Department of Defense may benefit from leveraging a range of benefits from existing platforms and technologies. In this section, the general construct of social learning will be reviewed. Next, key concepts and possible applications from communities of practice and peer-to-peer support will be described.

Online Social Learning

Online social learning refers to learning with and from others in an informal, online setting; it includes learning that occurs both deliberately and unintentionally through synchronous and asynchronous communication, as well as information exchange (Allen & Naughton, 2011).

While social learning occurs in both personal and professional settings, the use of social learning in organizations has rapidly grown in popularity over the past decade. When used appropriately, social learning has the potential to enhance employee learning and performance, and has therefore become an asset to many companies. A survey of learning professionals revealed that over 50% of respondents felt that social learning was important to their job performance, and 70% of respondents felt that social learning would be important to their job performance in the next three years (Allen & Naughton, 2011).

Social media is often used as a platform for social learning; common tools for facilitating social learning include social networking sites, blogs, virtual immersive environments (e.g., Second Life), instant messaging, and message boards (Allen & Naughton, 2011). More specifically, question and answer (Q&A) forums provide a space for participants to either answer one another's questions or pose questions for the group to answer. These forums may be open to specific topics or may allow users to pose questions on any topic (Cheng, Liu, & Shieh, 2012). Social learning is also used in traditional

educational settings, such as the creation of a Facebook page for college courses (Aydin, 2012) or the use of forums to encourage second language students to interact with and learn about the culture associated with this language (Aydin, 2012; Ritchie & Black, 2012).

Two specific types of social learning discussed in the present review include communities of practice (CoPs) and peer-to-peer support. For each type of social learning, the tool will be defined and key concepts will be described. Further, specific motivations for use, strengths and weaknesses of the tool, and best practices will be reviewed.

Two specific types of social learning include communities of practice (CoPs) and peer-to-peer support.

Communities of Practice

Communities of Practice (CoPs) allow users to create communities where they can exchange information and share knowledge. CoPs may be useful in facilitating certain types of information exchange between the Department of Defense and military spouses or between groups of military spouses. The concept of communities of practice is not new, but the term was originally coined by Wenger (2006) who defined them as "people who engage in a process of collective learning in a shared domain of human endeavor" (Wenger, 2006, pg. 1). In other words, CoPs are groups of people coming together to create, share, and sustain knowledge in a particular area over time.

Wenger and Lave (2002) recognized that CoPs were already being implemented in different ways and contexts before they actually coined the term. Such communities actually began in a face-to-face context, but over time they have evolved to include online contexts and even hybrid contexts consisting of both in-person and online networks of people (Nistor, Schworm, & Werner, 2012). For the purposes of this paper, only research regarding online or virtual CoPs was examined.

Not every group of people that gathers together is a CoP. Three essential elements (domain, community, and practice), must be present in order for a collective group to be considered a CoP (Wenger, 2006). The *domain* is the common area of interest that group members share. The *community* is built among the group members themselves. By building relationships and engaging in the community through activities and sharing of information, the community is formed. Finally, the *practice* is the actual skill set the community members need to actively engage in the topic and in the CoP. The practice is communicated through group norms, activities, and shared information (Callahan & Tomaszewski, 2007; Hemmasi & Csanda, 2009; Wenger et al., 2002; Yukawa, 2010).

A wide variety of online portals may include CoPs, and the communities may span a broad range of topics. Organizations might have customized modules created to support CoPs, such as the World Health Organization's "Implementing Best Practices Knowledge Gateway" (Thomas et al., 2010). In addition, Facebook and other social networking sites can have CoPs within their confines. Lewis and Rush (2013) found that CoPs exist on Twitter despite its 140 character limit. By the use of hashtags and other ways to thematically group conversations, it is possible to create communities. Hashtags (#) are used to mark keywords or topics within a tweet, and they are a way to categorize messages. For example, #milfam and #milifam are commonly used on Twitter when posting about something related to military family life (a user could tweet, "To learn more about talking with your child about deployment, check out this website #milfams #military #deployment"). Clicking on a hashtag within a tweet shows the user all other tweets also using that hashtag, allowing like-minded users to find, follow, and communicate with each other. Hashtags can also be used within Facebook and Instagram.

Key concepts of CoPs. Originally, CoPs were constructed as informal groups of learning. People came together around particular domains of knowledge and worked together to build a well-functioning CoP. However, as the utility of this type of group became known, organizations and others have organized formal CoPs. Management and administrators create these online communities for the betterment of the organization or business.

In addition to the distinctive characteristics of domain, community, and practice, other key concepts for CoPs include: the developmental stages, structure, group membership, and the role of the facilitator.

Developmental stages. Most CoPs move through predictable stages, which can result in the continued growth of the community or disbanding the group because of lack of usefulness. These groups have a life cycle similar to other types of groups in organizations (Hemmasi & Csanda, 2009). Also, as the CoP develops through its stages, group members may encounter the need to change group norms which is acceptable within CoP practices (Stommel & Koole, 2010).

The Stages of Development for a Community of Practice

Annick, Howard, & Schoenberger-Orgad, 2004; Hemmasi & Csanda, 2009; Wenger, McDermott, & Snyder, 2002

Stage	Traits
Prepotential	Group members are hesitant about joining a CoP
Potential	Group members see the benefit of joining the group
Coalescing	Group members begin to work together to define parameters, and group norms; they explore how they will form the CoP
Active	Group is actively exchanging information and solving problems
Dispersing	Group has met its objective
Memorable	Group disbands if a new objective is not cultivated

Structure. CoPs are generally construed as informal spaces for knowledge generation and management, but they can also be created in a formalized way within an organization (Thomas et al., 2010). Research is still examining if different outcomes emerge based on whether the CoP is implemented in an informal, volunteer environment or a mandated, structured environment within an organization.

Group membership. A CoP generally has two categories of group members—experts and novices. Wenger and colleagues (2002) describe them as core members and periphery members, whereas in organizations they are generally termed seasoned practitioners and novices (Hemmasi & Csanda, 2009). The image of a circle can be used to visually depict how these two types of group members work together within the CoP. Core members (experts) are located close to the center and the periphery (novices) are scattered throughout the rest of the circle (Callahan & Tomaszewski, 2007).

Importantly, group members can operate both as a core member or a periphery member depending on the actual topic of discussion for the CoP. This flexibility allows members to flow into different roles depending on their level of comfort, expertise, and time (Nistor, Schworm, & Werner, 2012).

Role of the facilitator. Any CoP will require someone to facilitate or manage the group, but this role looks very different depending on the context of the group. For example, this role might be filled differently depending on whether it is an organically grown group or a mandated company group (Probst & Borzillo, 2008). Caseio (2000) notes the person in this position must act as a definer, facilitator, and encourager, and that it takes a particular skill set as well as a domain expertise to fill this role.

Functions of CoPs. CoPs are used for three main purposes: knowledge generation, knowledge management, and as a means of overcoming geographic isolation. In this way, CoPs can acculturate new practitioners, manage organizational knowledge, and connect group members who may be working in different geographical places.

Knowledge generation. CoPs are most often used when a two-way exchange of information is needed. Fang and Chiu (2010) found that the primary necessary component for a success of a CoP is the exchange of information. By generating new knowledge and sharing resources, CoPs can become useful to group members. Such online communities give members a network of peers that they can easily and quickly contact to ask questions and obtain suggestions or new information (Hemmasi & Csanda, 2009). CoPs can be found in many different types of contexts, including government, education, for-profit organizations, and nonprofits (Cheung, Lee, & Lee, 2012; Hemmasi & Csanda, 2009).

CoPs are used for three main purposes: knowledge generation, knowledge management, and as a means of overcoming geographic isolation.

By integrating the CoP model into business practices, organizations are leveraging their human capital to share information and resources for efficient development and dissemination of best practices. CoPs can also resolve complex business problems and increase business productivity (Ardichvili et al., 2006; Cheung, Lee, & Lee, 2012). In this way, organizations are increasing their ability to translate best practice to their products and services, as well as creating a learning environment that engages employees (James, 2002).

