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Amputee Social Support: A Quantitative Investigation of Peer-to-Peer and Group Influence

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Abstract

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MA, Walden University, 2012

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Previous research has indicated that vascular disease, trauma, and cancer lead to amputations and that 1.7 million Americans are living with an amputation. The social problem of this study is that amputees have limited places to obtain social support. Alderfer's Existence, Relatedness, and Growth Theory provided the foundation for this research. The current study examined the following questions. First, does type of social support impact amputee perceived social support satisfaction? Second, does type of social support impact life satisfaction? Survey methodology was used following attendance at either peer-to-peer or group support. A purposeful sample of 184 participants were assessed using the Satisfaction with Life Scale and the Multidimensional Scale of Perceived Social Support. ANOVA first showed that peer participants reported significantly greater perceived social support satisfaction than group. Second, ANOVA showed that participants in peer support groups reported greater life satisfaction than group. These data assist anyone concerned with helping amputees make support decisions based on the amputees' specific needs. From these findings, future research utilizing other forms of social support for amputees can be generated and expanded.

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Dedication

This study is dedicated to all those who are seeking to better themselves. To those who believe they can despite the difficulties they face. My word to you is to set your face like flint. Keep your eyes on the prize, and keep telling yourself, I can do this. Before you realize it, you will have accomplished your purpose and reached your goal.

Acknowledgments

I wish to take this opportunity to acknowledge all those who have helped me through this arduous and sometimes tedious process. This has proven to be one of the most rewarding ventures I have ever embarked upon. I thank everyone from my Dissertation chair Dr. Horton, to my Methods person, Dr. Brown, to URR's Dr. Sickel, and my family. I appreciate you all!

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Chapter 1

Socialization is a core factor in the lives of humans (McNicholas, 2002). Positive social support leads to higher levels of self-esteem and optimism (McNicholas, 2002). Ajala (2011) investigated psycho-social correlates of adjustment in adult amputees. The study investigated 60 upper and lower body amputees to determine the impact amputations had on the mindset and social concepts of amputees. Study results indicated that many amputees' experienced failure or difficulty in adjusting to life post amputation. Study results showed that the psychological impact experienced by most amputees' included feelings of hopelessness, sadness, and apprehension (Ajala, 2011).

The purpose of the current study related to examining the influence the method of receiving social support via peer-to-peer (one-to-one) or group contributed to an amputee's satisfaction with life and perceived social support. Peer-to-peer support referred to matching someone with an amputation with an amputee who is seeking social support. The other method is group social support where social support occurred in a group setting instead of a one-to-one setting. The tests instruments, namely the satisfaction with life scale (swls), (Diener, Emmons, Larsen, & Griffin, 1985) and multidimensional scale of perceived social support (mspss), (Zimet, Dahlem, Zimet, & Farley, 1988) assisted in making support method evaluations. The noted instruments along with aspects of Alderfer's existence, relatedness, and growth theory (erg) provided empirical information about the relationship between the type of intervention, satisfaction with life scores, and multidimensional scale scores. The social change benefits from this

study help both amputees and advocates to choose a support method that offers significant influence towards meeting an amputee's satisfaction with life goals.

Chapter Composition

The major sections of this chapter included a brief background of the study. Information identifying the gap in the literature followed the background of the study segment. Next, study rationale and method information were noted. The problem statement noted study rationale and method information. The problem statement included supporting evidence indicating why this problem is current, relevant, and significant to health psychology. The study purpose segment followed the problem statement. The purpose noted this as being an inferential quantitative study. This section provided the intent of the study. Research questions followed. Information about the theoretical framework followed the research questions segment. The nature of the study section succeeded the theoretical framework. It provided study rationale and definition of terms. The assumptions followed the definition of terms. This chapter concluded with the study limitations, scope, and delimitations section, the significance section, and summary.

Study Background

The Amputee Statistics (2013) website depicted 1.7 million Americans living with an amputation. The Limb Loss Resource Center (2014) showed that the primary cause of amputations in the United States is a vascular disease. Statistics showed that vascular diseases accounted for 54% of amputations (Limb Loss Resource Center, 2014). Data showed that 45% of amputations occurred due to trauma, and 2% resulted from

cancer. Studies revealed that dysvascular limb loss accounted for 97% of lower limb amputations (National Limb Loss Information Center, 2012). The Amputee Statistics (2013) website depicted a steady rise in people living with an amputation.

Sheehan and Gondo's (2014) reiterated the rise in amputations in their investigation of the impact of limb loss. According to Sheehan and Gondo (2014) more than 500 amputations, occur throughout the United States every day. These researchers emphasized the importance of establishing a registry to track the rising needs of this population (Sheehan & Gondo, 2014). Melcer et al. (2012) demonstrated this increase by way of examining physical and psychological health prospects for military amputees and non-amputee extremity injured patients. Judge et al. (2013) noted this rise while investigating complications due to cancer and infection that led to amputations. Walker (2012) informed readers that amputations occurred due to peripheral arterial disease, infections, malignancy, diabetic foot ulcers and various traumas. Socialization helped to ward off the negative effects of trauma (Oddone, Hybel, McQuoid, & Steffens, 2011).

Studies on Social Support and Amputees

Effective social support methods contributed to fewer suicide attempts and less mental distress in amputees via providing coping mechanisms (Livneh, Antonek & Gerhardt, 2000). The researchers evaluated 61 amputees, using multidimensional scaling, and cluster analysis. Study results indicated an amputee's perception towards coping with amputation related stress explained three study dimensions. The coping dimensions included (a) active/confrontive versus passive/avoidance, (b) social/emotional versus

cognitive, and (c) pessimistic/fatalist versus optimistic/positivistic. Proficient social support provided a basis for physical, emotional stability and well-being (Buljac-Samardzic, Van Wijngaarden & Van Excel, 2010). The Buljac-Samardzic et al. (2010) study included 51 respondent rank ordered opinion statements. Study results showed that three main factors contributed to teamwork effectiveness. The factors showed interactions between team members, common team characteristics, and team distinctions that led to team cohesion (Buljac-Samardzic et al. 2010). Constanca, Salma, and Shah (2007) investigated the responses of 999 participants to determine the influence of social support, self-perceptions of health, and quality of life. Researchers employed the dual-process coping model to interpret results. Study conclusions indicated that social support contributed to optimistic health outlooks. In another study, Solomon (2004) examined peer support, and the principal processes of peer provided services. Solomon discussed the underlying psychosocial processes involved in providing peer support and peer related services. The study provided empirical information relating to the essential components of peer provided services. Study findings identified necessary peer provided characteristics and mental health system fundamentals for achieving optimal benefit (Solomon, 2004). The social change benefits from this study help both amputees and advocates to choose a support method based on the influence it provides towards meeting an amputee's satisfaction with life goals.

Other studies demonstrating social support

The literature showed a limited number amputee social support studies; however, social support assessments have taken place using other populations. Researchers Clifford and Minnes (2013) made readers aware that participation in a support group helped members develop coping strategies. Their study focused on support groups for parents with a child with an autism spectrum disorder. Clifford and Minnes (2013) provided an online survey geared towards gathering data relevant to parent's beliefs towards support groups and autism spectrum disorder. Study results indicated that parents who engaged a support group employed more adaptive coping skills (Clifford & Minnes, 2013).

Providing appropriate social support saved money (Goetzel, 2009). Van Spijker, Majo, van Straten and Kerkhof (2012) demonstrated cost savings relating to suicide prevention, missed work days and unnecessary trips to medical facilities. Their study employed the use of 236 adults with suicidal tendencies. They used a self-help web-based intervention program and self-report questionnaires. The beck scale for suicidal ideation helped researchers assess study data. Results showed that the Internet treatment program positively correlated with decreased suicidal ideations, lower medical costs, and fewer lost work days (Van Spijker et al. 2012). The literature showed social support rendered to amputees in different forms. However, none of the noted forms included an evaluation of either peer-to-peer or group forms of social support.

This study aimed to provide empirical information noting the influence of peer-to-peer and group social support on amputee perceived social support and satisfaction with

life. Study conclusions may provide a starting point for amputees to begin seeking social support based on their specific needs and goals via noting the influence of each method. Study information allows amputees to make informed decisions based on the information provided for both methods of social support.

As previously stated, the test instruments for the current study included the satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985), and multidimensional scale of perceived social support (Zimet, Dahlem, Zimet, & Farley, 1988). The satisfaction with life scale measuring overall life satisfaction provided the dependent variables for this study. The satisfaction with life scale validation study investigated subjective well-being. Results from the validation study showed that scores on the satisfaction scale positively correlated with various measures of well-being (Diener et al. 1985). The satisfaction with life scale aided in providing an overall assessment of an individual's quality of life (Diener et al. 1985). The multidimensional scale of perceived social support, (Zimet et al. 1988) received its validation in a study investigating the effect of perceived social support. The Zimet et al. (1988) study employed 275 college students to examine the influence of perceived social support on depression and anxiety. Study results revealed that perceived social support positively correlated with low levels of depression and anxiety symptoms. The validation study used a self-report measure and the Hopkins symptoms checklist. For this study, scores from the multidimensional scale of perceived social support provided the independent variables.

Means between totaled scores from the test instrument highlighted differences between peer-to-peer support and group support. The social change benefits from this study help both amputees and advocates to choose a support method that offers significant influence towards meeting an amputee's satisfaction with life goals. Assessing the degree of influence each method of support contributed to amputee satisfaction with life totaled scores and perceived social support totaled scores provide an empirical basis for choosing either method of social support. Results may help counselors and advocates advising amputees to choose one or the other method for receiving social support. This study may help to maximize social support method selection benefits by helping both amputees and advocates to choose a support method that offers significant influence in life satisfaction areas important to the amputee.

Literature Gap

The literature review showed few studies investigating amputees and social support outcomes. The one study conducted by researchers Tebbi, Stern, Boyle, Mettlin and Mindell (2006) examined social support systems. Their study showed percentages associated with various types of social support. The support systems included parents, professional hospital staff, siblings, and friends. Tebbi et al. (2006) showed that mothers support provided .80, hospital professional support offered 59%, and siblings offered 59% of perceived social support for adolescents who incurred an amputation due to cancer. Study findings indicated friends offered less perceived social support showing 65% felt sorry for the individual, 33% avoided them, and 40% percent drifted away. The

study noted that only 7% of the adolescent amputees desired to be associated with other amputees (Tebbi et al. 2006). However, none of the social support systems noted included peer-to-peer or amputee group social support. Williams et al. (2004) provided a two-year longitudinal study investigation of amputee social support. Their study highlighted social support integration. Study results indicated that high levels of socialization integration post amputation helped amputees to adjust to the associated changes easier. However, mean levels of social integration appeared lower for those with a disability than those without a disability. Multidimensional scale of perceived social support (MSPSS) scores varied between those with disabilities and those without a disability. Multidimensional survey data showed a positive correlation between mspss scores and the prediction of pain interference and life satisfaction (Williams et al. 2004). This present study examined how peer-to-peer social support and amputee social support groups influenced scores on the swls and mspss. The noted scores provided social support method data.

This study helped to lessen a gap noted in the literature. The gap revealed the lack of studies aimed at examining the effectiveness of socialization techniques for amputees. There exist approximately 260 amputee support groups in the United States (Amputee Coalition, 2011). However, there exists no information relating to how peer-to-peer or group support influenced amputee satisfaction with life and perceived social support scores. This study intended to lessen the gap by examining the influence of peer-to-peer

and group support relative to amputee overall life satisfaction and perceived social support.

A Google Scholar search for amputee social support revealed very few studies. None of the studies addressed peer-to-peer (one-to-one) social support or amputee group social support. Utilizing Walden's Library links to PsycINFO showed no studies when using the term, amputee social support. Walden Library link to PsycArticles showed no results when using the noted search term. Walden's link to ProQuest provided studies involving social support derived via family support, professional staff support, and support from friends. Tebbi, Stern, Boyle, Mettlin, and Mindell (2006) provided one such study. Study findings indicated that friends of amputees offered the least support. The previously mentioned Williams et al. (2004) study investigated social support from the vantage point of social integration. However, researchers only referred to a social integration subscale, relating to the craig handicap assessment and reporting technique (CHART) and telephone interviews to ascertain types of social integration. There is no direct mentioning of peer- to-peer support or group support. Hlebec, Mrzel, and Kogovsek (2012) examined survey instruments for assessing social support networks. Researchers noted the common use of certain study instruments when conducting cross-national comparative studies. The instruments included the gender and generation scale, the international social survey, and general social survey. The study demonstrated how unintentional variability emerges when the study approach does not coincide with the selected instrument. Results confirmed that the name generator approach and role relation

report tools did not adequately coincide. Hence, study findings using these instruments provided unintentional variability (Hlebec et al. 2012). None of the noted studies employed Alderfer's erg theory.

Google Scholar provided a study authored by Eyesenbach (2011) that involved improving and standardizing web-based evaluations and mobile health interventions. The study investigated ways to concisely evaluate social support health interventions offered via the web or by mobile platforms. The purpose of the Eyesenbach study was to initiate a checklist addendum to the CONSORT (Consolidated Standards of Reporting Trials) statement. The CONSORT statement provided guidance for ehealth and mhealth interventions. Eyesenbach conducted a literature review followed by a survey conducted among ehealth experts and a workshop. Study conclusions showed that CONSORT EHEALTH provided a stable basis for evaluating the applicability and validity of ehealth trials. The Eyesenbach (2011) study supported the premise that social support takes on many different forms.

Eysenbach, Powell, Englesakis, Rizo, and Stern (2004) examined health-related virtual communities and electronic support groups. The purpose of their study was to gather and evaluate information on social outcomes and health of computer-based self-support groups. The study measured peer-to-peer interventions and co-intervention studies. Study conclusions indicated that no robust evidence exist depicting consumer led peer-to-peer communities. Results showed that the majority of peer-to-peer community evaluations took place concurrent with more complex interventions (Eyesenbach et al.

2004). The Eysenbach et al. (2004) study provided supporting evidence for this present study. This study intended to lessen the literature gap relating to support method evaluations.

Humphreys and Rappaport (1994) researched self-help mutual aid groups and organizations. Researchers indicated that self-help groups differed from peer and non-professional services under professional supervision. The study discussed ways to construe self-help organizations. Study conclusions explained the importance of evaluating self-help organizations using normative procedures (Humphreys & Rappaport, 1994).

Dingwell, Davis, and Frazier, (1996) provided an assessment that involved responses in typical and transtibial members of amputee support groups. Their purpose pertained to providing gait symmetry feedback from amputee subjects. The study offered an assessment of a newly developed system for monitoring amputee symmetry information while using a treadmill. Study conclusions demonstrated that gait asymmetry for different variables are not necessarily related. Study conclusions noted the need for additional studies identifying more variables demonstrating symmetrical gait patterns (Dingwell et. al.1996). However; the study showed no information indicating how study outcomes related to amputee social support derived from study conclusions. The above study helped to further emphasize the lack of social support studies for amputees.

Study Rationale /Methods

The grounds for this study derived from the lack of information addressing this evaluation issue. This study undertaking provided empirical information for both amputees and those servicing amputees' when addressing amputee social support method concerns. For this study, the social interest involved how social support method (peer-to-peer, group) influenced amputee mspss and swls scores. Study information helped those involved in making a support method selection based on sound empirical data. The significance of this study derived from the fact that according to Amputee statistical data, amputations are increasing here in the United States (Amputee Statistics, 2013). This inferential quantitative study used a purposeful selective sample, ANOVA, and aspects of the Alderfer's ERG Theory to elicit empirical conclusions.

Problem Statement

The literature showed several studies involving amputees and amputee apparatus support outcomes, but very few studies depicting amputee social support outcomes. The problem addressed in this study pertained to lessening the noted gap by providing a social outcome methods study depicting how two methods for receiving amputee social support influenced amputee satisfaction with life and perceived social support total scores. This study intended to aid those in the position of counseling amputees and amputees themselves to understand differences between two social support methods.

This present study stemmed from future study recommendations provided by Liu, Williams, Liu, and Chien (2010) where they investigated the lived experience of persons

with a lower limb amputation. The Liu et al. (2010) study conclusions demonstrated that post amputation amputees struggled in various areas. The noted areas included physical, psychological, and socio-cultural (Lui et al. 2010). The problem addressed in this study related to identifying the influence of two specific forms of social support on amputee perceived social support and satisfaction with life scores. This study subsequently lessens the literature gap by adding another dimension to the information available to amputees. This supports the future study recommendations noted in the Lui et al. (2004) study by providing additional information relating to the lived experiences of amputees post amputation. The study instruments and the selected theory helped to accomplish this.

Research showed that the lack of social support contributed to deaths (Steptoe, Shankar, Demakakos, & Wardle, 2013). Steptoe et al. (2013) provided information showing correlations between loneliness, social isolation, and mortality. Study results indicated that lack of social interaction impaired quality of life and well-being. Prolonged periods of social isolation and loneliness significantly correspond with mortality (Steptoe et al. 2013). Perissinotto, Cenzer and Covinsky's (2012) stated that loneliness leads to distress, suffering, impaired quality of life, and death. The study further substantiates the Steptoe et al. (2013) study. The Perissinotto et al. (2012) study examined associations between loneliness, functional decline, and death. Their study sample included healthy adults 60 years and above in the United States. Study results indicated that isolation related to all outcome measures (Perissinotto et al. 2012). Lack of social support impacts health. The study postulated via Viner et al. (2012) showed the negative health impact

lacking social support had on adolescents. The study showed a positive correlation between social interaction and overall health. The Viner et al. (2012) study investigated social support elicited from various sources. The sources included personal, community, family, and national level support. Study conclusions stated that the most influential impact on adolescent health worldwide comes via structural factors (e.g., national wealth, access to education, and income inequality) (Viner et al. 2012).

Another study showing the association between deaths, social isolation, and loneliness provided further credence for this study. Chang, Sanna, Hirsch, and Jeglic (2010) examined correlations between loneliness, negative life events, hopelessness and suicidal behaviors. The Chang et al. (2010) study employed 160 healthy Hispanic adults. The study noted relationships between all four variables. Results depicted loneliness as the link that caused the substantial variance in both measures of suicidal risk (Chang et al. 2010).

Another factor associated with social isolation and loneliness pertained to disability. Cavanaugh and Buehler (2015) gathered information showing correlations between various methods of social support and their impact on lessening teen loneliness and social anxiety. Social anxiety is a debilitating condition. Their study employed the use of parental, inter-parental, teacher, and peer interactions. Study results indicated that cumulative social support did lessen social anxiety (Cavanaugh & Buehler, 2015).

Purpose for the Study

This quantitative study used a purposeful selection. The intent of this study related to providing inferential information. This investigation examined the influence of the support method influence on amputee satisfaction with life, and amputee perceived social support. The totals from the mspss provided the independent variables (Zimet, Dahlem, Zimet, & Farley, 1988). The totals from the swls provided the dependent variables (Diener, Emmons, Larsen, & Griffin, 1985). The purpose of this study was to investigate the influence of social support methods on overall amputee satisfaction with life and perceived social support cumulative totals.

The literature provided information regarding the availability of support for amputees in terms of apparatus to help support functionality, but little in regards to social support. The Amputee Support Group Network (2013) provided contact information for accessing peer-to-peer and support groups. This study examined a proportion of the peer-to-peer and group social support contacts to garner information. The intended information involved noting the influence of the two support methods on amputee satisfaction with life and perceived social support scores.

Research Questions

Research Question 1-Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses are:

$H_{o1:}$ There is no mean difference in perceived social support satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

$Ha_{1:}$ There is a mean difference in perceived satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

Research Question 2- Is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses are:

$H_{o2:}$ There is no mean difference, in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

$Ha_{2:}$ There is a mean difference in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

The purpose of this study involved investigating the influence of support method on amputee satisfaction with life and perceived social support. Comparing these study variables provided a better understanding towards the influence of amputee social support methods (peer-to-peer and group social support) on amputee satisfaction with life and perceived social support.

Theoretical Framework

Alderfer's erg theory (1969) came about as Alderfer sought a means to compress Maslow's needs pyramid. Alderfer's study demonstrated essential human motivational needs: (a) existence needs included physiological and material well-being, (b) relatedness needs, involved desires that satisfy interpersonal needs (i.e., peer-to-peer and group social support), and (c) growth needs, that included the need for ongoing psychological stimulation. Alderfer's erg theory asserted that once one satisfies lower level needs, the needs become less significant. Erg theory asserted that satisfying higher level needs only helped to increase their importance. Alderfer (1969) stated that if and when higher level needs go unmet individuals' sometimes move back down the hierarchy consequently, reactivating previously satisfied needs. Alderfer (1969) called that action the frustration-regression principle. This theoretical framework offered concepts germane to evaluating amputee social support influence on amputee satisfaction with life and perceived social support.

For this study, Alderfer's (1969) erg theory helped to identify the socialization needs of some amputees (e.g., existence needs, relatedness needs, growth needs). Alderfer's (1969) erg theory helped to note support method influence on amputee multidimensional perceived social support and satisfaction with life totals. Subsequent studies demonstrated that this theory provided generalizability.

De-Haan et al. (2014) demonstrated the use of Alderfer's erg theory in helping to understand societal systems and transitions. De-Haan et al. (2014) demonstrated that

Alderfer's erg theory showed that societal systems emerged subsequent to the needs of a particular culture. These theorists employed Alderfer's erg theory to provide a more comprehensive framework of societal needs evolution. The study results demonstrated the significance of including sustainability and liveability factors in societal evolution. De-Haan et al. (2014) study conclusions showed that using erg theory broadened the scope of theoretical tools used in making assessments.

Ganzach and Fried (2012) included components of Alderfer's (1969) erg theory in their longitudinal investigation of the role of intelligence in forming well-being. This study demonstrated Alderfer's theory components of relatedness and growth. Ganzach and Fried (2012) noted components in their discussion concerning intrinsic rewards and intrinsic satisfaction. Study conclusions indicated that level of intelligence contributed moderately to mediating rewards relating to global satisfaction. The relatedness component linked to the job satisfaction aspect of their study. Alderfer's (1969) erg theory stated that relatedness involved an individual's interpersonal needs (i.e., personal and professional setting). The growth aspect of Alderfer's (1969) theory related to one's need for personal development.

For this present study, the two study instruments, namely, the swls (Diener, Emmons, Larsen, & Griffin, 1985) and mspss (Zimet, Dahlem, Zimet, & Farley, 1988) helped to capture aspects of Alderfer's erg theory. This study aimed to provide evaluation information towards the influence of peer-to-peer and group social support for amputees via the study instruments total scores. Utilizing the study instruments and Alderfer's

(1969) erg theory allowed for assessing the influence of the two support methods in attributing to amputee SWLS and MSPSS scores.

The literature demonstrated a gap in studies specifically geared towards assessing social support methods influence for meeting amputee socialization needs. The information in Chapter two discusses the need for social support studies for amputees.

The nature of social support

Social support planning involves initiating a safe place for individuals to exchange both emotional and practical support (Haggman-Laitila & Pietila, 2009). A good social support environment offers a place where members feel comfortable in exchanging useful information. Haggman-Laitila et al. (2009) stated that a good and effective social support program included discussions and interactions. A good and effective social support program employs the use of various instruments and tools to measure and maintain or improve the social support offered (Haggman-Laitila et al. 2009). Ehde, Wegener, Williams, Ephraim, Stevenson, et al. (2013) examined the use of Participatory Action Research with rehabilitation research to close some of the noted gaps in social support effectiveness evaluations. In so doing Ehde et al. (2013), used consumers (participants receiving rehabilitation, but not directly related to the study) to gather their study data. Study results indicated five phases that needed integration into the research (Ehde et al. 2013). The five stages included agenda setting, implementation, methodology, diffusions/dissemination, and sustainability.

This present study investigated social support methods, namely peer-to-peer and group. In so doing, hypotheses about the influence of both methods on satisfaction with life scale scores and multi-dimension scale scores emerged. Alderfer's (1969) erg theory added another dimension to this study based on providing the opportunity to discuss existence needs, relatedness needs and growth needs, relative to social support method influence. This information provided concrete data for those who wish to aid amputees in choosing one method over another. Study data is intended to help amputees make informed decisions relating to selecting a method for receiving social support.

Nature of the Study

The quantitative study design employed in this study allowed for obtaining quantitative data from 74 amputees receiving social support via peer-to-peer and 104 receiving social support via a support group. Statistical data assessment occurred via tallying of scores from both test instruments and the use of Analysis of Variance (ANOVA). Wai-Chi Wong, Lam, Yeung and Lee (2015) demonstrated the use of ANOVA in their investigation of long-distance walking in transtibial amputees. The Wai-Chi Wong et al. (2015) study showed that ANOVA allowed researchers to compare and contrast stability parameters from study participants. Study findings showed inconsistency between both knee and hip angular pace after 30 minutes of walking (Wai Chi-Wong et al. 2015). This current study also compares two sets of variables. G- Power calculations showed that the sample size needed to achieve a power of .80 with a test

alpha level .05, and medium effect size of .25, was 128 (Mayr, Erdfelder, Buchner & Faul, 2007).

These statistical calculations allowed for determining the influence of peer-to-peer social support and group social support. Accessing the selected 178 amputees occurred via contact with the Amputee Support Group Network. The Amputee Support Group Network provided a database to contact peer-to-peer leaders and members for a nominal fee. The Amputee Coalition Network offers free access to contact information for social support group leaders by state. Prior contact with peer-to-peer and support group facilitators took place to obtain permission to send the surveys and demographic sheet. The demographic sheet sent to group leaders asks for the number of participants in each support group, age ranges, and how many males, and females. The demographic sheet sent to peer-to-peer leaders asks whether the participating peer receiving peer-to-peer social support is male or female, and their age range. Prior contact helped to increase the likelihood that the mailed study instruments along with the self-addressed stamped envelopes returned promptly. After speaking with the contact person, the appropriate number of study packets was forwarded to the contact person for distribution. Each study packet contained one multidimensional scale of perceived social support, one satisfaction with life scale, one consent form and one self-addressed stamped return envelope for the participant to return their completed survey tools and consent form anonymously. The peer-to-peer leader and group leader served as the contact person to fill out the demographic sheet that accompanied the individual packets and to make amputees aware

of the available study instruments. The contact person did not collect the completed test instruments; the participant returned their completed materials in the self-addressed stamped envelope. This helped to maintain anonymity since each test packet contained a unique identification code, no personal information.

Definition of Terms

Congruence – The quality or state of agreeing or corresponding (Langan-Fox, Sankey, & Canty, 2009).

Group Social Support – refers to social support offered in a group setting.

Method of Social Support – refers to manner by which amputee social support is rendered either peer-to-peer (one-to-one) or support group.

Multivariate Analysis – The analysis procedure that allows for citing influence between multiple variables (El-Bassiouny, 2009).

Multidimensional Scale of Perceived Social Support (MSPSS) – also referred to as Multidimensional Survey is the test instrument that provides the independent variables (Zimet, Dahlem, Zimet & Farley).

Operationalization - A process for defining the dimension of an occurrence that is not directly measurable (Busseri & Sadava, 2010).

Peer-to-Peer - method of social support refers to one-to-one social support.

Satisfaction with Life Scale (SWLS) - For this study the Satisfaction with Life Scale is also called the Life Satisfaction Scale. This instrument measured an individual's overall satisfaction with his or her life (Diener, Larsen, Emmons & Griffin, 1985).

Assumptions

The five assumptions concerning participants and measurements included the following. The first assumption asserted that participants provided truthful responses on the multidimensional scale of perceived social support and satisfaction with life scale. The second assumption related to participants having undergone an amputation and choosing to engage social support. The third assumption involved the test instruments correctly capturing the study variables. The fourth assumption referred to amputees clearly understanding the method of social support they are receiving (peer-to-peer or group). The fifth assumption related to participants understanding the directions about how to respond to the instruments so that accurate data emerged.

Limitations

When conducting research, it is impossible to control every extraneous variable. Limitations occur in every study (Guyatt, Oxman, Vist, Kunz, & Brozek, 2011). The limits of this study included those connected to design and sample. First, the quantitative design using purposeful selective sampling to assess amputee support methods involved limitations. The design limitation occurred because a purposeful sample required a targeted demographic. Coyne (2008) stated that purposeful and theoretical sampling provided clear boundaries. The demographic for this study are amputees who participate in or have participated in peer-to-peer or group social support. Secondly, accessing study sample participants involved limitations. For this study, accessing participants occurred via contact with the Amputee Support Group Network and support group leaders.

Scope and Delimitations

The research problem referred to the lack of studies addressing amputee social support methods and subsequent outcome evaluations. To lessen the noted gap, this study employed specific study tools and a particular theory to conduct this investigation. Study instruments and theorist selected for this study presented delimitation. Study tools included those used in assessing social support methods available to amputees (i.e., swls, mspss). The delimitation relating to peer-to-peer or group social support referred to investigating only these two types of social support for amputees. These groups allowed for comparisons and contrast relating to social support method influence on both test instruments scores.

Delimitations related to the test instruments selected for this study. Both the swls and mspss adequately captured the variables of interest. The swls provided total dependent scores that reflected overall amputee satisfaction with life. The mspss provided independent score totals.

The next delimitation pertained to the targeted, purposeful sample selection (i.e., amputees). This study involved amputees who have participated in either method of receiving social support no more than five years prior. This delimitation provided a basis for gathering data no more than five years old from amputees. Amputees provided the focus for this study in that the literature showed no amputee social support method evaluation outcomes for this group. The delimitation involving Alderfer's (1969) erg

theory pertained to the theory's ability to capture existence needs, relatedness needs, and growth needs for amputees.

The posed research questions provided delimitations in this study. The research questions posed for this investigation asked the following, Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support? The second question asks is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support? The social generalizability of this study involved providing a broader understanding towards matching the needs of amputees to support programs that best meet their socialization needs.

Study Significance

This study offered the potential for helping amputees to maximize social support benefits via advanced knowledge. The generalizability of this examination related to equipping those aiding and advising amputees with empirical knowledge regarding two specific social support methods (peer-to-peer and group). Positive social change implications derived from this studies potential to foster the need for additional social support method research. Providing this study information allowed amputees and those counseling amputees to make decisions that effectively address the amputees' specific socialization needs. Implications from this study provide a starting point for conducting further social support evaluations in other areas of social support offered to amputees.

Professional application provided a motivating factor when undertaking this study. One individual purpose of this study was to broaden the scope for examining social support offered to amputees. The amputations by cause fact sheet indicated that amputations occur, due to conditions such as diabetes, cancer, and trauma, all of which are common nationwide (Limb Loss Resource Center, 2014). Amputations statistics showed that the number of U.S. citizens living with an amputation exceeds one million (National Limb Loss Information Center, 2012). With amputations on the rise, the need for effective social support increases (Limb Loss Resource Center, 2014). Effective social support affects an amputee's health, as noted in the Park, Peterson, and Seligman (2004) study investigating character strengths. Researchers indicated a positive correlation between character strengths, life satisfaction, and well-being (Park et al. 2004). Chang, Sanna, Hirsh and Jeglic's (2010) study demonstrated that loneliness and isolation contributed to suicidal risks. At the macro-organizational level, effective social support fosters coping mechanisms. Healthy amputees are less likely to burden the healthcare system. Thoits (2011) studied social support and societal relationships. Thoits (2011) showed that engaging in activities that aid in developing stress buffers facilitates well-being. Boen, Dalgard, and Bjertness (2012) demonstrated the social support effects on psychological distress, somatic health concerns, and socio-economic factors. Their study examined tools that promoted social relationships and social support. Study findings indicated that both social relations and social support positively contributed to well-being and lessened all three of the study variables (i.e., psychological distress,

somatic health concerns, and socio-economic factors) (Boen et al. 2012). Cavanagh and Buehler (2015) initiated a study examining loneliness and social anxiety. Research participants equaled 416. The study examined if cumulative social support positively correlated with lessening youths' loneliness and isolation during early adolescence. Study conclusions showed that cumulative social support did lessen loneliness and anxiety. Further findings indicated that decreased social anxiety was more prevalent in boys (Cavanagh & Buehler, 2015).