Knowledge management. Over time, organizations have discovered that CoPs do not merely generate knowledge, but they also provide a means for managing information over the long-term. As CoP members come together around a specific topic of interest, they can utilize the questions posed by novices to understand where gaps in knowledge are causing problems. These spaces allow seasoned practitioners to fill in the gaps in a more efficient manner than other types of organizational informational systems. In this way, the CoP is acting as both a recorder and preserver of knowledge.

Droege and Hoobler (2003) further illustrate the usefulness of CoPs as knowledge preservers highlighting how these communities can prevent the loss of tacit knowledge associated with employee turnover. CoPs sustain connections that assist in the transfer and retention of knowledge. CoPs can assist in transforming businesses from the

traditional, multidivisional structure to a more efficient, competitive organization (Hemmasi & Csanda, 2009; James, 2002)

Overcoming geographic isolation. CoPs can be useful for group members who work in different locations. With the growth of people doing tele-work, overcoming geographic isolation and creating a sense of community and ongoing dialogue can be beneficial. For example, Gray (2004) found the use of online CoPs to be helpful for adult educators who were geographically dispersed. This particular organization had high turnover rates and many part-time female workers who were often the only ones in their region. Through this online group, practitioners were able to connect with other similar professionals who were located across the state, as well as orient new coordinators more quickly by giving them a group of experts to utilize for questions and ideas. Through this CoP, professionals were able to build a professional network that would have otherwise not existed.

Strengths and weaknesses. Similar to other types of group work, CoPs have both great potential and possible drawbacks for addressing group members' needs.

In today's fast-paced global world, CoPs are one mechanism that can help individuals and companies keep up with an ever-increasing pace of change (Hemmasi & Csanda, 2009). Due to advances in technology, CoPs can foster an environment where problems are addressed quickly among group members who may or may not be physically located in the same space. Also, group members with different backgrounds can tackle complex issues that require more than one knowledge set to solve (Anand, Gardner, & Morris, 2007; Kranendonk & Kersten, 2007). In addition to addressing problems, CoPs can lead to innovative practices which result in new products or services. The more informal, less constrained atmosphere can foster creativity, a unique asset of CoPs (Thomas et al., 2010). In addition, CoPs can be used to relay information that practitioners would otherwise not be able to access (Thomas et al., 2010). For example, an international CoP of physicians would afford users opportunities to share new techniques and information quickly, gaining access to best practices immediately rather than waiting for the release of journal articles.

Yet, for all the strengths inherent in CoPs, some weaknesses exist as well. First, they require up-to-date software and hardware which may not always be feasible for group members. With more and more people using their mobile device as a primary form of communication, CoPs will likely need to invest in push technologies (channels through which new content or communication are sent to interested members, such as email alerts) and mobile platforms to remain relevant (Gray, 2004). In addition, members have to make the time to participate in the CoP (Hemmasi & Csanda, 2009). Doing so requires participants to be logged in so that they can either pose questions or answer questions and engage in dialogue. Although the time commitment may be considerable, members may make the time if the knowledge exchange is deemed useful (Thomas et al., 2010). Group members who deem the knowledge exchange to be unhelpful will likely discontinue using the CoP (Fang & Chiu, 2010). Finally, the largest drawback to CoPs is that their information is completely experiential and has not been subject to any validity testing (Thomas et al., 2010). This lack of empirical testing may lead to solutions that are good for one context but not generalizable to others.

Best practices. Whether a CoP is started informally by a group of interested people, or formally through an organization, some best practices may be useful in fostering a productive, successful online platform. Best practices that have been described in the literature include:

1. **Clear purpose and related content.** The purpose needs to be clear, and the content needs to relate to the CoP's intended function and domain (Nistor et al., 2012).

2. **Well-organized, easy to use.** The information within the CoP should be well-organized and easy to use (Gongla & Rizzato, 2001).

3. **Public, known users.** Anonymous posts should be prohibited to maintain a professional environment (Fang & Chiu, 2010; Kilner & Hoadley, 2005).

4. **Understanding the cultural context.** Creators can be cognizant of cultural influences in both the development and utilization of the CoP. For example, a CoP might be shaped for different places and groups due to cultural notions around asking questions, sharing information, and teamwork (Ardichvili et al., 2006).

5. **Understanding group norms and practices.** Developers can help users be successful by developing online protocols that assist group members in understanding group norms and practices (Ardichvili et al., 2006).

6. **Appropriate facilitator.** The role of the facilitator is to be both a technical expert and a group facilitator (Cheung, Lee, & Lee, 2012; Gray, 2004). This person can answer questions and work to keep the exchange of information flowing. In addition, this person may assist in developing traditions, creating opportunities for users to participate, and building community. This person will need to have both the technical expertise required to facilitate the group as well as good communication skills to encourage group members to participate in meaningful ways.

Peer-to-Peer Support

Although there is no single definition of peer-to-peer support, it generally refers to the social support that is shared among people who have had similar experiences. According to Dale, Williams, and Bowyer (2012), peer support "comes from a person who has first-hand knowledge of a specific behavior or stressor and possesses similar characteristics to the target population" (p. 1361). A peer supporter can extend or supplement the formal services provided to a population. Unlike other social networks, peer support is unique as the shared experiences between peers is the essence of the support (Hoey, Leropoli, White, & Jefford, 2008).

In a systematic review of peer-support programs for people with cancer, Hoey and colleagues (2008) identified five different models of peer support: one-on-one face-to-face, one-on-one telephone, group face-to-face, group telephone, and group Internet. The Internet has extended peer-to-peer support beyond the traditional face-to-face meetings to online forums like Facebook, personal blogs, and information-based group forums.

Because online peer-to-peer networks link people living with common conditions, it has gained popularity for a range of populations facing health problems including cancer (Lobchuk, McClement, Rigney, Copeland, & Bayrampour, 2014) and diabetes (Dale et al., 2012; Simmons, Bunn, Cohn, & Graffy, 2013). These networks have also been used as supports for people making behavior changes, such as weight management (Chang, Chopra, Zhang, & Woolford, 2013; Eysenbach, Powell, Englesakis, Rizo, & Stern, 2004) and smoking cessation (Klatt et al., 2008). Peer-to-peer networks can also be helpful for parents seeking support for raising children with a chronic disease and/or disability (Kingsnorth, Gall, Beayni, & Rigby, 2011; Paterson, Brewer, & Stamler, 2013).

In a military setting, peer-to-peer support may be especially helpful for military spouses when facing deployment and Permanent Changes of Station (PCS); support from peers can supplement official information distributed by the military. Military spouses can offer military credibility when supporting each other through shared knowledge and experiences.

Key concepts of peer-to-peer support. The kinds of support provided in peer-to-peer support networks depend on the program's model and the role of the participants. Simmons, Bunn, Cohn, and Graffy (2013) reviewed two approaches to peer-to-peer support in the context of diabetes management. A *directive approach* to peer support often involves a healthcare professional providing the content that is shared on the online platform. The healthcare professional determines the focus for the discussion, ensuring that specific information is conveyed. As an avenue for increasing communication with military spouses, the directive approach could be a method for the Department of Defense to impart specific information directly to military spouses. At times, specific peers may be selected to take leadership and communication roles in directive approach forums (e.g., a lead military spouse is the conduit of information between the Department of Defense and other military spouses). In contrast, a *non-directive approach* allows peer supporters the freedom to structure the interactions and knowledge in ways that are most beneficial for participants. In this approach, interactions among peers are based on equal, reciprocal relationships.

In an effort to move away from the dichotomy of directive/non-directive approaches, Simmons and colleagues (2013) suggest that peer support be viewed along two independent dimensions, *nature of the peer support* and *nature of the peer relationship.* The nature of the peer support refers to the information shared, and can range from explicit instruction to informal advice (some of which may be unhelpful). The nature of the peer relationship can also vary, and may fall on a continuum from a professional to a friend. Simmons and colleagues' (2013) conceptualization allows for greater variability with the role of the peer supporter and prevents overemphasis on one dimension.

Functions of peer-to-peer support. Peer-to-peer support, whether online or in person, can offer personalized, nonjudgmental connections. Shared experiences are at the center of the peer support, and are what differentiates this mode of support from other types of support such as that from a healthcare provider or other professional. Peers can serve a range of roles, including listener, mentor, advocate, problem-solver, or sounding board for challenges that arise. Peers may have empathy due to their lived experience that can be reassuring to others in distress.

Paterson and colleagues (2013) found that parents' motivations for engaging in online peer support was to seek information about their children and to connect with others with similar experiences. Similarly, Lobchuk and colleagues (2014) analyzed conversations in a peer-led

online support community, and found that users often sought peer support to validate the information received from health care professionals (i.e., a diagnosis, stage of disease, or prognosis).

Organizations can benefit from instituting peer-based programs to bolster social support of their members. When peer support is offered through a formal, structured program, peer supporters can serve as confidants for otherwise isolated and at-risk populations. Using peer support in this capacity could be useful in a military environment. For example, a military unit may request an experienced military spouse to provide additional peer support to new parents of a child with special needs. The utilization of a peer-to-peer model would be especially helpful in situations where individuals are experiencing new circumstances and are unsure how to access additional support.

> Shared experiences are at the center of peer support, and are what differentiates this mode of support from other types of support.

Strengths and weaknesses. Regardless of the specific platform, peer-to-peer support can include numerous strengths and weaknesses. The peer can provide various kinds of support and decrease feelings of isolation. Most of the research has been conducted on in-person peer support, with a growing literature documenting positive outcomes of peer support on a range of outcomes, including depression (Pfeiffer, Heisler, Piette, Rogers, & Valenstein, 2011) and serious mental illness (Davidson, Bellamy, Guy, & Miller, 2012). Research on online peer support has documented the following positive correlates: positive mood, increase in healthy behaviors, sense of belonging, empowerment, and better coping (Hoey, Leropoli, White, & Jefford, 2008).

The experience of supporting someone else can also be rewarding. Supporters can feel empowered, proud, and hopeful about their ability to help someone else in need. Dale and colleagues (2012) delineated additional benefits for the peer supporter including increased confidence, new knowledge, and social approval from peers.

The demands of recruiting, training, retaining, and supporting peer volunteers are a central limitation to the peer-to-peer model. Since the success of the program is commonly rooted in a volunteer peer who has shared experiences with the target population, finding and keeping such a person can be difficult. In addition, possible adverse outcomes of peer support include failed social connections, reduced self-efficacy of users, and reinforcement of unhealthy behaviors (Hoey et al., 2008). There is also the potential for peers to become “illness companions” or make suggestions based on personal experience that are otherwise unhelpful (Simmons, Bunn, Cohn, & Graffy, 2013). As the peer is typically untrained and speaking from personal experience, his/her advice may not reflect research-based recommendations for effective coping. Further, when peer supporters face challenging experiences in their own lives, they may feel overwhelmed by the demands of caring for others and their effectiveness may diminish. External monitoring of peer support interactions can be difficult due to the private nature of such communications.

Finally, similar to other social media portals reviewed in this report, the literature on the effectiveness of peer support in shaping health and psychological outcomes has been inconclusive, largely due to lack of comparison groups and measurable effects. Although some preliminary promising studies exist (such as a randomized clinical trial of an online peer support

group for depression which found reductions in depressive symptoms among users; Griffiths et al., 2012), additional research is needed.

Best practices of peer-to-peer support. Whether peer-to-peer support is accomplished informally through online forums, or formally through an organization, several best practices may contribute to their effectiveness. Recommendations for successful peer-to-peer support communities that have been described in the literature include:

1. **Taking a long-term perspective**. Peer support is best delivered over an extended period of time in order to establish rapport and yield benefits (Hoey et al., 2008).

2. **Identifying the population and purpose of the peer support mechanism**. Numerous decisions are involved in creating a peer support forum including:
    a. Recruitment process for peers
    b. Training and supervision of peer supporters
    c. Users' understanding and expectations of the kinds and limits of available support
    d. Structural issues including frequency, accessibility, and duration of support
    e. The extent to which the peer support is independent or integrated with other services
    f. Management of emergencies (Dale et al., 2012)

3. **Broadening the research base** regarding the following elements of peer support:
    a. Cost-effectiveness
    b. Benefits of using peers for support (for both the giver and receiver of support)
    c. Characteristics of individuals that might benefit from peer support
    d. Effective means of optimizing and sustaining online social media use as a mode for peer support (Dale et al., 2012)

In summary, the literature on social learning, communities of practice, and peer-to-peer support can provide helpful insights into effective means of supporting military spouses online. Prior to reviewing overarching best practices, this review will briefly summarize relevant literature from the business sector. Organizations have been developing and successfully using social media for a range of purposes, and some of their research may be useful to the Department of Defense's communication with military spouses.

Organizational Social Networking Best Practices

Organizations that administer social media platforms may encounter some unexpected challenges due to the unique nature of these websites. Research supports a variety of important organizational recommendations, some of which may be intuitive while others may be unexpected. In the following, some unique issues for social media administrators are discussed (including structural considerations for online platforms), and research-based best practices and conclusions are described.

Anonymity and Self-Disclosure

Social media users have many options when choosing a platform for online communications. Specifically, users have a range of choices about their online identity, including the level of desired self-disclosure or anonymity, both between social media platforms and within them. How social media administrators structure the extent and nature of identity disclosure can impact the quality of online communication.

Although some users wish to comment anonymously on online platforms (Colvin, Chenoweth, Bold, & Harding, 2004), such anonymous interactions are correlated with poor quality of comments (Kilner & Hoadey, 2005). In particular, anonymous posters are more likely to make negative and unprofessional comments. Online platforms that require each user to create an online identity tend to experience fewer unprofessional comments, even if that online identity is a pseudonym that is not associated with the user's real name.

Research has found that eliminating the option to post anonymously is associated with a reduction in overall participation on the online platform (Kilner & Hoadey, 2005). However, eliminating anonymous postings is also associated with an increase in the total number of participating users, even though the total volume of comments is lower. Research has found that requiring users to reveal their real names in online communications did not produce a significant change in the quality of comments or total participation.

Research suggests that requiring an online identity appears to produce the best outcomes on social media, even if that identity is a pseudonym that is not connected to the participant's real name.

Requiring an online identity is also valuable for ensuring the credibility of communications in an online platform. This may be especially important for platforms that involve communication with the public (Kaplan & Haenlein, 2009), such as Yelp, Twitter, or various review websites. Users from the general public are less likely to find anonymous responses to be credible.

In sum, this research suggests that requiring an online identity appears to produce the best outcomes on social media, even if that identity is a pseudonym that is not connected to the participant's real name.

Gender Differences

Research has revealed some gender differences in relationship development in online social media networks. For example, one study reported that women are more focused on maintaining existing relationships online, while men are more intent on forming new relationships (Muscanell & Guadagno, 2012). In general, women tend to experience greater distrust toward new online relationships and engage in less self-disclosure with unknown users than do men. However, another study (Giossar, 2008) found that women participated in an online community at a disproportionately higher rate than men. Differences in participation by gender are likely affected by the content and structure of the online forum (e.g., mothers often feel more comfortable with online parenting forums than fathers; Brady & Guerin, 2010; Sarkadi & Bremberg, 2005).

In light of this research, online communities for women may be most successful when the participants are already known to one another, and when a degree of trust and acceptance has previously been

established among group members. Administrators of online platforms could find ways to leverage the relationships that women have built offline to help women feel comfortable engaging with similar peers online. Social media sites could also emphasize commonalities among users as a means of building trust and comfort in online communication.