Another example demonstrating the benefits of social support was noted in the Choi et al. (2011) study. The study employed 1,940 workers from the Malmo Shoulder and Neck Cross-Sectional Study. Researchers investigated job control, social support at work, and job demands. The study instruments included the Swedish version of the job control questionnaire and general health questionnaire. Study conclusions noted a significant risk increase for persisting psychological distress in workers that lacked adequate job social support. Choi et al. (2011) demonstrated that social support serves as a buffer against psychological distress.

Davison, Pennebaker, and Dickerson (2000) examined the social psychology of illness and support groups. These researchers noted that the majority of Americans employ self-help to alter health behaviors. Davison et al. (2000) informed readers that mutual support groups are commonly used. Mutual support groups involved little to no cost for participants. Davison et al. (2000) noted that mutual support groups provided

significant effect on mental and physical well-being. Researchers noted that stigmatizing diseases garnered the most social support seeking.

Amputee counselors and advocates demonstrate this studies ability to provide community change if and when they access this study data depicting the influence of these two support methods on amputee satisfaction with life and perceived social support scores. The fact that this study provides information for making informed support method choices demonstrates its community relevance. At the community level, this study provided empirical information that may aid amputees and their advocates in selecting the method of social support that best helps amputees' effectively cope with various issues. The fact that peer-to-peer social support and group social support comes by way of amputees helping each other demonstrates this at the community level. Better access to the benefits of effective social support comes by way of diminutive steps towards providing information showing the need for beneficial social support. Reeler's (2007) social change theory informed readers that change often occurs in small steps. Clearer disability planning via aiding amputees and those working with amputees to understand how effective social support contributed to well-being is one goal of this study. This study purposed to evaluate social support offered by way of peer-to-peer (one-to-one) and support groups. In so doing this study provided a small step towards, lessening the gap relative to social support method evaluations for amputees'.

Community based interventions

Research showed that community-based interventions motivated persons who have undergone an amputation to seek out social support (Wegener, Mackenzie, Ephraim, Ehde, & Williams, 2009). Community-based interventions involved informational resource bases that included community input from advisory committees and community coalitions (McLeroy, Norton & Sumaya, 2003). Community-based self- management interventions often served as the catalyst that motivated amputees to seek out help for themselves (Wegener et al., 2009). Self -management necessitated that amputees use their skills, methods, and strategies to seek out a supportive environment (Wegener et al., 2009).

Ebrahimzadeh and Hariri (2009) investigated the usefulness of seeking out community-based interventions (e.g., amputee social support). Their study examined long-term outcomes of unilateral transtibial (below the knee) amputations relative to how such an amputation impacted amputees functionally, socially, and psychologically. Geertzen, Van, and Dijkstra (2009) noted the need for an effective amputee social support in their study examining sexuality and amputation.

This research was presented to examine the influence of peer-to-peer and group support on mspss scores and swls scores. Considering the far-reaching effects of social support alluded to earlier in this study provided the basis and intent for this investigation. The social implications make this research current and worthwhile.

Summary

This chapter provided an overall structure pertaining to what this study includes. Information from this chapter allows readers to note that the gap filled by this study concerns the fact that no other studies provided information referencing the influence of peer-to-peer and group support on an amputee satisfaction with life and amputee perceived social support. The chapter informed readers that this study investigated the influence of these two methods (peer-to-peer, group) of social support on amputee

multidimensional scale and amputee satisfaction with life scale scores. This chapter alluded to study content via the various sections contained within this study. These sections included references to Alderfer's (1969) erg theory. One finds information about United States statistics and limb loss information. There is information relating to the instruments used in this study. This information related to gathering quantitative data for analysis. This chapter provided information about assumptions, limitations, delimitations, and study significance.

Chapter two content involved information about how and why seeking social support helps amputees. Chapter two information highlights the lack of data examining the influences of the chosen social support methods (peer-to-peer, group support) on swls and mspss scores. The gap referred to the fact that none of the noted studies discussed social support influence relevant to peer-to-peer or group.

Chapter three included information about research design and rationale. Chapter three included information relating to methodology, population, sampling and recruitment procedures. Chapter three also contained information about data compilation, study instruments, operationalization of constructs and ethical procedures. Chapter four provided information relating to the analysis of the data.

Chapter five involved a discussion about the explanation and application of the findings. Chapter five provided positive social change implications. A discussion about study dissemination takes place in this final chapter. In the end, the implications of this

study will be beneficial for those intending to aid amputees seeking appropriate social support methods to meet their needs.

Chapter 2

Background

This literature review chapter included information referencing the study background and literature review strategy. The literature review was succeeded by the purpose section. Next one finds amputee statistics. Following statistics is the organization of the literature and design. Then there is information about the theoretical foundation

encompassing sub-categories including other theories that employed erg theory, criticisms of Alderfer's erg theory, study rationale and study instruments. One finds information about studies emphasizing social change, the need for effective social support, and studies evaluating satisfaction with life and well-being. The summary follows the theoretical section.

Literature Review Strategy

Searching the literature involved varying methods to locate applicable information. The principal search began by engaging the Walden Library website. The Walden library allowed for the gathering of information from a host of studies relating to social change theories. Walden's Library searches involved PsycINFO and ProQuest Central, allowing for information related to theories and theorists to emerge. After investigating Walden's library, Walden's connection to Google Scholar commenced. Google Scholar provided further information relating to social support, and theorist. Using the various online databases allowed for the capturing of information using keywords and terms including *theorist, theories, social change theories, social support, amputees' and social support, Alderfer's erg theory, criticisms of ERG Theory and Bias.*

Amputee statistics

According to 2007 statistics, there were approximately 893,000 males and 392,000 females with limb amputations in the United States. Between 1988-and 1996, hospitals discharged approximately 133,735 individuals after undergoing an amputation (National Limb Loss Information Center, 2012). Tipton (2012) stated that there are

approximately 260 amputee social support groups scattered throughout the United States. However, Tipton (2012) provided no references towards peer-to-peer (one-to-one) social support. The frequency of amputations and individuals coping with different aspects of living with a limb loss causes researchers to place greater emphasis on studying persons who have undergone an amputation.

Study purpose

The purpose of this study was to gather and analyze data about how the selected methods of social support influenced mspss and swls totals. This study compared two variables. The two variables come by way of the swls total scores and mspss totals. The above occurred via amputees' answers on the test instruments.

The problem under investigation related to the fact that the literature review showed no studies demonstrating the social support influence of peer-to-peer or support group socialization for amputees. This study examined the influence of peer-to-peer and group social support methods on amputee satisfaction with life and perceived social support. Using multidimensional scale scores and life satisfaction scores two different methods of receiving social support for amputees took place. The gap this study lessened related to providing research offering empirical evidence depicting the influence of social support method on perceived social support and satisfaction with life scores. For this study, the selected test instruments referred to the MSPSS and SWLS.

Organization of the Literature and Design Rationale

The literature review showed a steady increase in limb amputations in the United States (National Limb Loss Information Center, 2012). Several conditions necessitate an individual having to undergo a limb amputation. Subsequently leading one to seek out social support.

Alderfer's (1969) erg theory provided the theoretical basis for this study. The theory allowed for examining the existence needs, relatedness needs, and growth needs of amputees. This study used a quantitative inferential research design and purposeful selective sample. The rationale supporting the study choice comes from the literature review. The literature review showed no studies assessing peer-to-peer and group social support method influence. Literature depicted no support method study demonstrating how effective social support methods influence satisfaction with life and multidimensional scale scores.

However, studies noted the use of a quantitative inferential research design with regards to making other assessments. Campos, de la Parra, and Francesc (2012) demonstrated a quantitative inferential design. Their study advanced research in entrepreneurship research. Campos et al. (2012) employed quantitative inferential research design as they investigated how dominant logic affected the connection between entrepreneurial orientation and company performance. Campo et al. (2012) allowed investigators to gather numerical data showing how dominant logistics intervenes with entrepreneurial orientation-performance. The variables used in the Campo et al., (2012)

study included risk taking, aggression, and innovativeness. Peixodo, Peixodo, and Alves' (2012) study employed quantitative inferential research design Their study examined learning strategies. The quantitative inferential research design helped these researchers to gather quantitative data relating to the learning styles of undergraduate and postgraduates students. Study participants included students taking several different types of courses. Study results showed various similarities between students study habits across the spectrum. Peixodo et al., (2012) used a learning strategies scale to garner this quantitative information.

Studies indicating increase

Several studies emphasized this increase in amputations. Ziegler-Graham, MacKenzie, Ephraim, Travison and Brookmeyer (2008) noted that one out of every 190 United States citizens had undergone an amputation. Ziegler-Graham et al. (2008) estimated that if this trend remains static the number of people needing an amputation will double by 2050. The study provided by Prvu-Bettger, Bates, Bidelspach, and Stineman (2008) examined diagnosis among veterans with auditory disorders post a lower limb amputation. Sargen, Hoffstad, and Margolis (2013) presented a study that investigated geographic variation in spending towards individual's post-amputation. Peek (2011) examined differences in the sexes relative to diabetes and lower extremity loss. The previous studies indicate a rise in amputee research.

Amputee concerns

Senra, Oliveira, Leal, and Veira (2011) examined the experiences of adults after undergoing an amputation. Senra et al. (2011) examined body image post amputation. The results added credence to a theoretical framework that examined personal identity changes relating to limb loss. Watrin and Darwich (2012) compared and contrasted behaviorism and cognitivism. In so doing one, found that cognitivism (the way an individual thinks) played a major role in an amputees' personal identity post amputation. Kimbrel, Mitchell, and Nelson-Gray (2010) examined the relationship between behavioral approach system (BAS) sensitivity and social interaction anxiety. Study findings indicated that individuals with generalized social uncertainties reported higher levels of behavioral inhibition system (BIS) and lower levels of behavioral approach system (BAS) levels when compared to persons with few or specific social fears (Kimbrel et al. 2011). Kickert et al. (2011) discussed steering emergent and complex change processes. In so doing, Kickert et al. (2011) informed readers that change emerges from various sources. According to Kickert et al. (2011), the process of change often involved a fundamental guiding process. Considering the Senra et al. (2012) amputee body image study and the information gleaned from the work of Watrin and Darwich (2012) and Kickert (2011) provided amputees with information to choose the appropriate method for receiving social supports further substantiated the premise for this current study. Watrin and Darwich (2012) showed that cognitivism recognized a change in beliefs, thinking, attitudes, and values. The previous studies showed that an amputation

brings on specific concerns. One objective of this current study pertained to providing information for amputees to make social support method selections based on empirical information. The purpose of this study related to making influential support method evaluations using data provided by the test instruments.

Social support helps to lessen stress

According to the Mayo Clinic (2012), stress management starts with an assessment of how you react to stress. Effective social support serves as a stress buffer (Mayo Clinic, 2012). Bovier, Chamot, and Perneger (2004) posited that mental health positively corresponds with quality of life. These researchers surveyed 2,000 randomly selected university students. They ascertained perceived stress via the brief encounter psycho-social instrument. Researchers garnered social support levels via the duke-unc functional social support questionnaire and a brief version of the Pearlin coping questionnaire. Bivariate analysis showed that mental health negatively correlated with stress, but positively correlated with social support and internal resources (Bovier et al. 2004). Stress management starts with an assessment of how you react to stress (Mayo Clinic, 2012).

The literature review showed that social support takes on many different forms. Warren and Manderson (2008) investigated social support in their study involving enhancing rehabilitation for elderly individuals who have undergone an amputation. The importance of social support was noted in a study that examined increasing an amputee's mobility (Vincent et al. 2010). The importance was noted in the study examining

lessening depression in the elderly (Tiedt, 2010), and in the aid to recovery post amputation study (Thompson & Fisher, 2010). The Thompson and Fisher (2010) study examined the importance of social support as they examined traumatic injury that caused soldiers from the Iraq war to incur an amputation.

This study examined the influence of peer-to-peer and group social support on mspss totals (independent variables) and swls totals (dependent variables). This knowledge may lessen amputee stress when making social support method decisions.

Resource directory

The research reviewed showed that the American Amputee Foundation (2011) offered a resource directory for amputees'. The American Amputee Foundation (2011) is a non-profit organization that serves as a national clearinghouse and referral center for amputees. The foundation provided various types of information including, amputee studies, amputee product information, available services information and self-help publications. The American Amputee Foundation (2011) offered amputee information regarding ways to lessen stress and anxiety post amputation(s).

Theoretical Foundation

The theoretical foundation for this study derived from Alderfer's (1969) erg theory. According to erg theory, people seek to fulfill three categorical needs. The theory identified the needs as (1) existence needs, (2) relatedness needs, and (3) growth needs. Existence needs included basic aspirations for material and physiological well-being. Relatedness needs involved desires towards fulfilling interpersonal relationships. Growth

needs involved aspirations towards frequent psychological growth and development (Alderfer, 1969). For this study, an effective social support method was capable of meeting erg theory prerequisites.

Other studies using erg theory

Arnolds and Boshoff (2012) posited a study investigating compensation, esteem valence, and job performance. Researchers used erg's needs paradigm to investigate the effect of satisfaction on self-esteem. Their study also examined the influence of self-esteem on intent. Study results showed that using esteem as a personality variable positively correlated with job performance. (Arnolds &Boshoff, 2012).

Qin and Huang (2011) presented another study employing the use of erg theory. The Qin and Huang (2011) study investigated IT/IS innovation behavior. First, researchers divided innovation behavior into two categories. The categories included complex information systems behaviors and simple software tools behaviors. Qin and Huang (2011) employed analysis from erg theory and Social Capital Theory. Study results showed that four variables including network expert tie, trust, existence need, and growth need provided significant employee complex innovation behavior. Results also showed that trust and relatedness need contributed significantly to employee's software tools innovation behavior.

Ko, Rhee, Walker, and Lee (2014) presented a study employing the use of erg theory. These researchers provided information relating to the investigation and development of an integrated model college donor motives scale. The study included

(N=532) college sports donors. Employing the use of a model of athletic donor motivation scale and erg theory allowed researchers to provide a psychometrically accurate scale. Study results showed that a scale of athletic donor motivation (SADOM) with its eight-factor measurements produced sound results (Ko, Rhee, Walker, & Lee, 2014).

Criticism of Alderfer's ERG Theory

The noted criticism towards Alderfer's (1969) erg theory arose via Trivellas (2011). Trivellas stated that erg theory warrants criticism because the theories use occurred primarily when examining work environments. Trivellas informed readers that erg theory parameters encompass job specific orientations. Second, Trivellas criticized the fact that most of the acclaim towards erg's use comes from empirical researchers focused on examining correlation relationships between its content and work behaviors (Trivellas, 2011).

***Bias* –** Research showed that Alderfer (1969) offered bias towards the Alderfer (1969) erg theory in the study examining measures satisfaction in organizations (Schneider & Alderfer, 1973). The bias concerned the study results. Study one showed inadequate convergence when employing Maslow's procedures on N=146 nurses. Study two depicted weak convergence between Maslow and erg measures for N=217 bank employees. Researchers reported that sample three revealed some convergence where they hypothesized convergence between Maslow and erg theory elements. Study results

demonstrated a strong need to know inter-measure convergence before making inter-study comparisons (Schneider & Alderfer, 1973).

Study Rationale

The rationale for employing the use of Alderfer's (1969) erg theory derived from its fundamental concepts. First, the theory provided aspects that closely corresponded with the statements and subsequent responses from the test instruments used in this study. Secondly, research showed that erg theory offered generalizability. Thirdly, Alderfer's (1969) erg theory acquaints readers with the term, frustration-regression. Frustration-regression referred to the period when an already satisfied need becomes re-activated. According to erg theory, re-activation occurred because a higher level need cannot be satisfied.

Study instruments

The instruments chosen to gather quantitative information for this present study included the mspss and swls. Variables contained on the mspss provided the independent variables. The independent variables come via total scores from the mspss. Total scores from the swls provided the dependent variables. Two sets of variable totals allowed for comparisons in this study.

Social support via other means

Studies showed that social support comes via the Internet (Terp Hoybye et al. 2009). Kee, Sparks, Struppa, and Mannucci (2013) further demonstrated the social media aspect of receiving social support as they investigated building communication networks.

Kee et al. (20013) provided computational data referencing the efficacy of social support received via social networks (i.e., Facebook). Their study identified various essentials needed in providing closely bound groups via social networks. This present study focus involved providing method influence (peer-to-peer, group) information that aids amputees and those serving amputees to make informed decisions when choosing either method to meet an amputee socialization needs.

Steginga, Ferguson, Clutton, Gardiner, and Nicol (2008) demonstrated that social support comes by way of the telephone. Dorstyn, Mathias, and Denson (2011) examined telephone counseling for adults with an acquired disability. Fluery, Salih, and Peel (2013) examined factors that influenced prosthetic rehabilitation. Social support, by way of rehabilitation services, provided a positive influence. Abraham, Velenczer, and Szabo (2012) posited a study that investigated perceptions towards associations of well-being, pleasure and leisure activities. In this (2012) study, social support perception mediated well-being, pleasure, and leisure.

Social support provided a significant component of an amputee's supportive environment (Yaday, 2010). The perception of the social support offered provided a strong bearing on how worthwhile the support is to the recipient. An amputee's perception of social support influences his or hers perception towards the effectiveness of social support. If an individual's impression of the social support being rendered is meaningful and worthwhile, the social support aids in bringing forth positive outcomes associated with quality of life factors (Yaday, 2010).

Westaby, Pfaff, and Ryan (2014) investigated social networks. Their study demonstrated that dynamic network theory when employing social networks elicits certain outcomes. The outcomes included goal achievement, performance, emotional contagion, and learning. This present study employed Alderfer's ERG Theory to capture specific needs goals for amputees.

Additional studies noting social support

Other studies further illustrated the need for social support. Bisson, Shepherd, Joy, Probert, and Newcombe (2004) investigated cognitive behavioral therapy for treating traumatic stress symptoms post a physical injury (i.e., amputation). Bisson et al. (2004) used 152 patients attending an accident and injury department after displaying varying levels of stress post-traumatic injury. Their study used a randomized one to three-week post-injury and a four-session cognitive-behavior intervention. Study results showed that at 13 weeks post-intervention, the total impact of event scale scores was significantly lower for the group that had received cognitive-behavior intervention compared to those that had not. Study conclusions indicated that a brief period of meaningful cognitive intervention reduced levels of traumatic stress (Bisson et al. 2004).

Braithwaite and Eckstein (2003) examined how persons with disabilities managed instrumental social support. Their study included qualitative /interpretive analysis using

in-depth transcripts from 30 participants who had noted disabilities. Results discussed assistance initiated by people with disabilities and support offered by nondisabled people. Study conclusions offered a discussion of how disabled persons cope with unwanted assistance. Braithwaite and Eckstein provided information referencing communication and behaviors for both disabled and nondisabled persons. Yaday (2010) stated if an individual views the support offered as beneficial, it will be well received.

Stahl (2010) demonstrated the need for social support when examining group cognitive factors. Stahl's (2010) investigation referenced group cognition factors of teamwork in socio-technical systems. Stahl investigated the relationship between organizational development, interactions between societal infrastructures and human behavior. Study conclusions showed the need to identify defining characteristics of small group interactions (Stahl, 2010). The intent of this present study related to capturing the influence of peer-to-peer and group social support on the tests instruments. Peer-to-peer and group social support offered to amputees', and the study instruments helped to capture some small group characteristics. The basic peer-to-peer and group characteristics emerged via the scores from the study instruments. Jean-Francois (2004) filled a gap in the literature by examining the gap between organizational effectiveness models and performance measure models. Jean-Francois's (2004) study filled the gap by reconciling and integrating the two concepts via study analysis. This present study intended to fill a literature gap via study analysis depicting support method influence of the two methods of receiving social support on test instrument scores.

The need for effective social support further substantiated

The following studies demonstrated social support. However, none investigated social support available to amputees via peer-to-peer or group. Ajala (2011) examined psychological and societal relationships of adjustment in adult amputees. The Ajala study results showed a significant correlation between self-concepts and adjustment. Archer, Castillo, MacKenzie, and Bosse (2008) offered a tri-fold investigation. They investigated perceived and unmet needs of support services offered to traumatic lower limb amputees. Their study focused on the issues that led to an amputee seeking mental health and vocational services. They examined an amputee's unmet and met needs relative to obtaining the social support help they were seeking. Their study examined perceived needs and unmet needs for various services after lower limb extremity trauma. Study results indicated that the prevalent unmet needs pertained to vocational and mental health needs (Archer et al. 2008). Social support comes by way of peer support groups for persons dealing with psychosis, not an amputation (Stant et al. 2011). One's family provided social support in the form of psychosocial support (Steinglass, Ostroff, & Steinglass, 2011).

The noted Steinglass, Ostroff, and Steinglass (2011) study examined family psychosocial support interventions. In so doing, Steinglass et al.(2011) made readers aware of the clinical protocol used in a single day workshop version of the multiple family groups (MFG) intervention. The new one-day workshop, which offered a family-based support intervention, received positive feedback from the majority of participants.

This feedback demonstrated that abbreviated psychosocial support interventions benefited patients and family members (Steinglass et al. 2011).

Stant et al. (2011) investigated the role of social support in their study. Their research informed readers that although social support would be beneficial, it is not always readily available to some groups. Study results showed that peer support positively correlated with positive social contacts and higher self-esteem for the 106 study participants (Stant et al. 2011). Zheng, Yang, and McLean (2010) presented a study examining practices of social knowledge-management. Their study noted the mediating influence social knowledge- management played in organizational culture, structure strategy, and organizational effectiveness. Zheng et al. (2010) demonstrated necessary components for organizational effectiveness similar to social support effectiveness components mentioned in the Haggman-Latilia and Pietila (2009) study. The last component mentioned in the Haggman-Latilia et al. (2009) study stated that a good and effective social support program employed the use of various instruments and tools to measure and maintain or improve the social support offered.

Studies Evaluating Satisfaction with Life and Well-Being

Rybarczyk, Nyenhuis, Nicholas, Cash, and Kaiser's (1995) study where psychological and social adjustment after an amputation took place. Rybarczyk et al. examined amputees' psychosocial adjustment relating to the perception of social stigma post amputation. Archer, Castillo, MacKenzie, and Bosse (2008) investigated the need for support services post amputation. Archer et al. examined an amputee's thinking

towards seeking supportive services post amputation (i.e., peer- to- peer or group). Weinstein, Brown, and Ryan's (2009) study provided a multi-methodology examination of consequences relating to forethought on acknowledging emotional strain and dealing with it, relative to affecting wellness. Thereby demonstrating that adaptive coping skills helped to mediate stress events (i.e., an amputation), this, in turn, provided a better sense of well-being. Weinstein et al. (2009) presented a study using a laboratory-based, long-term, and daily journal design to explore mindfulness when appraising and coping with stressful situations. In this present study, the stressful event related to one undergoing an amputation and subsequently seeking social support. The previous studies compared and contrasted several different ways to evaluate an amputee's well-being post amputation. This study compares variables associated with an amputee's choice for receiving social support. For this study, the options included peer-to-peer (one-to-one) social support or group social support.

Researchers' Boen, Dalgard and Bjertness (2012) examined social support relative to its associations with psychological distress, somatic health concerns, and social support. Thoits (2011) examined social support and societal relationships relative to employing stress-buffering processes. Effective social support serves as a stress-buffer (Buljac-Samardzic, van Wijngaarden & Van Excel, 2010). Thoits (2014) named some stress-buffers as self-esteem, belonging and companionship. Da Silva, Rizzo, Gutierrer-Filho, Ramos, and Deans (2011) emphasized the importance of physical activity relevant to optimal physical, psychological, and social well-being. Both these studies promote the

importance of socialization and well-being. This present study expounded on the principles of socialization and well-being. Here in socialization and well-being related to active social support via peer-to-peer or group support. For this study, social support should contribute to high satisfaction with life scores and high multidimensional survey scores. Their study employed the use of questionnaires mailed to 2387 participants. Evaluations occurred via Hopkins symptom checklist and Oslo 3 social support scale. Results reported a significant positive correlation between psychological distress and depression.

Oddone, Hybel, McQuoid, and Steffens (2009) examined the correlates of personality and social support. These researchers investigated the personality trait coupled with the relative social dimension most associated with depression. Their study showed social support as being significant in fostering well-being and neutralizing depression. Oddone et al.(2009) offered comparisons and contrasts. Singh, Ripley, Pentland, Todd, Hunter, Hutton, and Philip's (2009) study examined depression, and anxiety indications post lower limb amputation. Their study found that depression and anxiety heightened post amputation, then lessened during inpatient rehabilitation and again increased after rehabilitation (Singh et al. 2009). Hansen et al. (2009) examined social support from the vantage point of personality disorder indications. Hansen's et al. findings supported research hypotheses. Results showed that social support provided a direct bearing on substance abuse. Hwang et al. (2009) presented a study that looked at multidimensional social support. Hwang et al. (2009) examined social support from the

perspective of how lacking social supports makes people susceptible to illness. Hwang et al. conclusions bolster the findings of the Boen, Dalgard, and Bjertness (2012) study relating to the correlation between social support and psychological stress. Kubzansky, Mendes, Appleton, Block, and Adler (2009) examined the roles of oxytocin and social support for a particular group. Pedersen, Olesen, Hansen Zacharian, and Vedsted (2011) examined relationships and social support relevant to a person's perception of social support when referencing patient delay in treatment. Uchino (2004) examined links between social support and health. Uchino noted that social support is one of the most documented psycho-social factors impacting physical health outcomes. Uchino informed readers that social support concepts primarily involved social relationships. Study conclusions showed that the stronger the social relationships, the better the health outcomes. Uchino's (2004) findings demonstrated the need for future studies involving a life-span approach. The life-span approach needed to include antecedent processes responsible for distinct measures of social support (Uchino, 2004).

Nahum-Shani, Bamberger, and Bacharach (2011) investigated divergent empirical findings concerning the direct effect of social support on well-being. Their study employed longitudinal data. The premise for the study involved examining patterns of supportive exchange. The patterns included reciprocal, and under, or over reciprocating. Study results showed that receiving emotional support enhanced well-being if and when the recipient viewed the supportive exchange as reciprocal. Further study conclusions

indicated that receiving support adversely affected well-being if the support appeared overly reciprocating (Nahum-Shani et al. 2011).

The noted studies all investigated various components that either improve or prevent well-being. According to the National Peer Network (2012), many combat veterans returning from battlegrounds have undergone amputations and subsequently seek amputee support. Coupling the foretasted with information from the Limb Loss Resource Center (2014) showing that limb losses are increasing provided credence for this study undertaking. This study noted the influence of support methods on perceived social support and satisfaction with life scores for amputees.

Effective social support could benefit other studies

Effective social support offers beneficial components (Ebrahimzadeh & Hariri, 2009). Effective social support could enhance studies such as that posited via Hamamura et al. (2009) and others. Hamamura et al. (2009) investigated issues influencing prosthetic rehabilitation. Hillan and Graham (2011) examined compliance with service standards for those who had undergone congenital upper limb deficiency. Ide (2011) investigated the association between pain and depression in persons who had undergone a lower limb amputation. Karami, Ahmadi, Nejati, and Masumi (2012) presupposed a study examination for making quality of life assessments for amputees. Their study looked at how amputee quality of life assessments led to a promotion of health services. Kumar and Gambhir (2011) examined critical limb ischemia, by way of assessing outcomes for those amputees who had undergone the noted procedure.

Liu, Williams, Lui, and Chien (2010) examined everyday experiences of amputees. Mazari et al. (2010) examined rehabilitation for transtibial amputees. Mazari et al. (2010) informed readers that a transtibial amputation is an amputation occurring across or involving the tibia. McNicholas (2002) examined how social support related to affirmative health practices. Meulenbelt, Geertzen, Jonkman, and Dijkstraa (2011) investigated problems involving an amputee's stump post lower limb amputation and how this impacted their daily lives. Miller and Deathe (2011) examined the influence of balance control post amputee being released from prosthetic rehabilitation. Nolan (2012) investigated a program that was intended to improve hip strength in amputees who had undergone a lower limb amputation. Ostlie, Magnus, Skjeldal, Garfelt, and Tambs (2011) assessed health and satisfaction with life. Their study stressed the importance of rehabilitation leading to one returning to work (Ostlie et al., 2011). Pasquina et al. (2008) assessed medical care for service men and women, who had incurred an amputation. Their assessment examined service men and women's satisfaction regarding the medical care received. Samuelsson, Toytari, Salminen, and Brandt (2012) examined the effects of lower limb prosthesis. Samuelsson et al. (2012) investigated the usefulness or non-usefulness of a prosthesis in daily activity, participation and overall quality of life. Seaman (2010) presented a study intended to survey individuals wearing lower limb prostheses. Schairer (2011) examined prosthesis use and the possibility for personal innovation. Senra, Oliveira, Leal, and Vieira (2011) examined the thoughts and feelings amputees experienced as relating to their body image post amputation. Sinha and Van

Den Heuvel (2011) conducted a methodical literature review that captured essential long-term quality of life factors that amputees deemed important. Swanberg et al. (2011) examined how amputating a dominant extremity; either an upper or lower limb altered dexterity in the remaining limbs. Unwin, Kacperek, and Clarke (2009) investigated positive adjustment to lower limb amputation. People open to receiving help are more likely to perceive help rendered as beneficial (McNicholas, 2002). Participants from the studies above are suitable candidates for effective amputee social support. Effective social support promotes change (Deans, McFadyen, & Rowe, 2008).

The Need for Change

Social change, although sometimes brought about through the auspices of chaos and trauma primarily helps both individuals and society to move forward (Reeler, 2007). Alderfer's (1969) erg theory demonstrated the use of change levels. Alderfer's erg theory change levels included, (a) the existence level – this level referenced basic needs (e.g. food, clothing shelter), (b) the relatedness level – referring to an individual's interpersonal needs (i.e. personal and professional), (c) the growth level – involved one's need for personal development. Alderfer's (1969) erg theory demonstrated that every human desires to fulfill particular needs. Alderfer (1969) informed readers that individuals do not have all of the same needs at the same time; however, humans all possess the needs listed in the theory. The present study examined the influence of two methods of social support for amputees (e.g., peer-to-peer and group) on amputee perceived social support and satisfaction with life. The premise of this study related to

investigating how effectively the noted methods of receiving social support met amputee needs. This study provided an overall support method evaluation. The research questions for this study asked, (1) Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support? (2) Is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support?