Recruitment, Retention, and Participation

Recruitment of new members is a key consideration for the success of any online community (Yuqing et al., 2011), as is the meaningful participation and retention of members while they are active in the community. Members who feel no attachment to an online community are less likely to participate regularly, and are at risk of discontinuing membership entirely. Two methods of stimulating attachment are the strengthening of a cohesive group identity, and the strengthening of interpersonal bonds among community members. Building a group identity can consist of giving the group a name, focusing on content that is of specific interest to the group, or even giving group members a t-shirt or other memorabilia to signify their involvement with the group. On the other hand, building interpersonal bonds typically involves stimulating discussion among individuals within a group, and encouraging self-disclosure among participants.

Both the group-identity approach and the interpersonal approach can be successful in increasing the participation of online community members. However, the group-identity approach has been found to be markedly and consistently more successful in increasing participation rates. Notably, neither the group identity nor the interpersonal approach have been demonstrated to increase the duration of participant membership (Yuquing et al., 2011).

In the context of military spouses, it may be easier to share a common group identity than it is to establish new, meaningful online relationships. Many participants, especially women, are reluctant to engage in self-disclosure towards strangers and do not trust online communities. Therefore, approaches focused on the establishment of a common group identity may be more successful in increasing participation than approaches focused on creating interpersonal bonds. As many online portals compete for users' attention and participation, active efforts by the Department of Defense to create and maintain visually appealing, engaging social media sites may be important.

Online Activity

It is important for any endeavor involving social media to maintain an active online presence (Kaplan & Haenlein, 2009). Users who perceive an online community to be inactive may be tempted to leave the community in favor of a more active environment. Many online platforms compete for users' participation, and each individual participant may overlap in membership with many similar groups (Wang, Butler, & Ren, 2012). Developers of new sites are wise to explore possible competition for their sites and develop a niche, highlighting unique features of the new social networking site. Doing so may increase the site's recruitment potential and enhance the likelihood of success in reaching its target audience. Site administrators may also dedicate effort to gaining the support of key stakeholders who will be responsible for maintaining active and dynamic content on the site.

In summary, based on the research on organizations' use of social media, successful online platforms may take into account questions of anonymity, gender, recruitment and retention, and perceptions of online activity when planning and creating platforms. Consideration of best practices in these areas may help foster greater and more meaningful use of the platform.

Conclusions and Best Practices

The use of social media is expanding quickly in the United States and around the world, and the Department of Defense can capitalize on the many strengths of this means of communication. Social media takes many different forms, and each mode has inherent strengths, as well as potential challenges. Users are drawn to social media for a range of reasons, but the primary motivations are to strengthen relationships and exchange social support. Although communication via social media has many advantages (e.g., immediacy, flexibility, ease of access, low cost), research has identified potential challenges associated with its use (e.g., risks of miscommunication, unhealthy social comparison, security or privacy breaches, cyberbullying, leaks of sensitive information).

The literature includes mixed findings regarding the relationship between social media use and personal wellbeing. Some research finds that using social media is related to negative outcomes including loneliness, jealousy, depression, and decreased life satisfaction. Other studies describe opposite findings, indicating social media usage relates to improved wellbeing. The research suggests that the correlates of social media use depend upon the user's motivation for use and specific online activity, but further examination of this important question is needed. Further, although minimal research exists regarding the use of social media among military personnel and their families, it is expected that military members use social networking sites at a rate similar to that of the broader United States population (of people in similar demographic categories).

Further research on the effectiveness of social media for military personnel and spouses may be beneficial. The existing literature on the correlates of social media use in the general population is mixed, with some research documenting associations with positive indicators (e.g., enhanced wellbeing, better connections to others) but other research revealing negative correlates (e.g., increased loneliness and social isolation). Although much of the research reveals high user satisfaction, meta-analyses of online communication for specific topics (i.e., parenting, health communication) have concluded that there is no documented benefit to users for participating in these online activities. Research will need to consider a range of factors in studying social media use (e.g., motivation for use, specific site and mode of communication, nature of feedback) as outcomes appear to differ across these variables.

Further research on the effectiveness of social media for military personnel and spouses may be beneficial.

As summarized in this report, social learning, communities of practice, and peer-to-peer learning are examples of popular social networking modalities, each with unique functions, strengths, and weaknesses. As the Department of Defense expands its use of social media with military spouses, consideration of the following best practices may be useful:

Examination of Existing Online Platforms

Examination of existing online platforms that military spouses are already using may provide helpful information. Existing social media sites (e.g., Facebook groups for military spouses, Military.com groups, National Military Family Association blogs) could be reviewed to maximize their usefulness. Some research has found that organizations may be most successful if they utilize existing social media platforms (e.g., Facebook) that already have high participation and acceptability by users rather than trying to create a new platform (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011).

Creation of New Social Media Sites

If new social media sites are created, defining the niche and specific purpose may be useful in maximizing reach, participation, and usefulness. Platforms work best when the purpose is clear, information is well-organized and accessible, and posted content relates to their intended function and audience. In addition, some organizations participate in several social networking sites. For example, one platform may be dedicated to the transfer of information among the Department of Defense and spouses, while others may be dedicated to peer-to-peer support. Use of several platforms to accomplish various goals may be more successful than attempting to meet the wide range of users' needs on one site.

Keep Social Media Platforms Active

To keep the social media platform active, enticing, and safe for users, it can be helpful for platform administrators to dedicate staff time to moderating the site and regularly engaging with users. This person can answer questions and strive to keep the exchange of information flowing. A moderator may also assist in developing traditions, creating opportunities for users to participate, and building community. Further, a moderator can regularly monitor posts to avoid leaks of sensitive information and the spread of rumors.

Cultural Awareness

It may be useful for social media creators to be cognizant of cultural influences in both the development and utilization of social media. For example, a site might be shaped for different users and groups due to cultural notions around asking questions, sharing information, and teamwork.

Tailor Content to Meet Specific Needs

The small research base on military spouses' use of social media reveals that they use these sites for information exchange and sharing of social support. Therefore, provision of vital information, routine updates, interesting stories, humorous anecdotes, and inspirational passages may be successful approaches to retaining users. Furthermore, research has found that military spouses use social media in differing amounts and for diverse reasons across a deployment cycle. Thus, social media administrators may wish to tailor content to meet these changing experiences and needs.

Safety Concerns

When considering development of social media sites, site administrators may consider the advantages and disadvantages of varying levels of privacy. Decisions regarding designation of who would monitor the site (e.g., a lead spouse versus an employee) may affect spouses' comfort and willingness to share openly online. Social media site administrators may also wish to utilize and develop platforms that require a user to show a user name rather than allowing for anonymous posts. The user name does not need to reveal the user's unique identity.

In light of users' legitimate concerns about dangers of online communication, site administrators may choose to proactively address these matters. Social media sites could have specific rules

and consequences for infractions. Users could have an opportunity to report inappropriate behavior, and people who engage in improper ways could be blocked from the site. Site administrators may educate users about netiquette (online etiquette) and safe use of the internet (as is done in the Department of Defense's Social Media Guide).

User Driven Development

Site administrators could strive to strengthen bonds and trust among users on social media sites by emphasizing shared experiences. Users who feel understood and appreciated by others with similar backgrounds and feelings may be more likely to use and benefit from such a website. This best practice could be partly accomplished by using peer support members who can share personal experiences. Furthermore, military spouses may be involved in developing and fine-tuning the online platform. Doing so may increase buy-in from military spouses and may highlight appreciation of the spouses' opinions and feelings. Involving military spouses in creating and fine-tuning the platform may also assist in recruiting users to the platform and generating interest through word-of-mouth.