The noted literature review showed no studies investigating amputee peer-to-peer or group social support overall influence on amputee satisfaction with life. The lack of social support reviews helped to emphasize the need for a study investigating the influence of amputee social support methods. There remains a gap in the literature relative to the influence of social support methods on perceived social support and amputee satisfaction with life scores. This study posited to examine a proportion of the amputee population that currently avails to peer-to-peer (one-to-one) or group social support. The purpose of this study involved ascertaining data showing the influence of social support method on satisfaction with life scores and multidimensional scale scores. The referenced research data provided an overall social support method evaluation.

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Summary

This chapter provided an overall structure about what this study included. This chapter made readers aware that the gap filled by this study concerned the fact that no other studies provided information examining the influence of socialization method on

perceived social support and life satisfaction. The socialization methods included peer-to-peer and group support. The chapter informed readers that this study investigated the influence of these two methods of social support on amputee multidimensional scale scores and amputee satisfaction with life scores. This chapter depicted study content via the various sections contained within this study. These sections included references to Alderfer's erg theory. One finds information showing United States statistics and limb loss information. There is information relating to the instruments being used in this study. This information related to gathering quantitative data for analysis. This chapter provided information about assumptions, limitations, delimitations, and study significance.

Chapter three included information about research design and rationale. Chapter three contained information relating to methodology, population, sampling procedures and recruitment procedures. Chapter three also contained information relating to data compilation, study instruments, the operationalization of constructs and ethical procedures. Chapter four provided information relating to the analysis of the data.

Chapter five involved a discussion concerning explanation and application of the findings. Chapter five included positive social change implications. A discussion relating to study dissemination takes place in the final chapter. In the end, the implications of this study benefit those intending to aid amputees seeking appropriate social support methods to meet their socialization needs.

Chapter 3

Introduction

This investigation stemmed from the lack of studies providing social support method evaluations. Lui, Williams, Liu, and Chien (2004) provided a study investigating

the lived experience of amputees with a lower limb amputation. The Lui et al. (2004) study conclusions depicted the need for further research involving supportive services (i.e., support groups). The purpose of this proposed evaluation involved examining the influence of two methods of social support (e.g., peer-to-peer and group) on amputee perceived social support satisfaction and satisfaction with life scores. Liu, Williams, Liu, Chien (2010), and Eysenbach, Rizo, Powell, Englesakis, and Stern (2004) demonstrated different methods that are employed to evaluate social support offered to amputees. Their studies employed the use of supportive psychological, social interventions, and semi-structured interviews. These studies used randomized controlled trials, non-randomized control trials, and cohort studies. The present study included Alderfer's (1969) erg Theory. Alderfer's theory allowed for noting aspects of existence, relatedness, and growth needs. Study comparisons and contrasts provided information towards the influence of the two methods of social support on amputee perceived social support and satisfaction with life scores.

The chapter contains information about research design and rationale. Information referencing methodology followed research design and rationale. The methodology included subcategories showing sampling, measures used for recruitment, power analysis,

and data compilation. This chapter contains information relating to instrumentation, the operationalization of constructs, detailed data analysis plan, risks to validity, ethical measures, and summary.

Research Design and Rationale

I used a quantitative, inferential research design and purposeful selective sample. The research questions: **RQ1 -**Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support? Coupled with **RQ2 -** Is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support? Research question one helped to note the mean difference numerically for amputees' perceived satisfaction when participating in either group. Research question two provided numerical data depicting any mean difference in life satisfaction with life scores for each method.

Both study instruments elicited subjective information from the amputee participant. The multidimensional scale of perceived social support (mspss) depicted an amputee's overall level of perceived satisfaction the support method provided based on the sum totals of the 12 statements on the scale. The satisfaction with life scale (swls) provided an overall subjective satisfaction assessment of the two support methods peer-to-peer, group via the sum totals of the five scale statements. The instruments complement each other in that each employed a Likert scale and statements that helped one to assess overall support method influence.

A quantitative design using a purposeful selective sample best suited the data set examined in the present study. Mayo and Tsey (2009) demonstrated the use of purposefully selective sampling in their study that investigated collaborative research correlation. Mayo and Tsey showed areas of concern relative to challenges, strategies, and experiences involving research collaborating. Smith, Silva, Covington and Joiner Jr., (2014) provided a comparative study assessing suicide-related skills and knowledge. The Smith et al. (2014) comparative study technique contrasts the purposely selective sampling noted in the present study. The Smith et al. (2014) study used naturalistic and uncontrolled group comparisons and online survey's sent to nearly 2000 participants (Smith et al., 2014). That methodology would not work well for this current study because this study employed a smaller targeted sample. The G-power analysis showed that the minimum number needed to make this study significant is N=128 amputees.

Other studies supporting my research design and rationale included the Campos, de la Parra and Francesc (2012) study that provided another example of the quantitative research design and rationale. The researchers employed a quantitative inferential design to advance entrepreneurship research. Campos et al. (2012) employed quantitative inferential research design as they investigated how dominant logic affected the connection between entrepreneurial orientation and company performance. Campo et al. allowed investigators to gather numerical data showing how dominant logistics intervened with entrepreneurial orientation performance. The variables used in the Campo et al. study included risk taking, aggression, and innovativeness. Peixoto, Peixoto,

and Alves' (2012) employed a quantitative inferential research design. Their study examined learning strategies. The quantitative inferential research design helped these researchers to gather quantitative data relating to the learning styles of undergraduate and postgraduates students. Study participants included students taking several types of courses. Study results showed various similarities between students study habits across the spectrum. Peixoto et al., (2012) used a learning strategies scale to garner this quantitative information. Humphreys and Rappaport (1994) used quantitative measures when they investigated self-help mutual aid groups and organizations. In so doing, Humphreys and Rappaport showed other means for gathering data. Results depicted useful information and diverse ways to construe self-help organizations.

The selected design chosen for this evaluation appeared in past studies. Freemantle, Wood, and Crawford (1998) used a quantitative design to evaluate interventions aimed at helping health care workers provide more efficient healthcare. Study results indicated the importance of rigorous developmental stages before implementation interventions go public. Nathan, Bunde-Birouste, Evers, Kemp, MacKenzie, et al. (2010) employed the quantitative design when they evaluated social cohesion. Nathan et al. (2010) study demonstrated the effectiveness of a particular program. The program involved building cohesion among immigrants by lessening social isolation within their communities. The Nathan et al. study was presented to advance knowledge relative to amputee satisfaction when in engaging either peer-to-peer or group social support.

The instruments chosen to gather quantitative information for this present study included the multidimensional scale of perceived social support (Zimet, Dahlem, Zimet and Farley, 1988) and satisfaction with life scale (Diener, Emmons, Larsen & Griffin, 1985). Totaled scores from the multidimensional scale statements provided the independent variables. Totaled scores from the satisfaction with life scale statements provided the dependent variables. The noted variable totals helped to perform support influence evaluations.

Methodology

The target population for this study included amputees who participated in either peer-to-peer or group social support. Not every state offers amputees peer-to-peer or group social support (Amputee Support Group Network, 2013).

On the east coast, the Amputee Network (2013) depicted amputee support groups in Maine, New York, Maryland, Washington D.C. and Florida. The amputee database showed South West support groups in Arizona, New Mexico, Colorado, Utah, and Nevada. The Western region depicted groups in Oregon, Washington, Idaho, Montana, and California. In the Mid-West one found amputee support groups in Illinois, Indiana, Michigan, Kansas, and Minnesota (Amputee Support Network, 2013).

Table 1. Amputee Representation

Amputee representation by region in the United States

Region	Peer	Group
North East	18	23
Mid-West	12	17
South West	27	32
West	20	35

According to the power analysis, the target population for this study should consist of a minimum of N=128. However, to increase significance, the study sought to collect data from a minimum of 200 amputees from the states that offered peer-to-peer or group social support. The 200 participants equated to 100 amputees receiving peer-to-peer support and 100 receiving group support. The selected states represent the four regions of the United States.

Approximately 2 million U.S. citizens who have undergone an amputation (National Limb Loss Information Center, 2012). Of, the nearly 2 million referenced, this study focused on a proportion. The proportion included amputees who participated in either peer-to-peer (one-to-one) or group social support listed in the Amputee Coalition database.

Sampling frame and sampling procedures

This sampling frame included amputees who currently participated in either peer-to-peer or group social support. The one stipulation required that the individual had adequate knowledge relating to the support method they received to fill in the test instruments. The sampling procedures involved contacting peer-to-peer and group social support leaders by telephone. The Amputee Support Group Network (2013) website provided amputee group leader contact information by state and city. The website did not make peer-to-peer contact information readily available. However, information on the website stated that for a fee, peer-to-peer support leader contact information could be accessed (Amputee Support Group Network, 2013).

The advance contact allowed for obtaining permission to send the study materials to these leaders for amputees to fill out. Peer-to-peer and group leaders simply informed potential amputee participants that study materials were available. A self-addressed stamped envelope accompanied the demographic sheet provided to peer and group leaders to fill out and return. The only item peer and group leaders returned was the completed demographic sheet. Study materials sent to peer and group leaders allowed for a central contact person. This provided a contact person accountable for receiving and making potential amputee participants aware that a study was available. The contact person received enough study packets based on the number of people they served. Peer-to-peer leaders potentially conducted more than one peer-to-peer session on any given day. Each study packet contained the consent form, multidimensional scale of perceived social support, satisfaction with life scale, and a self-addressed stamped envelope for participants to seal their completed study materials in and mail back to the researcher.

This procedure helped to maintain anonymity and confidentiality. Receipt of test materials sent to peer and group leader confirmation came by way of the postal confirmation sent with the materials. If the study materials were not returned within 3 weeks, a follow-up phone call took place to the group or peer-to-peer leader to confirm that study materials were made available to peer and group members. Once peer and group leaders made study materials available to participants to fill out, the peer and group leader no longer handled the materials. Participants filled out the study instruments and returned them in their individual self-addressed stamped envelope.

The demographic sheet for peer-to-peer and group leaders to fill in asked the following:

- How many males are in your group?
- How many females are in your group?
- What state is your group/peer-to-peer support in?
- What is the average age of group or peer-to-peer member(s)?

Following question 4 there was a scale listing age ranges 20-35 years, 36-45 years, 46-55 years and older than 55 followed question four. Peer-to-peer advocates received the same sheet with the assumption that there was only one member in the group. Since ages showed a range, the peer-to-peer participant only needed to give the age range. The demographics helped in isolating male/female and age categories. The type of amputation is not crucial to this study because it adds no further information relating to the focus of this study. I focused on the influence the method of receiving social support had on study instrument totals.

Power analysis and sample size

Suresh and Chandrashekara (2012) informed readers that power analysis is employed to determine the optimal sample size required to make a study statistically significant. G- Power calculations showed that the sample size needed to achieve a power of .80 with a test alpha level .05, and medium effect size of .25, was 128 (Mayr, Erdfelder, Buchner & Faul, 2007). The sample for this study derived solely from amputees listed in the Amputee Coalition database. ANOVA, and F- test analysis allowed

for noting the influence support group and peer-to-peer contact had on an amputees' overall satisfaction with life. These differences provided information toward the overall influence each method (group, peer-to-peer) had on amputee multidimensional scale of perceived social support and satisfaction with life scale statement totals. Citing Cohen's d, the effect size for this study is medium (0.5) (Cohen, 1992). Researchers Bing, Davison, and Arvey (2009) demonstrated that small sample sizes yield valuable results when paired with the correct test. These researchers investigated the benefits of pairing small samples with a repeated measures design. Study findings showed that the selected test increased statistical power for criteria- related validation using small samples. The study purpose involved providing small businesses with legal defensibility for using small sample testing (Bing, Davison, & Arvey, 2009).

I used ANOVA and *F*-test in to ascertain support method influence (peer-to-peer, group) on amputee perceived satisfaction and satisfaction with life scores. Schlattman and Dirnagl's (2010) research supported the use of ANOVA and *F*-test in the present study. According to Schlattman and Dirnagl's (2010) study, ANOVA and *F*-test aid in emphasizing comparison data. Schlattman and Dirnagl's (2010) employed both ANOVA and *F*-tests in their study comparing statistics in experimental cerebrovascular research. Their research demonstrated ANOVA and post hoc test use in making comparisons. In so doing, readers were made aware that ANOVA was used to provide comparisons and *F*-tests were used to compare two variances. Schlattman and Dirnagl (2010) informed readers that *F*-test distribution is a probability distribution. *F*-test distribution is used for

analysis of differences when comparing the variance of two samples of significance (Schlattman & Dirnagl, 2010). The noted comparisons in this present study helped to emphasize the influential aspects the method of receiving social support elicited for the participant's overall satisfaction and perceived satisfaction. For this study, ANOVA aided in making comparisons and *F*-test helped to note method variance.

Procedures for recruitment

Procedures for recruitment involved making prior contact with peer-to-peer and social support group leaders via the telephone. The Amputee Coalition (2015) website provided contact information for amputee Peer-to-Peer contacts located throughout the United States. The Amputee Support Group Network (2013) website provided information for contacting Support Group leaders via State. Contacting peer-to-peer and group leaders provided the portal to access study participants. In so doing study materials were mailed to both peer-to-peer and social support group leaders. The peer-to-peer and social support group leaders, who received the study tools, subsequently made the research tools available to amputee members without coercing the member(s) to complete the study instruments.

Each study packet contained a consent form indicating that the study is anonymous and voluntary. The packet included the multidimensional scale of perceived social support and the satisfaction with life scale tool for the amputee to complete, along with a self-addressed stamped return envelope. The consent form asked that the respondent use the self-addressed stamped envelope to mail their responses back to the

researcher. Group and peer-to-peer leaders received the initial study materials along with a demographic sheet asking how many members in the group (for peer-to-peer, the number depended on how many peer-to-peer members they served). The demographic sheet asked how many male members and how many female members. Leaders were asked to provide age ranges based on the ranges listed on the sheet. Lastly, the demographic sheet asked leaders to cite the location of their peer or group by state. Initially, contact was made with group and peer leaders to send the appropriate number of study packets. Subsequently, the only item returned via the leader was the demographic sheet in a self-addressed stamped envelope. Each participants study tool packet contained a self-addressed stamped envelope so that upon completion of the study instruments each participant returned the materials in a self-addressed stamped envelope. This procedure helped to ensure confidentiality and anonymity. This prevented group or peer-to-peer leaders from viewing any of the responses. A follow-up call to the group or peer-to-peer leader occurred if turnaround of materials was slow (greater than three weeks). A postal tracking receipt accompanied the study instruments sent to peer and group leaders. The tracking receipts helped in providing expected turnaround times based on the delivery tracking date receipt.

Data collection

This study used a quantitative inferential research design and a purposeful selective sample. For this present study, the following data collection steps occurred: Step 1 contact amputee peer-to-peer and group leaders via the contact information provided by

way of the Amputee Coalition (2011), Step 2 obtain permission from peer-to-peer and group leaders to send the study packet. The study packet contained (one consent form, one multidimensional scale of perceived social support, one satisfaction with life scale and one self-addressed stamped return envelope) for the amputee participant to fill out and return. The study packets had unique identification numbers, no individually identifying information. This helped to maintain anonymity. The study packet included a self-addressed envelope so that once the participant filled out the two study instruments, they were responsible for returning their anonymous completed study instruments via the self-addressed stamped envelope. Initial contact people (i.e., peer-to-peer, group leaders) received the appropriate number of study packets based on the number of participants in their group. Peer-to-peer leaders received the appropriate number of anonymous study packets according to the number of peer-to-peer participants they served. A demographic sheet accompanied the initial set of study packets (only peer-to-peer and group leaders filled in the demographic sheet. A self-addressed, stamped envelope allowed for the return of completed materials to the researcher.) To maintain anonymity, the demographic sheet asked for the number of males and females they served, the age range based on the age ranges provided on the sheet and the state they operated in. Step 3 Peer-to-peer and Group leaders made potential study participants aware of the study without any coercion to participate. Step 4 following the directions on the consent form participants were informed to return their completed study instruments in the self-addressed stamped envelope in their packet.