The number of people using social networking sites has nearly doubled since 2008, with 74% of online adults now using social media (Duggan & Smith, 2013; Hampton et al., 2011). This growing trends allows organizations to reach individuals, deliver information, and respond to unique needs in a way that was previously impossible. Military Service members and their families continue to use social media in similar ways to their civilian peers, allowing for the Department of Defense to leverage the benefits of online communities of practice, peer-to-peer activities, and social media/learning. This is specifically true for military spouses, who may benefit from the social media communication discussed in this report. As the Department of Defense expands its use of social media, it may be beneficial to consider the research findings in this report regarding strengths, limitations, and dangers of online communication. With these considerations in mind, the Department of Defense can examine current social media utilization, grow usage in strategic areas of high potential, and address the specific needs of individual Service members, spouses, and military families.

References

Afifi, T. D., Hutchinson, S., & Krouse, S. (2006). Toward a theoretical model of communal coping in postdivorce families and other naturally occurring groups. *Communication Theory, 16*(3), 378-409. doi:10.1111/j.1468-2885.2006.00275.x

Afifi, W. A., Felix, E. D., & Afifi, T. D. (2012). The impact of uncertainty and communal coping on mental health following natural disasters. *Anxiety, Stress & Coping, 25*(3), 329-347. doi:10.1080/10615806.2011.603048

Al-Dubai, S. A. R., Ganasegeran, K., Al-Shagga, M. A. M., Yadav, H., & Arokiasamy, J. T. (2013). Adverse health effects and unhealthy behaviors among medical students using Facebook. *The Scientific World Journal, 2013*. doi:10.1155/2013/465161

Allen, M., & Naughton, J. (2011) Social learning: a call to action for learning professionals. *Development and Learning in Organizations: An International Journal, 26*(1), 50-55. Retrieved from http://www.emeraldinsight.com/loi/dlo

Ardichvili, A., Maurer, M., Li, W., Wentling, T., & Stuedemann, R. (2006). Cultural influences on knowledge sharing through online communities of practice. *Journal of Knowledge Management, 10*(1), 94-107. doi:10.1108/13673270610650139

Aydin, S. (2012). A review of research on Facebook as an educational environment. *Educational Technology Research and Development, 60*(6), 1093-1106. doi:10.1007/s11423-012-9260-7

Baumgartner, S. E., Valkenburg, P. M., & Peter, J. (2010). Unwanted online sexual solicitation and risky sexual online behavior across the lifespan. *Journal of Applied Developmental Psychology, 31*(6), 439-447. doi:10.1111/j.1741-3729.2012.00708.x

Beardslee, W. R., Keller, M. B., Lavori, P. W., Staley, J., & Sacks, N. (1993). The impact of parental affective disorder on depression in offspring: A longitudinal follow-up in a nonreferred sample. *Journal of the American Academy of Child & Adolescent Psychiatry, 32*(4), 723-730. doi:10.1097/00004583-199307000-00004

Blue Star Families. (2013). *2013 military family lifestyle survey: Comprehensive report.* Retrieved from http://webiva-downton.s3.amazonaws.com/617/0b/0/1584/Comprehensive_Report2013.pdf

Bowling, U. B., & Sherman, M. D. (2008). Welcoming them home: Supporting service members and their families in navigating the tasks of reintegration. *Professional Psychology: Research and Practice, 39*(4), 451-458. doi:10.1037/0735-7028.39.4.451

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer Mediated Communication, 13*(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x

Brady, E., & Guerin, S. (2010). "Not the romantic, all happy, coochy coo experience": A qualitative analysis of interactions on an Irish parenting web site. *Family Relations, 59*(1), 14-27. doi:10.1111/j.1741-3729.2009.00582.x

Burke, M., Marlow, C., & Lento, T. (2010, April). Social network activity and social well-being. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1909-1912). New York, NY: Association for Computing Machinery.

Burrell, L. M., Adams, G. A., Durand, D. B., & Castro, C. A. (2006). The impact of military lifestyle demands on well-being, Army, and family outcomes. *Armed Forces & Society, 33*(1), 43-58. doi:10.1177/0002764206288804

Burton, T., Farley, D., & Rhea, A. (2009). Stress-induced somatization in spouses of deployed and nondeployed servicemen. *Journal of the American Academy of Nurse Practitioners, 21*(6), 332-339. doi:10.1111/j.1745-7599.2009.00411.x

Byron, K. (2008). Carrying too heavy a load? The communication and miscommunication of emotion by email. *Academy of Management Review, 33*(2), 309-327. Retrieved from http://aom.org/AMJ/

Callahan, J. L., & Tomaszewski, L. (2007). Navigating the good ol'boys club: Women, marginality, and communities of practice in a military non-profit organization. *Studies in Continuing Education, 29*(3), 259-276. doi:10.1080/01580370701403324

Chang, C., & Heo, J. (2014). Visiting theories that predict college students' self-disclosure on Facebook. *Computers in Human Behavior, 30*, 479-86. doi:10.1016/j.chb.2013.07.059

Cheng, S. S., Liu, E. Z. F., & Shieh, R. S. (2012). Identifying the indicators attracting users to online question and answer discussion forums. *Social Behavior and Personality: An International Journal, 40*(2), 283-292. Retrieved from http://www.sbp-journal.com/index.php/sbp

Cheung, C. M. K., Chiu, P., & Lee, M. K. O. (2011). Online social networks: Why do students use Facebook? *Computers in Human Behavior, 27*(4), 337–1343. doi:10.1016/j.chb.2010.07.028

Cheung, C. M. K., Lee, M. K. O., & Lee, Z. W. Y. (2013). Understanding the continuance intention of knowledge sharing in online communities of practice through the post-knowledge-sharing evaluation processes. *Journal of the American Society for Information Science and Technology, 64*(7), 1357-1374. doi:10.1002/asi.22854

Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *The Future of Children, 23*(2), 13-39. Retrieved from http://futureofchildren.org/futureofchildren/index.xml

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5), 300-314. Retrieved from http://journals.lww.com/psychosomaticmedicine/pages/default.aspx

Cohen, C. (2013) *How do Millennials behave on social, mobile and the web?* Retrieved from http://millennialmarketing.com/2013/04/how-do-millennials-behave-on-social-mobile-and-the-web/

Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In B. Baum, S. E. Taylor, & J. E. Signer (Eds.), *Handbook of Psychology and Health* (pp. 253-267). Hillsdale, NJ: Lawrence Erlbaum.

Colineau, N., & Paris, C. (2010). Talking about your health to strangers: Understanding the use of online social networks by patients. *New Review of Hypermedia and Multimedia, 16*(1-2), 141-160. doi:10.1080/13614568.2010.496131

Colvin, J., Chenoweth, L., Bold, M., & Harding, C. (2004). Caregivers of older adults: Advantages and disadvantages of internet-based social support. *Family Relations, 53*(1), 49-57. doi:10.1111/j.1741-3729.2004.00008.x

Creech, S. K., Hadley, W., & Borsari, B. (2014). The impact of military deployment and reintegration on children and parenting: A systematic review. *Professional Psychology: Research and Practice*, Advance online publication. doi:10.1037/a0035055

Dale, J. R., Williams, S. M., & Bowyer, V. (2012). What is the effect of peer support on diabetes outcomes in adults? A systematic review. *Diabetic Medicine, 29*(11), 1361-1377. doi:10.1111/j.1464-5491.2012.03749.x

Davidson, L., Bellamy, C., Guy, K., & Miller, R. (2012). Peer support among persons with severe mental illnesses: A review of evidence and experience. *World Psychiatry, 11*(2), 123-128. Retrieved from http://www.wpanet.org/

Davis, D. Z., & Calitz, W. (2014). Finding healthcare support in online communities: An exploration of the evolution and efficacy of virtual support groups. *Journal for Virtual Worlds Research, 7*(3). Retrieved from http://www.jvwresearch.org

DeAndrea, D. C. (2014). Testing the proclaimed affordances of online support groups in nationally representative sample of adults seeking mental health assistance. *Journal of Health Communication: International Perspectives.* Advance online publication. doi:10.1080/10810730.2014.914606

Defense Manpower Data Center. (2013). *The 2012 active duty spouse survey tabulation volume*. Arlington, VA: Department of Defense.