Preliminary Analyses Steps

Dias, Welton, Sutton, Caldenwell, Lu, et al. (2013) informed readers of the importance of showing relationships among and between study variables. Dias et al. (2013) informed readers that the strength of associations affects decision-making. The Dias et al. (2013) study demonstrated this as they examined evidence synthesis in decision-making. Schlattman and Dirnagl (2010) informed readers that *F*-tests are used to compare two variances. The quantitative inferential research employed in this study allowed for gathering numerical data relative to assessing the influence of social support methods (e.g., peer-to-peer and group). This study focus involved providing data reflecting how social support methods influenced perceived satisfaction and life satisfaction scores of amputees engaged in either peer-to-peer or group social support. Amputee satisfaction evaluations for both methods occurred after obtaining multidimensional scale of perceived social support and satisfaction with life scale totals. The steps involved to obtain the needed totals included: Step 1 total the scores for each statement noted on the study instruments for each participant, Step 2 tally the total for each participant (These totals allowed for comparing and contrasting data using ANOVA, and f-test analysis. Sum totals provided numerical data signifying overall influence of each support method).

Instrumentation and operationalization of constructs

The study tools required approximately ten minutes for participants to read through and respond. The consent form stated that participation is voluntary. Participants

were made aware that they could exit the study at any time by simply leaving the study instruments incomplete. Peer-to-peer and social support leaders received Institutional Review Board direct contact information for any follow-up concerns.

There were two instruments used for this study. They included the multidimensional scale of perceived social support, (Zimet, Dahlem, Zimet and Farley, 1988) and satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985). These study instruments provided valid operationalization of constructs based on their validation qualifications.

Satisfaction With Life Scale. This measure is a five-item rating scale used for assessing individual global life contentment as a subconscious-judgmental process. The scale is based on the assertion that asking people how they view their life overall will provide global life viewpoints (Diener, Emmons, Larsen & Griffin, 1985). The satisfaction with life scale provided five statements and seven levels of agreement or disagreement. The seven levels ranged from one equaling strongly disagree to seven equating with strongly agree. Respondents provided rating numbers for the five statements. The rating numbers could be used more than once. Comparisons then took place by matching the total statement scores with the rating scale provided at the bottom of the scale. Total scores ranging from five through nine equated with an extremely dissatisfied with life. However, a total score of 31-35 indicated that one is extremely satisfied with his or her life. Study validation showed a bi-month, test-retest correlation coefficient .82 and coefficient alpha .87. Validation for the satisfaction with life scale included an inter-item correlation

matrix that used factor analysis. The study involved the use of principal axis factor analysis, resulting in the emerging of a single factor. The single factor contributed to .66 of the variance. Scores on the satisfaction with life scale correlated between *moderate* to *high* with other measurements of perceived well-being (Diener et al., 1985). The satisfaction scale validation study showed that the satisfaction with life scale provided global life satisfaction results. The tool validation article noted that the satisfaction with life scale showed positive psychometric properties.

Multidimensional Scale of Perceived Social Support. This is a seven-point rating scale employed to capture perceived social support numerical information. The survey poses 12 statements referring to one's perception of particular relationships fulfilling support needs. The multidimensional scale of perceived social support provided a Likert scale rating. The scale contained seven levels of agreement or disagreement. Respondents provided input by circling corresponding numbers for the seven levels of agreement or disagreement for each of the scales 12 statements. Score totals for all statements provided numerical data depicting one's overall level of perceived satisfaction with social support. The survey provided a subjective assessment of social support. In the validation study investigating perceptions of social support rendered via family, friends, and significant others, the scale showed internal consistency. Subscales equated to Cronbach's alphas .91, .87, and .85. The survey showed a test-retest value of .85. Validation study results revealed moderate construct validity (Zimet, Dahlem, Zimet, & Farley, 1988). For this

study peer-to-peer and group, social support methods provided the significant other relationships referred to in the survey.

Scoring for both instruments occurred by quantifying the totals for each category. Obtaining a total score for each category provided an overall sum per category. Grand totals comparisons occurred, allowing for capturing differences in overall instrument scores. The totals helped to answer the research questions posed for this study investigation.

Permission has been granted to use both of these instruments in student research. The test instrument details showed permission via granted rights. Thereby, allowing one to know that these instruments are public domain. Based on the studies used to validate these selected instruments, they were deemed appropriate for this study evaluation.

Data Analysis

Preliminary analyses

This study used SPSS version 23 data analysis software. Data cleaning and screening for missing variables occurred. Frequencies were run for all categorical variables. The categorical variables included peer-to-peer support, group support, male amputees, female amputees, multidimensional scale of perceived social support, and satisfaction with life scale. Cronbach's alphas were run to confirm that the test instruments provided reliability for testing this population. This study employed assumption testing for ANOVA to ensure normality and homogeneity of variance. Residual testing occurred to provide uncorrelated (independence) of observation data.

Finally, assumption testing took place to confirm the statistical assumptions necessary to run ANOVA. These assumptions included: independence of observations, normality, and homogeneity (Pallant, 2013).

Main Analyses

The detailed analysis plan for this study allowed for answering the posed research questions. The research questions were:

(a) Research Question 1-Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses were:

$H_{o1:}$ There is no mean difference in perceived social support satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

$Ha_{1:}$ There is a mean difference in perceived satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

(b) Research Question 2- Is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses were:

$H_{o2:}$ There is no mean difference, in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

$Ha_{2:}$ There is a mean difference in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support. Answers to the posed questions helped to provide data between the test instruments and support method influence on amputee satisfaction.

ANOVA and *F*-test provided statistical influential data subsequently utilized to answer the research questions. D'agostino-Pearson normality test allowed for testing study skewness and kurtosis. The noted associations helped to accept or refute the null hypotheses. This study employed a .05 confidence interval and a minimum of 178 amputee participants. The noted parameters provided a confidence level of 95%. When employing the G Power calculator for priori sample size for means difference between two independent means, the following computations emerged. Input, tails equals one, effect size d equals 0.5, alpha err prob equals 0.05, power (1- beta err prob) equals 0.95, and the allocation ratio N1/N2 equals 1. The output showed non-centrality parameter as 3.3166248, critical t equals 1.6536580, DF equals 174, sample size group 1 equals 88, and sample size group 2 equals 88. The G Power calculator priori test showed that the total sample needed for this study equals 128. The actual power equals 0.9514254 (Faul, Erdefelder, Lang & Buchner, 2007).

The study provided by Neto (1993) helped in justifying the use of the swls in this present study. The Neto study investigated the applicability of the swls for validating specific aspects of consistency and validity in a different cultural context (i.e., Portuguese adolescents). The purpose of the study related to extending the applicability of the scale. Study conclusions showed that gender and socio-cultural level affected satisfaction with life scores. Further findings showed a positive correlation between satisfaction with life scores and measures of loneliness, social anxiety, shyness, physical attractiveness, and self-concept. The study instrument validation provided a Cronbach's alpha of 0.78 (Neto, 1993). The present study investigated the influence of the two methods for receiving social support (peer-to-peer and group). The demographics aided in providing age and sex distinctions. The Neto study provided credence for the use of the swls via a validated Cronbach's alpha of 0.78 and the applicability extension parameters.

Researchers Wongpakaran, Wongpakaran, and Ruktraku (2011) presented validation for the mspss in their reliability study. The investigation of the mspss psychometric properties employed 462 participants. mspss coupling with the Rosenberg self-esteem scale (RSES), the state-trait anxiety inventory (STAI) and the thai depression inventory (TDI) provided the basis for this examination. Test-retest reliability occurred over four weeks. Study findings indicated that factor analysis revealed three-factor solutions for student groups and patient groups. Study conclusions demonstrated overall model indices fitness. The mean score and sub-scale score for student groups were significantly higher than those noted in the patient groups. The one exception related to

significant others. The mspss showed good internal consistency. Cronbach's alpha depicted 0.91 for the student group and 0.87 for the patient group. Post four weeks' re-test for reliability showed an intra- class coefficient of 0.84. Wongpakaran, Wongpakaran, and Ruktraku (2011) found that the mspss showed negative correlations with the STAI and TDI. However, the mspss depicted a positive correlation with the RSES. The noted findings offer further credence for the use of the mspss in the present study because it offered the ability to differentiate output information between different scales (i.e., satisfaction with life scale).

Assumption testing for ANOVA derived from information provided by the Central Limit Theory. According to the theorem of regularity, under general conditions, the average of data observed over time tends to distribute as a normal distribution (Machkouri, Volny, & Wu, 2012).

To test for normality, the present study employed the D'agostino-Pearson normality test. According to statisticians D'agostino and Belanger (1990), the D'agostino-Pearson test for normality computes skewness and kurtosis (quality of flatness or peakness of the curve). The D'agostino and Belanger (1990) study demonstrated the importance of employing the D'agostino-Pearson test for normality to establish or refute normal distribution within a study. Homogeneity of variance detection occurred via F-test. According to Zhang and Liang (2014), *F*-test provided a reference point for determining whether the variances of two groups are equal. For this present study*, F*-test identified the variance of amputee participants receiving peer-to-peer social

support and those receiving group social supports. According to the study offered by Zhang and Liang (2014), *F*-test usage played a pivotal role in their study examining a new global test. *F*-test showed that the new test, namely GPF test for overcoming the one-way ANOVA problem for functional data offered significance. The GPF test showed root-n consistency. *F*-test use provided suitable outcomes for this present study regarding confirming whether the two groups (amputees participating in peer-to-peer support, and amputees receiving support via a group) show homogeneity of variance. Residuals referred to the process of interpreting a normality test (D'agostino & Belanger, 1990). The normality test expression showed a P value. The noted P value equates to distributions within the study. Large P values indicated that the residuals pass the normality test. Conversely, small P values indicated that the residuals failed the normality test (D'agostino & Belanger, 1990). The present study examined the P value to make determinations of normal distribution.

Totaling the scores from both test instruments occurred allowing for grand totals for each variable to emerge. These totals allowed for comparing the influence of support methods for both test instruments. The mspss totaled score (independent variable) coupled with swls totaled score (dependent variable) provided data for computing variances.

Threats to Validity

Threats to external validity manifest in several forms including faulty investigator conclusions. Risks include falsely attributing variations in the independent variable to

differences in the dependent variable (Yu & Ohlund, 2012). Threats to external validity occur if one falsely assumes that variations in the dependent variable did not occur due to other confounding variables (Yu & Ohlund, 2012).

Internal threats to validity encompass threats due to history, maturation, testing, one-time data collection, and instrumentation (Yu & Ohlund, 2012). To minimize both external and internal threats to validity in this study, parameters limitation occurred. The limitation concerned the fact that the study employed a targeted population. Employing validated evaluation instruments that coincided with one another also aided in minimizing both extraneous and confounding variables.

Ethical procedures

Ethical procedures involved two primary concerns. The first concern involved obtaining an approved consent form from the IRB committee giving approval for the study. The approved consent form indicated that the study is ethical. An IRB approved consent form was attached to each survey packet. The peer-to-peer and group leaders received a demographic sheet (only they filled this sheet out) along with the study packets provided to them to make available to amputees. To maintain anonymity, the demographic sheet (provided only to peer-to-peer and group leaders) asked peer-to-peer and group leaders how many male and how many female amputees their group or peer-to-peer contacts they serve, the age range of the participants (the sheet provided the age ranges) and the state they served. The packet included the approved IRB consent form, the multidimensional scale of perceived social support, and satisfaction with life scale.

The consent form appeared at the front of each survey packet. The consent form advised participants that this is an anonymous, confidential study. The form informed participants that they have the right to decline the study simply by leaving the study instruments blank.

The second ethical concern involved contacting peer-to-peer and group support leaders via telephone to gain approval to send the study instruments for study participants to fill out. The consent form addressed anonymity concerns. Maintaining anonymity occurred via providing each survey pack (e.g., Consent form, multidimensional scale of perceived social support, satisfaction with life scale and self-addressed stamped return envelope) with unique identification numbers void any personal information. Data confidentiality maintenance occurred via keeping data in a locked file cabinet. Data destruction took place three months post study completion via shredding all documents. The form states that by completing the study instruments, one is consenting to be a part of this study.

Summary

This chapter included essential components for analysis of the data. The chapter began with an introduction section that restated some previous information. Research design and rationale followed the introduction. In the research section, study variables were once again identified. One found information about the reasoning for using a

quantitative inferential research design and purposeful selective sample. This section mentioned other studies that used an inferential quantitative research design, Analysis of Variance (ANOVA) and *F*-test. The referenced studies provided credence for the use of the quantitative research design, ANOVA, and *F*-test used in this present study. There is information about how the research design connected with answering the research questions.

The methodology discussion involved various segments. In this section, one found information about the population, sampling frame, power analysis, sampling procedures, data collection, preliminary analysis steps, and instrumentation and operationalism of constructs. The primary data analysis followed the methodology segment. Threats to validity, ethical procedure, and the summary closed out this chapter. Chapter four provided detailed data analysis. Chapter five contained information pertinent to explaining the findings in chapter four and implications for social change.

Chapter 4

Results

The purpose of this evaluation involved examining the influence of two methods of social support (e.g., peer-to-peer and group) on amputee perceived social support and

satisfaction with life scores. The content of Chapter four included a basic review of the purpose of the study, the research questions, along with the null and alternative hypothesis. Data collection via data collection time frame, recruitment and response rates are provided. This chapter encompasses data collection discrepancies from the plan presented in chapter three. The chapter included baseline descriptive and demographic characteristics of the sample. This chapter contained information referring to overall applicability of the sample. The results section of the chapter included preliminary data details followed by hypotheses test details. This chapter contained descriptive statistics that characterized the sample and evaluated statistical assumptions relating to this study. This chapter showed statistical research findings, including probability values and confidence intervals.

The study included tables and figures to illustrate results. This study employed two scales; namely the swls and the mspss. The validation study for the swls showed that it provided global life satisfaction results. The second scale employed during this assessment involved the mspss. The validation evidence for both scales deemed the scales viable for the present inferential study. ANOVA data output helped to answer the two research questions.

Data Collection

The time frame for data collection occurred over four months, ranging from November through February 2016-2017. Returned study instruments equaled N= 184.

However, useable returned study instruments equaled N =178 post six exclusions (3 peer-to-peer, 3 group scales). Exclusions took place based on participant selecting the same response number for each question (three group exclusions). Exclusions occurred based on participants writing that they had taken part in both methods (peer, group) at different times (three peer exclusions).

The sample size calculator showed that to obtain a 95% confidence level using .05 as the significance level the sample size needed was 200. A total of 246 surveys were sent (100 to peer-to-peer, and 146 to group). The number of study instruments returned equaled 184. The total usable participant surveys for this study amounted to N = 178 after excluding six participant scales. The Amputee Network (2013) included a limited number of peer-to-peer mentors in different regions of the United States. The shortage of peer contacts contributed to the shortage of returns from peer-to-peer members.

Data discrepancies from chapter three expectations

The data showing N = 178 after excluding six participant surveys differed from the approved proposal granted at the beginning of this study. The three group participant surveys showing the same response numbers for all statements deviated from the premise that study instruments were to be answered truthfully, subsequently they were excluded. Since the total usable study tools equaled N = 178, G – power calculations were employed.

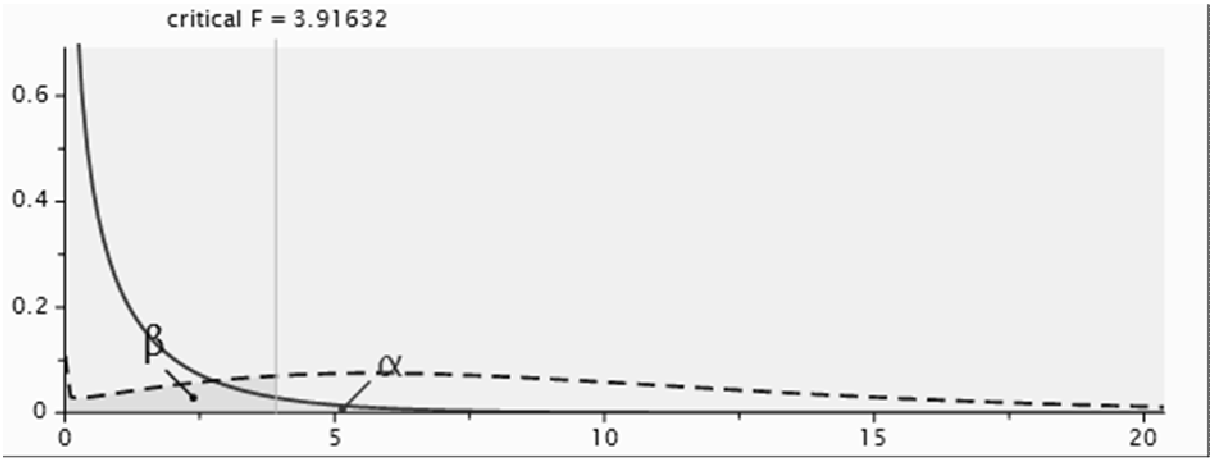

Figure 1. *G power calculator screen shot*

Descriptive data

This study employed two scales. The swls that used a Likert scale with five statements, coupled with a rating scale of one through seven. One represented strongly disagree, and seven represented strongly agree. The descriptive reliability scale statistics for the five statements on the swls showed the mean as 5.23, the variance 1.75, and std. deviation 1.38 for N= 5 items. The mspss provided a Likert scale with 12 statements. The mspss included a seven-point rating scale ranging from very strongly disagree (1) to very strongly agree (7). The descriptive reliability scale statistics for this study included scale statistics for N = 17 items (e.g., five statements from the swls and 12 statements from the mspss). Higher mean scores represented higher influence of the support method (peer, group) on amputee satisfaction with life and perceived satisfaction. Study results showed the mean 94.60, the variance 154.88, and std. deviation 12.45 for N = 17 items. The study results showed a Cronbach's alpha of .915 for the 17 statements. The Cronbach's alpha

coincided with previous validation studies that employed these instruments. Two cited studies included the validation study presented via Diener, Emmons, Larsen, and Griffin (1985) for the swls and the validation study for the mspss of perceived social support presented by Zimet, Dahlem, Zimet, & Farley, (1988).

Noted next is the information obtained by way of the demographic sheet. The demographic sheet was sent to peer and group leaders to fill out. The participant demographics is shown.

Table 2. Participant demographics

Male -Peer	Male - Group	Female -Peer	Female - Group
28	71	51	28
Total 99 male		79 female	

Next ones finds the histograms. The histograms provided a visible depiction for the totaled scores from the swls and mspss. The histograms captured trends in answers from amputees based on the item descriptive information. The histogram data showed descriptive range scores (Frequency) along the left side, Minimum/Maximum (lowest score for statement and highest score for statement) along the bottom of the histogram. The mean, SD, and variance are seen on the upper right side of the histogram. The mean differences between the totaled scores helped to determine which method of support was most influential in contributing to amputee satisfaction with life and perceived satisfaction via the study instruments. This study showed that peer-to-peer support was most influential in eliciting greater satisfaction with life and perceived support.

Figure 2 depicted the frequency of individual totaled scores from the swls. The mean showed 26.15, the std. dev. equaled 5.33 for N=178. The histogram showed the individual score ranges from 10 to 35. Figure 3 showed the upper score totals for the mspss depicted as 84. This is possible because the mspss offered 12 statements on a Likert scale ranging from one to seven. Figure 3 depicted mean 68.16, Std Dev. 8.47 for N=178.

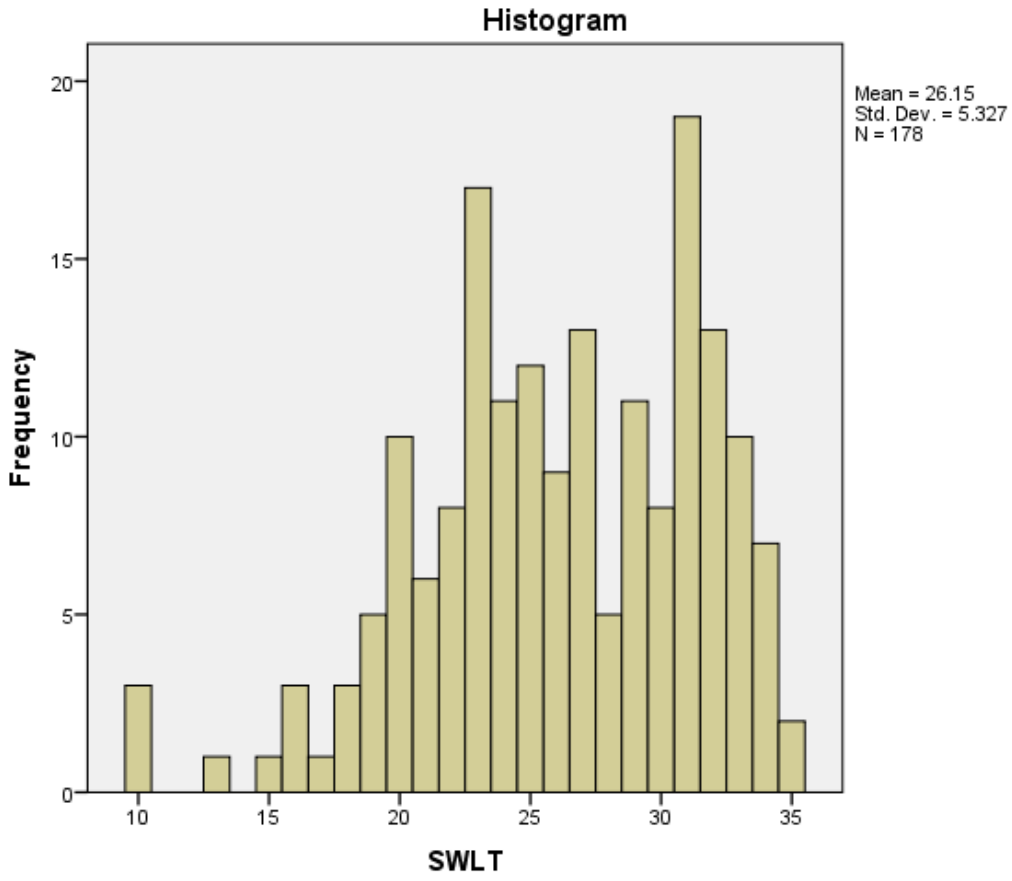

Figure 2. *Frequency of score totals on the Satisfaction with Life Scale*

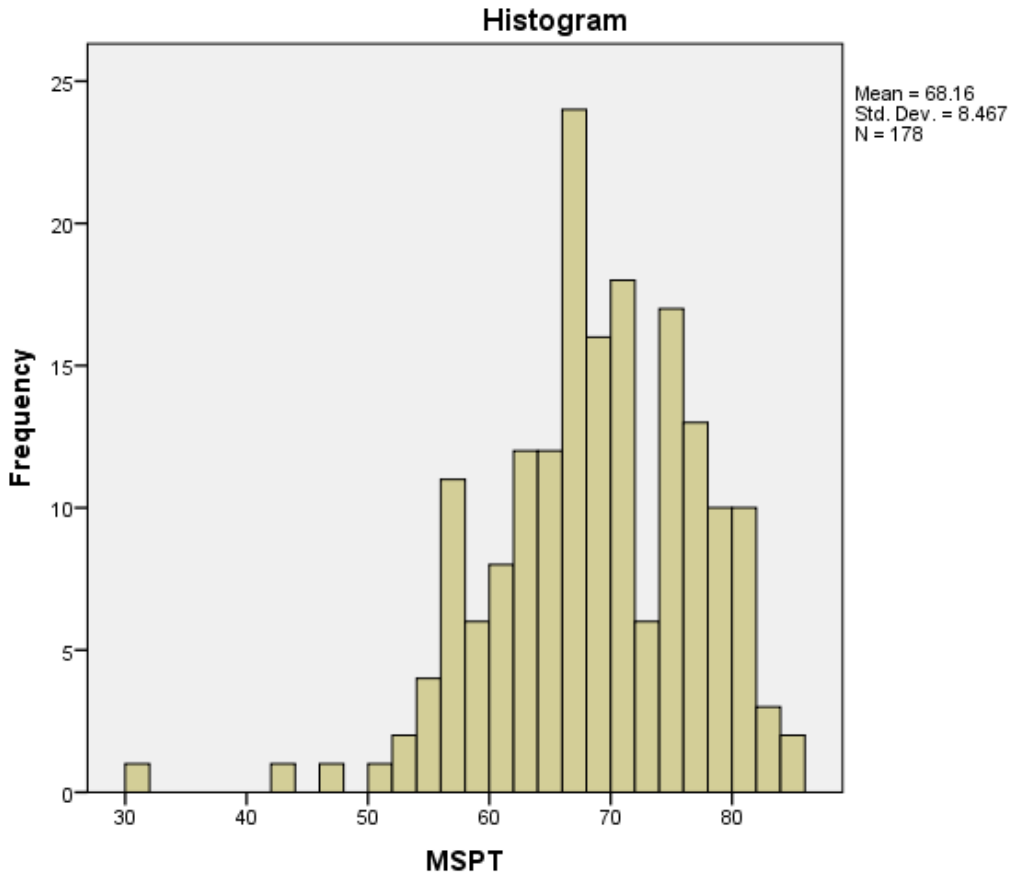

Figure 3. *Frequency of score totals for the Multidimensional Scale of Perceived Social Support*

The score descriptives show the mean, standard deviation, and variance for the study.

Table 3. Participant score descriptives

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
In most ways my life is close to ideal	178	5	2	7	990	5.56	1.275	1.626
The conditions of my life are excellent	178	5	2	7	974	5.47	1.194	1.426
I am satisfied with my life	178	5	2	7	957	5.38	1.275	1.626
So far I have gotten the important things I want in life	178	5	2	7	914	5.13	1.273	1.620
If I could live my life over, I would change almost nothing	178	6	1	7	829	4.65	1.526	2.328
There is a special person who is around when I am in need	178	4	3	7	1060	5.96	.932	.868
There is a special person with whom I can share joy and sorrows	178	5	2	7	1045	5.87	1.058	1.119
My family really tries to help me	178	5	2	7	1026	5.76	1.047	1.097
I get the emotional help & and support I need from my family	178	4	3	7	1017	5.71	.964	.929
I have a person who is a real source of comfort to me	178	5	2	7	1000	5.62	1.014	1.028
My friends really try to help me	178	6	1	7	988	5.55	1.169	1.367
I can count on my friends when things go wrong	178	6	1	7	990	5.56	1.130	1.276
I can talk about my problems with my family	178	5	2	7	1003	5.63	.960	.922
I have friends with whom I can share my joys and sorrows	178	6	1	7	980	5.51	1.146	1.314
There is a special person in my life who cares about my feelings	178	5	2	7	1004	5.64	1.039	1.079
My family is willing to help me make decisions	178	4	3	7	1035	5.81	.917	.841

I can talk about my problems with my friends	178	5	2	7	1028	5.78	1.017	1.034
Valid N (listwise)	178							

Table 4 reflects the information found when describing the swls scores and the mspss totaled scores for all participants.

Table 4. Descriptive Statistics

Descriptives

						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
SWLT	Peer-to-Peer	74	31.27	2.023	.237	30.80	31.75	26	35
	Group	104	22.63	3.941	.386	21.86	23.40	10	30
	Total	178	26.19	5.383	.405	25.40	26.99	10	35
MSPT	Peer-to-Peer	74	73.44	6.238	.730	71.98	74.89	55	84
	Group	104	64.89	8.454	.829	63.25	66.54	31	84
	Total	178	68.42	8.691	.653	67.13	69.71	31	84

How representative is the sample

The inferential sample employed in this study represented amputees across the United States. Data showed that the sample population derived from every region in the United States. The fact that data showed a nationwide representation of amputees' further supported the premise of this study. Noting the fact that not every state offered amputee support suggests more opportunities for either peer-to-peer or group amputee support in areas lacking amputee social support. The study instruments provided assessments that captured global opinions from the representative population of amputees'. Alderfer's

(1969) erg theory aided in assessing shared representative viewpoints for the amputee population. The validation of the swls demonstrated that it provided global life satisfaction results. The mspss showed that it captured information from the subject's vantage point thereby deeming these appropriate to answer the research questions.

Table 5. Amputee representation by state

East Coast Region States (Maine, New York, Maryland, Washington D.C., Florida)	Amputee responses from18 peer-to-peer and 23 amputee group members.	18 peer	23 group
Southwest Region States (Arizona, New Mexico, Colorado, Utah, Nevada)	Amputee response from 27 peer-to-peer and 32 group amputees.	27 peer	32 group
Midwest Region States (Illinois, Indiana, Michigan, Kansas, Minnesota)	Amputee responses from 12 peer-to-peer respondents and 17 group members.	12 peer	17 group
West Coast Region States (Oregon, Washington, Idaho, Montana, California)	Amputee responses from 20 peer-to-peer and 35 group respondents	20 peer	35 group
Total respondent surveys before exclusions		77 peer	107 group

In chapter three, the first step involved contacting peer-to-peer and group leaders. Next, permission was obtained to mail study materials. Follow-up calls occurred to ensure that materials made it to the intended party. All parties received notification that the data obtained via the surveys and demographic sheet remained anonymous using a unique identification number. In Chapter three one read that each survey packet consisting of an informed consent form, the satisfaction with life scale and multidimensional scale of perceived social support was to be returned in the self-

addressed stamped envelope upon survey completion. Information from chapter three made readers aware that if surveys did not return within two weeks, follow-up calls to peer and group leaders would take place to ascertain survey status. Follow-up calls did take place. In some cases, the meetings had not yet taken place.

This study included univariate analyses to justify the inclusion of covariates. In the current research the covariates referred to satisfaction with life totaled scores and multidimensional scale of perceived satisfaction totaled scores.

Table 6. Univariate analysis of variance

Dependent Variable: Support

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	41.393[a]	138	.300	7.599	.000
Intercept	263.476	1	263.476	6674.721	.000
Swtot	19.521	23	.849	21.501	.000
Mstot	1.019	33	.031	.782	.762
Swtot * Mstot	3.205	82	.039	.990	.528
Error	1.500	38	.039		
Total	489.000	177			
Corrected Total	42.893	176			

a. R Squared = .965 (Adjusted R Squared = .838)

Data Results

Descriptive analyses

The first research question asked, Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support?

$H_{o1:}$ There is no mean difference in perceived social support satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

$Ha_{1:}$ There is a mean difference in perceived satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support. Answering the first hypothesis allows one to note the mean influence on amputee perceived social support satisfaction.

The second research question asked, Is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support? The null and alternative hypotheses were:

$H_{o2:}$ There is no mean difference, in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

$Ha_{2:}$ There is a mean difference in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support. Answering the second research question allows one to know whether or not the social support has a positive or negative affect on the amputee's life satisfaction totaled score via the mean.

To gather the necessary quantitative information needed to answer the research questions, ANOVA between subjects ensued to compare means of support (peer, group) on the IV (mspss) score total and the DV (swls) score total for amputee participants. Analysis showed significant influence for peer-to-peer support on the IV score total and DV score total at the $p < .05$ level for the two groups (peer, group) [F (1,177) =296.05, $p = .00$]. The results indicated significant influence by way of group support on IV score total and DV score total at the $p < .05$ level for the two groups [F (1,177) = 53.91, $p = .00$]. This information indicates that group support has a positive influence on perceived support and amputee satisfaction.