Department of Defense. (n.d.). *Social media guide.* Retrieved from http://www.militaryonesource.mil/12038/MOS/ResourceGuides/Social_Media_Guide.pdf

Department of Defense (2008). *Guide to online social networking for military families*. Retrieved from http://www.militaryonesource.mil/12038/Project%20Documents/MilitaryHOMEFRONT/HOMEFRONTConnections/Social_Networking_Guide%5B1%5D.pdf

Department of Defense. (2013). 2013 demographics: Profile of the military community. Arlington, VA: Author.

Department of Defense. (2013). Annual report to the congressional defense committees on plans for the department of defense for the support of military family readiness: Fiscal year 2013. Retrieved from http://www.militaryonesource.mil/12038/MOS/Reports/FY2013-Report-MilitaryFamilyReadinessPrograms.pdf

Dessens, L. C. (2014). *Online social support: Buffering deployment stress among Marine Corps spouses* (Unpublished doctoral dissertation). George Mason University, Fairfax VA.

Duggan, M., & Smith, A. (2013) *Social media update 2013*. Retrieved from http://pewinternet.org/Reports/2013/Social-Media-Update.aspx

Eichhorn, K. C. (2008). Soliciting and providing social support over the internet: An investigation of online eating disorder support groups. *Journal of Computer-Mediated Communication, 14*(1), 67-78. doi:10.1111/j.1083-6101.2008.01431.x

Elliott, D. (2011). *Facebook, resilience and Army spouses coping with combat deployment* (Unpublished master's thesis). Wake Forest University, Winston-Salem, NC.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication, 12*(4), 1143-1168. doi:10.1111/j.1083-6101.2007.00367.x

Eysenbach, G, Powell, J., Englesakis, M., Rizo, C., & Stern, A. (2004). Health related virtual communities and electronic support groups: Systematic review of the effects of online peer to peer interactions. *BMJ, 328,* 1-6. doi:10.1136/bmj.328.7449.1166

Fang, Y. H., & Chiu, C. M. (2010). In justice we trust: Exploring knowledge-sharing continuance intentions in virtual communities of practice. *Computers in Human Behavior, 26*(2), 235-246. doi:10.1016/j.chb.2009.09.005

Feinstein, B. A., Hershenberg, R., Bhatia, V., Latack, J. A., Meuwly, N., & Davila, J. (2013). Negative social comparison on Facebook and depressive symptoms: Rumination as a mechanism. *Psychology of Popular Media Culture, 2*(3), 161-170. doi:10.1037/a0033111

Gangadharbatla, H. (2008). Facebook me: Collective self-esteem, need to belong, and internet self-efficacy as predictors of the Igeneration's attitudes toward social networking sites. *Journal of Interactive Advertising, 8*(2), 5-15. doi:10.1080/15252019.2008.10722138

Gewirtz, A. H., Erbes, C. R., Polusny, M. A., Forgatch, M. S., & DeGarmo, D. S. (2011). Helping military families through the deployment process: Strategies to support parenting. *Professional Psychology: Research and Practice, 42*(1), 56-62. doi:10.1037/a0022345

Goldsmith, R. E., & Horowitz, D. (2013). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising, 6*(2), 2-14. doi:10.1080/15252019.2006.10722114

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360-1380. Retrieved from http://www.press.uchicago.edu/ucp/journals/journal/ajs.html

Gray, B. (2004). Informal learning in an online community of practice. *Journal of Distance Education, 19*(1), 20-35. Retrieved from http://www.jofde.ca

Green, S., Nurius, P. S., & Lester, P. (2013). Spouse psychological well-being: A keystone to military family health. *Journal of Human Behavior in the Social Environment, 23*(6), 753-768. doi:10.1080/10911359.2013.795068

Grieve, R., Indian, M., Witteveen, K., Tolan, G. A., & Marrington, J. (2013). Face-to-face or Facebook: Can social connectedness be derived online? *Computers in Human Behavior, 29*(3), 604–609. doi:10.1016/j.chb.2012.11.017

Griffiths, K. M., Mackinnon, A. J., Crisp, D. A., Christensen, H., Bennett, K., & Farrer, L. (2012). The effectiveness of an online support group for members of the community with depression: A randomised controlled trial. *PloS one, 7*(12), e53244. doi:10.1371/journal.pone.0053244

Hampton, K., Goulet, L. S., Rainie, L., & Purcell, K. (2011, June). *Social networking sites and our lives.* Retrieved from http://www.pewinternet.org/2011/06/16/social-networking-sites-and-our-lives/

Hargittai, E. (2007). Whose space? Differences among users and non-users of social network sites. *Journal of Computer-Mediated Communication, 13*(1), 276-297. doi:10.1111/j.1083-6101.2007.00396.x

Hashtags.org. (n.d.). *Analytics for #military*. Retrieved from https://www.hashtags.org/analytics/military/

Hemmasi, M., & Csanda, C. M. (2009). The effectiveness of communities of practice: An empirical study. *Journal of Managerial Issues, 21*(2), 262-279. Retrieved from http://www.pittstate.edu/department/economics/journal-of-managerial-issues/

Hertlein, K., & Stevenson, A. (2010). The seven "as" contributing to internet-related intimacy problems: A literature review. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 4*(1), article 3. Retrieved from http://www.cyberpsychology.eu/index.php

Hinds, D., & Lee, R. M. (2008). Social network structure as a critical success condition for virtual communities. In *Proceedings of the 41st Annual Hawaii International Conference on System Sciences* (pp. 323-323). Manoa, HI: University of Hawai'i.

Hoey, L. M., Ieropoli, S. C., White, V. M., & Jefford, M. (2008). Systematic review of peer-support programs for people with cancer. *Patient Education and Counseling, 70*(3), 315-337. doi:10.1016/j.pec.2007.11.016

Hudson, J. L., Dodd, H. F., & Bovopoulos, N. (2011). Temperament, family environment and anxiety in preschool children. *Journal of Abnormal Child Psychology, 39*(7), 939-951. doi:10.1007/s10802-011-9502-x

Joinson, A. N. (2008, April). 'Looking at', 'Looking up', or 'Keeping up with' people? Motives and uses of Facebook. In *Proceedings from CHI 2008: Online Social Networks.* Florence, Italy.

Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons, 53*(1), 59-68. doi:10.1016/j.bushor.2009.09.003

Karavidas, M., Lim, N. K., & Katsikas, S. L. (2005). The effects of computers on older adult users. *Computers in Human Behavior, 21*(5), 697-711.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons, 54*(3), 241-251. doi:10.1016/j.bushor.2011.01.005

Kilner, P. G., & Hoadley, C. M. (2005, May). Anonymity options and professional participation in an online community of practice. In *Proceedings of the 2005 Conference on Computer Support for Collaborative Learning: Learning 2005: The Next 10 Years!* (pp. 272-280). International Society of Learning Scientists.

Kingsnorth, S., Gall, C., Beayni, S., & Rigby, P. (2011). Parents as transition experts? Qualitative findings from a pilot parent-led peer support group. *Child: Care, Health, and Development, 37*(6), 833-840. doi:10.1111/j.1365-2214.2011.01294.x

Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior, 26*(6), 1237-1245. doi:10.1016/j.chb.2010.03.024

Klatt, C., Berg, C. J., Thomas, J. L., Ehrlinger, E., Ahluwalia, J. S., & An., L. C. (2008). The role of peer e-mail support as part of a college smoking-cessation website. *American Journal of Preventive Medicine, 35*(6), S471-S478. doi:10.1016/j.amepre.2008.09.001

Kniskern, M. K., & Segal, D. R. (2010). Mean wage differences between civilian and military wives. College Park, MD: University of Maryland, Center for Research on Military Organization.

Kowalski, R. M., Limber, S., Limber, S. P., & Agatston, P. W. (2012). *Cyberbullying: Bullying in the digital age* (2nd ed.). Malden, MA: John Wiley & Sons.

Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2013). Envy on Facebook: A hidden threat to users' life satisfaction? *Wirtschaftsinformatik Proceedings* (pp. 1477-1491). Urbana-Champaign, IL: Association for Information Services.

Krenzer, L. (2013). Online support communication among military spouses. (Unpublished master's thesis). University of Texas at El Paso.

Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., . . . Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PloS one, 8*(8), e69841. doi:10.1371/journal.pone.0069841

Kuhl, M. W., Casper, D. M., Jordan, A. C., Zemanek, L. J., Pinna, K. L. M., Hawkey, K. R., Borden, L. M., Koch, B., Tessier, C., Kearney, J., Steinman, D., & Otto, M. (2014, January). *Safeguarding children and youth from sexual abuse: Implications of grooming for prevention.* St. Paul, MN: University of Minnesota Center for Research and Outreach.

Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction – A review of the psychological literature. *International Journal of Environmental Research and Public Health, 8*, 3528-3552. doi:10.3390/ijerph8093528

Kwon, M., D'Angelo, J., & McLeod, D. M. (2013). Facebook use and social capital: To bond, to bridge, or to escape. *Bulletin of Science, Technology & Society, 33,* 35-43. doi:10.1177/0270467613496767

Lapp, C. A., Taft, L. B., Tollefson, T., Hoepner, A., Moore, K., & Divyak, K. (2010). Stress and coping on the home front: Guard and reserve spouses searching for a new normal. *Journal of Family Nursing, 16*(1), 45-67. doi:10.1177/1074840709357347

Lenhart, A. (2009) *Adults and social network websites.* Retrieved from http://www.pewinternet.org/files/old-media/Files/Reports/2009/PIP_Adult_social_networking_data_memo_FINAL.pdf.pdf

Lenhart, A., Purcell,, K., Smith, A., & Zickuhr, K. (2010, February). *Social media & mobile internet use among teens and young adults.* Retrieved from http://pewinternet.org/reports/2010/social-media-and-young-adults.aspx

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., . . . Beardslee, W. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*(4), 310-320. doi:10.1016/j.jaac.2010.01.003

Lewis, B., & Rush, D. (2013). Experience of developing Twitter-based communities of practice in higher education. *Research in Learning Technology, 21*, p. 1-13. doi:10.3402/rlt.v21i0.18598

Lobchuk, M., McClement, S., Rigney, M., Copeland, A., & Bayrampour, H. (2014). A qualitative analysis of "naturalistic" conversations in a peer-led online support community for lung cancer. *Cancer Nursing,* Advance online publication. doi:10.1097/NCC.0000000000000207

Mansfield, A. J., Kaufman, J. S., Marshall, S. W., Gaynes, B. N., Morrissey, J. P., & Engel, C. C. (2010). Deployment and the use of mental health services among U. S. Army wives. *New England Journal of Medicine, 362*(2), 101-109. doi:10.1056/nejmoa0900177

Martin, J. A., & McClure, P. (2000). Today's active duty military family: The evolving challenges of military family life. In J. A. Martin, L. N. Rosen, & L.R. Sparacino (Eds.), *The military family: A practice guide for human service providers* (pp. 3–23). Westport, CT: Praeger Publishers.

Matthews-Juarez, P., Juarez, P. D., & Faulkner, R. T. (2013). Social media and military families: A perspective. *Journal of Human Behavior in the Social Environment, 23*(6), 769-776. doi:10.1080/10911359.2013.795073

Military.com (2014, October 28). Coping. Message posted to http://forums.military.com/eve/forums/a/tpc/f/90600431813/m/7620084513001

Military.com. (n.d.). In *Facebook* [Group pages]. Retrieved October 29, 2014, from https://www.facebook.com/Militarydotcom

Miller, L. L., Martin, L. T., Yeung, D., Trujillo, M., & Timmer, M. J. (2014). *Information and communication technologies to promote social and psychological well-being in the Air Force*. Retrieved from http://www.rand.org/pubs/research_reports/RR695.html

Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: Systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of Medical Internet Research, 15*(4). e85. doi:10.2196/jmir.1933

Muise, A., Christofides, E., & Desmarais, S. (2009). More information than you ever wanted: Does Facebook bring out the green-eyed monster of jealousy? *CyberPsychology & Behavior, 12*(4), 441-444. doi:10.1089/cpb.2008.0263

Muscanell, N. L., & Guadagno, R. E. (2012). Make new friends or keep the old: Gender and personality differences in social networking use. *Computers in Human Behavior, 28*(1), 107-112. doi:10.1016/j.chb.2011.08.016

Nicholas, D., Picone, G. Vigneux, A., McCormick, K. Mantulak, A., McClure, M., & MacCullouch, R. (2009). Evaluation of an online peer support network for adolescents with chronic kidney disease. *Journal of Technology in Human Services, 27*(1), 23-33. doi:10.1080/15228830802462063

Nie, N. H., & Erbring, L. (2000). *Internet and society: A preliminary report*. Stanford, CA: Stanford Institute for the Quantitative Study of Society.

Nistor, N., Schworm, S., & Werner, M. (2012). Online help-seeking in communities of practice: Modeling the acceptance of conceptual artifacts. *Computers & Education, 59*(2), 774-784. doi:10.1016/j.compedu.2012.03.017

Nitzburg, G. C., & Farber, B. A. (2013). Putting up emotional (Facebook) walls? Attachment status and emerging adults' experiences of social networking sites. *Journal of Clinical Psychology, 69*(11), 1183-1190. doi:10.1002/jclp.22045

Nosko, A., Wood, E., & Molema, S. (2010). All about me: Disclosure in online social networking profiles: The case of FACEBOOK. *Computers in Human Behavior, 26*(3), 406-418. doi:10.1016/j.chb.2009.11.012

Nyland, R., Marvez, R., & Beck, J. (2007, February). MySpace: Social networking or social isolation. In *AEJMC Midwinter Conference* (pp. 23-24). Columbia, SC: Association for Education in Journalism and Mass Communication.

Padden, D. L., Connors, R. A., & Agazio, J. G. (2011). Determinants of health-promoting behaviors in military spouses during deployment separation. *Military Medicine, 176*(1), 26-34. doi:10.7205/MILMED-D-d1-000141

Padden, D., & Posey, S. M. (2013). Caring for military spouses in primary care. *Journal of the American Academy of Nurse Practitioners, 25*(3), 141-146. doi:10.1111/j.1745-7599.2012.00809.x

Paterson, B. L., Brewer, J., & Stamler, L. L. (2013). Engagement of parents in on-line social support interventions. *Journal of Pediatric Nursing, 28*(2), 114-124. doi:10.1016/j.pedn.2012.05.001

Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior, 12*(6), 755-759. doi:10.1089/cpb.2009.0109

Pew Research Internet Project. (2014). *Social networking fact sheet.* Retrieved from http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/

Pfeiffer, P. N., Heisler, M., Piette, J. D., Rogers, M. A., & Valenstein, M. (2011). Efficacy of peer support interventions for depression: A meta-analysis. *General Hospital Psychiatry, 33*(1), 29-36. doi:10.1016/j.genhosppsych.2010.10.002

Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society, 30*(5), 350-361. doi:10.1177/0270467610380009

Rains, S. A., & Keating, D. M. (2011). The social dimension of blogging about health: Health blogging, social support, and well-being. *Communication Monographs, 78*(4), 511-534. doi:10.1080/03637751.2011.618142

Rea, J. K. (2014). The role of social networking sites in the lives of military spouses (Unpublished master's thesis). North Carolina State University, Raleigh, NC.

Ritchie, M., & Black, C. (2012). Public internet forums: Can they enhance argumentative writing skills of second language learners? *Foreign Language Annals, 45*(3), 349-361. doi:10.1111/j.1944-9720.2012.01203.x

Rubin, A. M. (2002). The uses-and-gratifications perspective of media effects. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 525-548). Mahwah, NJ: Lawrence Erlbaum.

Sarkadi, A., & Bremberg, S. (2005). Socially unbiased parenting support on the Internet: A cross-sectional study of users of a large Swedish parenting website. *Child: Care, Health and Development, 31*(1), 43-52. doi:10.1111/j.1365-2214.2005.00475.x

Schaefer, C., Coyne, J. C., & Lazarus, R. S. (1981). The health-related functions of social support. *Journal of Behavioral Medicine, 4*(4), 381-406. doi:10.1007/BF00846149

Schumm, W. R., Bell, D. B., & Knott, B. (2000). Factors associated with spouses moving away from their military installation during an overseas deployment. *Psychological Reports, 86*(3c), 1275-1282. doi:10.2466/pr0.2000.86.3c.1275

Schumm, W. R., Bell, D. B., Knott, B., & Rice, R. E. (1996). The perceived effect of stressors on marital satisfaction among civilian wives of enlisted soldiers deployed to Somalia for Operation Restore Hope. *Military Medicine, 161*(10), 601-606. Retrieved from http://www.amsus.org/

Simmons, D., Bunn, C., Cohn, S., & Graffy, J. (2013). What is the idea behind peer-to-peer support in diabetes? *Diabetes Management, 3*(1), 61-70. doi:10.2217/dmt.12.80

Simmons, L. (2014). *Bullying or fun? Military spouses go to battle over "Dependa" on Facebook.* Retrieved from http://wtkr.com/2014/04/24/bullying-or-fun-military-spouses-go-to-battle-over-dependa-on-facebook/

Smith, A. (2011, November 15). *Why Americans use social media.* Retrieved from http://www.pewinternet.org/2011/11/15/why-americans-use-social-media/

Social media. (n.d.). In Merriam Webster Online, Retrieved December 12, 2014, from http://www.merriam-webster.com/dictionary/social%20media

Social networking. (n.d.). In Merriam Webster Online, Retrieved December 12, 2014, from http://www.merriam-webster.com/dictionary/social%20networking

Stefanone, M. A., & Jang, C. (2007). Writing for friends and family: The interpersonal nature of blogs. *Journal of Computer-Mediated Communication, 13*(1), 123-140. doi:10.1111/j.1083-6101.2007.00389.x

Stommel, W., & Koole, T. (2010). The online support group as a community: A micro-analysis of the interaction with a new member. *Discourse Studies, 12*(3), 357-378. doi:10.1177/1461445609358518

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior, 7*(3), 321-326. doi:10.1089/1094931041291295

Taniguchi, E., & Lee, H. E. (2012). Cross-cultural differences between Japanese and American female college students in the effects of witnessing fat talk on Facebook. *Journal of Intercultural Communication Research, 41*(3), 260-278. doi:10.1080/17475759.2012.728769

Taylor, M., Wells, G., Howell, G., & Raphael, B. (2012). The role of social media as psychological first aid as a support to community resilience building. *The Australian Journal of Emergency Management, 27*(1), 20-26. Retrieved from http://www.em.gov.au/publications/australianjournalofemergencymanagement/Pages/default.aspx

Tee, K., Brush, A. J. B., & Inkpen, K. M. (2009). Exploring communication and sharing between extended families. *International Journal of Human-Computer Studies, 67*(2), 128-138. doi:10.1016/j.ijhcs.2008.09.007

Thomas, A. U., Fried, G. P., Johnson, P., & Stilwell, B. J. (2010). Sharing best practices through online communities of practice: A case study. *Human Resources for Health, 8*(25), 1-8. Retrieved from http://www.human-resources-health.com/

Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. Philadelphia, PA: Basic books.

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site? Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication, 14*(4), 875-901. doi:0.1111/j.1083-6101.2009.01474.x

Verdeli, H., Baily, C., Vousoura, E., Belser, A., Singla, D., & Manos, G. (2011). The case for treating depression in military spouses. *Journal of Family Psychology, 25*(4), 488-499. doi:10.1037/a0024525

Walker, S. K., & Rudi, J. H. (2014). Parenting across the social ecology facilitated by information and communications technology: Implications for research and educational design. *Journal of Human Sciences and Extension 2*(2), 15-32). Retrieved from http://www.jhseonline.com/

Wan, C. (2009). Gratifications & loneliness as predictors of campus-SNS (Unpublished doctoral dissertation). The Chinese University of Hong Kong, Hong Kong, China.

Wang, X., Butler, B. S., & Ren, X. (2013). The impact of membership overlap on growth: An ecological competition view of online groups. *Organization Science, 24*(2), 414-431. Retrieved from http://pubsonline.informs.org/journal/orsc

Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge.* Boston, MA: Harvard Business Press.

White, K., & Lehman, D. R. (2005). Culture and social comparison seeking: The role of self-motives. *Personality and Social Psychology Bulletin, 31,* 232-242. doi:10.1177/0146167204271326

White, C., Plotnick, L., Kushma, J., & Hiltz, S. R. (2009). An online social network for emergency management. *International Journal of Emergency Management, 6*(3), 369-382. doi:10.1504/IJEM.2009.031572

Williams, G., Hamm, M. P., Shulhan, J., Vandermeer, B., & Hartling, L. (2014). Social media interventions for diet and exercise behaviours: A systematic review and meta-analysis of randomised controlled trials. *BMJ open, 4*(2), e003926. doi:10.1136/bmjopen-2013-003926

Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological predictors of young adults' use of social networking sites. *Cyberpsychology, Behavior, and Social Networking, 13*(2), 173-177. doi:10.1089/cyber.2009.0094

Wright, K. B., & Miller, C. H. (2010). A measure of weak-tie/strong-tie support network preference. *Communication Monographs, 77*(4), 500-517. doi:10.1080/03637751.2010.502538

Wright, K. B., Rains, S. and Banas, J. (2010), Weak-tie support network preference and perceived life stress among participants in health-related, computer-mediated support groups. *Journal of Computer-Mediated Communication, 15,* 606–624. doi:10.1111/j.1083-6101.2009.01505.x

Yukawa, J. (2010). Communities of practice for blended learning: Toward an integrated model for LIS education. *Journal of Education for Library and Information Science, 51*(2), 54-75. Retrieved from http://www.jstor.org/action/showPublication?journalCode=jedulibinfosci

Appendix

Definitions of the following terms are provided to set the context for this report:

Social media: "Forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content" ("Social media," n.d.). Includes real-time communication sites (e.g., Skype), blogs (e.g., Blogger), social networking sites (e.g., Facebook), content communities (e.g., YouTube), and virtual worlds (e.g., Second Life) (Matthews-Juarez et al., 2013).

Social networking: "The creation and maintenance of personal and business relationships, especially online" ("Social networking," n.d.).

Social networking site: "Web-based services that allow individuals to 1. Construct a public or semi-public profile within a bounded system, 2. Articulate a list of other users with whom they share a connection, and 3. View and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2008, p. 211). Examples include Facebook, LinkedIn, and Twitter.

Social learning: "Use of social media tools to learn informally…it helps people become more informed, gain a wider perspective, and make better decisions by engaging with others" (Allen & Naughton, 2011, p. 51).

Community of practice (CoP): "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger, McDermott, & Snyder, 2002, p. 1). Some research has defined various categories of virtual communities, such as socialization communities, gaming communities, content sharing communities, knowledge sharing communities, activism communities, development communities, and exchange communities (Hinds & Lee, 2008).

Blog: Personal webpages can come in a variety of types, from personal diaries describing one's life to summaries of information or opinions about a certain topic. Historically text-based, some have begun to take different media formats, including video-blogging (Kaplan & Haenlein, 2010).