Descriptive data results depicted the peer-to-peer mean total for amputee satisfaction with life as 31.27 with a standard deviation of 2.02 for the N=74 peer-to-peer participants. The mean denoting amputee satisfaction for amputees engaged in group support showed 22.63 with a standard deviation of 3.94 for N=104 participants. The total mean captured for the swls totaled score showed 26.19 with a standard deviation of 5.38 for N=178 amputee participants. ANOVA was used to ascertain probability values. Between (peer, group) statistics for mspss totaled score showed $F(1,3131.25) = 3131.25$, $p = .000$, $\eta^1 = .000$. swls totaled score between $F(1,3205.01) = 3205.01$, $p = .000$, $\eta^1 = .000$

A Cronbach's alpha of .915 for N = 17 is noted. Item statistic results from the present study showed that the test instruments did, in fact, capture the intended information for this evaluation. Cronbach's alpha measured internal consistency.

Cronbach's alpha helped in making determinations involving how closely the selected study materials and theorist aided in answering the research questions.

Presenting data findings from this study involved tallying the results from the two scales (mspss and swls). The mspss provided the independent variable data (IV) via tallied sum totals. The totaled scores from the swls provided the dependent variable (DV). When conducting the analysis, the totaled scores from the two scales (peer-to-peer and group) support allowed for capturing numerical influential data for the support offered via peer-to-peer or group.

To conduct the analysis, a One-way ANOVA was run using SPSS version 21. The One-way ANOVA helped to note the mean and standard deviation for peer-to-peer and group support relative to mspss totaled score for the N = 104 group and N = 74 peer-to-peer amputee participants. ANOVA aided in providing mean and standard deviation for swls totaled score responses for N = 74 peer-to-peer members and N = 104 group members. The noted calculations provided insight into the overall influential significance of the type of social support participants engaged (peer-to-peer, group). These numbers allowed for capturing the overall influence each method (peer, group) had on amputee perceived social support and life satisfaction. The answers derived from these calculations helped to answer the research questions.

Statistical assumptions

Employing ANOVA required satisfying certain assumptions. The assumptions included independence of cases, normality, and sample homogeneity (equality) (Flora,

LaBrish & Chalmers, 2012). The Shapiro-Wilk test confirmed normality of the data totaled scores. The Shapiro-Wilk test of normality showed the swls totaled score statistic .959, df 177, and sig .000. Shapiro-Wilk for the mspss totaled score showed statistic .971, df 177, sig .001. The normality results showed totaled scores mean, confidence interval, std. deviation, variance, range, skewness, and kurtosis. Shapiro-Wilk test provided data towards noting normality in the data set. Normality is consistent with data forming a bell curve over time (Gastwirth, Gel, & Miao, 2009).

Table 7. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
	.108	177	.000	.959	177	.000
	.063	177	.086	.971	177	.001

This study represented the general amputee population throughout the United States. Since data gathering occurred from a targeted population with representation throughout the United States, the resulting data offered increased applicability for amputees throughout America. Group leaders and Peer counselor contact information resulted from information located via the Amputee Coalition Network (2013).

Summary

ANOVA and F-tests were employed to investigate mean totals from the swls and mspss relevant to peer and group influence. The findings showed that social support garnered via peer-to-peer had a more positive influence on amputees however both forms offered positive influence. ANOVA and F-tests showed a positive mean difference for both forms of social support thereby leading to rejecting the null stating that there was no mean difference.

Chapter five content provided information relating to the results noted in Chapter four. Chapter five included information concerning Alderfer's Theory, the principle theorist for this study. Chapter five content suggest ways for employing study information in future research endeavors. The recommendations noted how the findings

in this study provided the catalyst to begin other studies that include other variables (i.e., race, gender, socio-economic status).

Chapter 5

Introduction

The purpose for this study was to investigate the mean differences influence between two types of social support offered to amputees. The two types were peer-to-peer and group. The investigation involved noting the influence the two types of support had on perceived satisfaction and life satisfaction. There were two research questions for this study. The first tested the influence of perceived social support influence rendered by peer-to-peer and group. The second question tested the influence on satisfaction with life totaled scores in relation to peer-to-peer and group influence. The variables under investigation included the totaled scores from the swls and mspss.

Key findings

Using ANOVA, and F-tests provided the quantitative information needed to answer the two research questions. The first research question asked, Is there a mean difference in perceived social support satisfaction between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses are:

$H_{o1:}$ There is no mean difference in perceived social support satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

$Ha_{1:}$ There is a mean difference in perceived satisfaction, as measured by the multidimensional scale of perceived social support between amputees participating in peer-to-peer social support and amputees participating in group social support.

The second research question asked; is there a mean difference in life satisfaction scores between amputees who participated in peer-to-peer or group social support?

The null and alternative hypotheses are:

$H_{o2:}$ There is no mean difference, in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

$Ha_{2:}$ There is a mean difference in life satisfaction scores as measured by the satisfaction with life scale for amputees participating in peer-to-peer or group social support.

ANOVA, and F-tests confirmed rejecting the null and accepting the alternative stating that there is mean difference in perceived satisfaction as measured by the mspss. There is a mean difference in satisfaction with life scores as measured by the swls for amputees participating in peer-to-peer or group support.

Interpretation of the Findings

The findings from this investigation allow one to know that this study is relevant and timely based on the number of amputations that are taking place daily here in the United States. We read that 1.7 million amputations occurred recently and that there is a steady rise. Previous data mentioned the fact that by 2050 the amputee population will have doubled (Amputee Statistics, 2013).

Through the literature review, I learned that amputee mental health post-amputation is almost non-existent. In the studies that did examine amputee support, most talked about some type of new mechanism to help amputees walk or stand. There were a few studies that discussed amputee social support via the internet. I noticed that there were very few studies that examined face to face support for amputees. A prior studies recommendations stated that more should be done regarding the living experiences of amputees (Liu, Williams, Liu, & Chien, 2010). That future recommendation led to this study examining the influence of peer-to-peer and group support on amputee perceived

satisfaction of social support and satisfaction with his or her life as a result of social support.

Results from the present study are consistent with previous literature. Livneh, Antonek, and Gerhardt (2000) provided an investigation, where study results showed that effective social support methods contributed to fewer suicide attempts and less mental distress in amputees. Alderfer's theory noted the importance of addressing basic human needs. Alderfer (1969) made readers aware that not fully satisfying certain needs stunts psychological development. Alderfer's erg theory discussed relatedness needs. Relatedness needs referred to one's desire to satisfy interpersonal needs (friendship, companionship, relationship).

Results from this study investigation coincides with other support assessments. Clifford and Minnes (2013) assessment study noted that participation in a support group helped to foster effective coping skills. Other studies mentioned throughout this current investigation focusing on the influence of peer and group support on amputee satisfaction with life and perceived satisfaction showed different types of supportive services.

Studies demonstrating other types of supportive services included Tebbi, Stern, Boyle, Mettlin, and Mindell (2006) who examined social support systems. Hlebec, Mrzel, and Kogovsek (2012) examined survey instruments for assessing social support networks. Humphreys and Rappaport (1994) researched self-help mutual aid groups and organizations. Liu, Williams, Liu, and Chien (2010) investigated the lived experiences of

persons with a lower limb amputation. Future recommendations from the Liu, Williams, and Chien (2010) study led to this study's conception.

The above studies showed that amputee concerns provided a vast field and opportunity to help this population. Findings from this present study helped to lessen the gap by noting how peer and group social support influenced overall amputee satisfaction with life. Results from the two test instruments employed in this study provided the data. Findings from this study revealed that peer-to-peer support was most influential in increasing amputee satisfaction with life and perceived satisfaction scores.

Limitations of the Study

There are several limitation in this study. First, study parameters were limited to peer-to-peer and group members found through the Amputee Support Group Network (2013). Although the network is a good source to find amputee participants, it is limited in its scope. It does not list every amputee resource.

Second, not every state offers amputee support groups. There are fewer peer-to-peer support mentors. Social support is not always available (Stant et al. 2011). The fact that not every state offers amputee social support puts some amputees at a disadvantage.

Third, since information for this study was captured via an anonymous scale there not face to face, I may have missed some information gleaned from face to face interviews. A qualitative interview would allow for accessing body language. Numbers only show quantifiable information.

Fourth, the study limitation occurred based on examining only two forms of social support offered to amputees. The test instruments statements captured information relating to how much influence the two methods of receiving social support contributed to amputee satisfaction and perceived satisfaction with his or her life. The test instruments employed for this study helped in gathering specific needs information. This study focused on gathering numerical data. Quantitative data concerning amputees' presented limitations for generability to other populations outside the scope of this study.

Finally, I was limited in accessing peer-to-peer participants. As stated previously not every state offered amputee social support groups. Of those that did, many did not offer peer-to-peer mentors.

Recommendations

This study set out to lessen the gap concerning amputee social support evaluations. To do this the influence of peer-to-peer and group support on amputee perceived social support and satisfaction with life occurred. This study presented information useful for initiating discussions relevant to meeting amputee socialization needs. The future recommendation might include other variables. Variables such as amputee gender specific love needs, or barriers when amputee couples travel. Both topics provide present and future opportunities.

Studies employing the swls and mspss implemented in face to face qualitative interviews may provide additional support needs information. This present study provided a base for launching investigations that extend far beyond just amputee

socialization. Studies incorporating populations outside the United States or those focused on persons from a specific demographic may prove fruitful.

Future studies could target amputees who have taken part in both forms of social support. The research depicted two methods of social support for amputees. Additional studies could include aspects of social importance such as love, emotional support, amputees and death of a loved one, satisfaction with daily living experiences, and how the methods of social support cited in this study influenced those areas. Study dissemination could take place at colleges, conferences, amputee facilities, veteran hospitals, assisted living facilities, Armed Services meetings, etc.

Implications for Social Change

The need for social change arose after citing the lack of amputee social support method evaluations in the literature. Social change and social impact are words that require action. The present study commenced after an exhaustive literature review and reviewing Liu et al. (2010) future study recommendations.

The results from this study contributed minutely in the advancing of information available to amputees. The contribution of this study helped amputees and those helping amputees to a have a head start when it comes to selecting a method of social support. This study provided amputees seeking support with information to take into consideration when he or she seeks support to satisfy specific needs.

Results from this study help those aiding amputees (family, friends, and agency workers) to make decisions that help to satisfy both perceived satisfaction and

satisfaction with life goals. This consequently, helps all intended to select peer-to-peer or group as the best option for the amputee. The impact of this study on social change is that it arms those advocating for more amputee support groups or peer-to-peer mentors with empirical data showing that social groups benefit amputees.

Conclusion

Social support is crucial to one's well-being. No man is an island. We all need each other especially after undergoing a traumatic event such as an amputation. This study provided inferential information. The inferential information related to the

influence of peer-to-peer and group support on amputee satisfaction with life and perceived satisfaction support. Employing two test instruments, namely the swls and the mspss, the influence of the two methods for receiving social support (peer-to-peer, group) were tested. Alderfer's (1969) erg theory helped to investigate various amputee social support needs via existence needs, relatedness needs, and growth needs. Study findings indicated that both peer-to-peer and group social support methods provided a significant influence on amputee satisfaction with life and multidimensional scale of perceived social support scale scores. This study provided concrete empirical evidence that social support either peer-to-peer (one-to-one) or group increases an amputee's overall satisfaction with his or her life.

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Appendix A

Informed Consent for Influence Study

You are invited to take part in a research study about the influence of amputee social support. This research study is investigating the significance your amputee support (Peer-to-Peer or Group) contributes to meeting your overall socialization needs. The purpose of this study is to capture numerically the influence the two methods for receiving amputee social support contribute to meeting socialization needs for an amputee.

The researcher is inviting amputee participants who are currently involved with peer-to-peer or group social support or have been involved in either form of receiving social support. The one stipulation is that one has enough knowledge to complete the two study instruments (The Multidimensional Scale of Perceived Social Support and the Satisfaction with Life Scale) without help from others. You were selected because you are currently involved in or have been involved in a peer-to-peer or group amputee social setting.

This form is part of a process call informed consent to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Dirrick Williams, who is a doctoral student at Walden University.

Background Information:

The purpose of this study is to investigate the influence two forms of social support (peer-to-peer and group) have on meeting amputee socialization needs.

Procedures:

If you agree to be part of this study, you will be asked to:

- Complete the two study instruments (The Multidimensional Scale of Scale of Perceived Social Support and Satisfaction with Life Scale). It should take approximately 10 minutes to complete both study instruments (5 minutes each).
- Upon completion of the two instruments, you are asked to return the completed instruments to the researcher in the self-addressed, stamped envelope. Please return completed study instruments within one-week post completion. (You need only to complete these study tools one time)

As you answer the two study instruments the words, "person," and "family" refer to your amputee peer or group members. Here are two sample questions:

- There is a special person who is around when I am in need. (This statement refers to your peer or group member).
- In most ways, my life is close to my ideal. (This statement refers to how closely your peer or group is in line with your way of thinking).

Voluntary nature of this study

This study is voluntary and anonymous (no personal information is required). You are under no obligation to take part, however; your participation will help greatly in providing the necessary data. There is no penalty should you choose not to participate. If you choose not to participate, simply leave the study materials incomplete.

Risks and Benefits of Participation

There is no foreseeable risk to you should you choose to take part in this study.

The anticipated benefits resulting from your participation come by providing numerical data that allows for quantifying the level of influence each support method has on meeting specific amputee social support needs. This information allows amputees and those aiding amputees to make informed decisions when selecting either support method (peer-to-peer or group) to meet specific amputee social needs.

Privacy

Confidentiality of data will be maintained via keeping data in a locked file cabinet when not in use. During periods when data analysis is taking place, the researcher will be in a secure environment wherein data is viewed only by the researcher. Data will be kept for a period of five years, as required by the university, and then shredded.

Contact and Questions

Should you have questions about the research, feel free to email your question(s) or concerns to me at Dirrick.Williams@waldenu.edu. Walden's University approval number for this study is _____ and expires on _____.

Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please return the two study instruments upon completion in the self-addressed stamped envelope. To protect your identity **no** signature is required. You may keep this informed consent form.

Appendix B Test Instrument number 1

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully and then indicate how you feel about each. (Group and Peer-to-Peer Support)

Circle 1 if you Very Strongly Disagree
Circle 2 if you Strongly Disagree
Circle 3 if you Mildly Disagree
Circle 4 if you are Neutral
Circle 5 if you Mildly Agree
Circle 6 if you Strongly Agree
Circle 7 if you Very Strongly Agree

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.There is a special around when I am in need.	1	2	3	4	5	6	7
2.There is a group/peer member I can share joys and sorrows.	1	2	3	4	5	6	7
3.My group/peer really tries to help me.	1	2	3	4	5	6	7
4.I get the emotional help and support I need from this group/peer.	1	2	3	4	5	6	7
5.My group/peer is a source of comfort for me.	1	2	3	4	5	6	7
6.I can count on support from this group/peer when things go wrong.	1	2	3	4	5	6	7
7.I can talk about my problems with this group/peer.	1	2	3	4	5	6	7
8.I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
9.There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
10.My group/peer is willing to help me make	1	2	3	4	5	6	7

decisions.

11.I can talk about issues I am confronting with my group/peer.	1	2	3	4	5	6	7
12.I can count on my my friends when things go wrong.	1	2	3	4	5	6	7

Appendix C Test Instrument number 2

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1 – 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. You may use the number more than once. Please be open and honest in your responding.

- 7 – Strongly agree
- 6 – Agree
- 5 – Slightly agree
- 4 – Neither agree nor disagree
- 3 – Slightly disagree
- 2 – Disagree
- 1 – Strongly disagree

____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

- 31-35 Extremely satisfied
- 26-30 Satisfied
- 21-25 Slightly satisfied
- 20 Neutral
- 15-19 Slightly dissatisfied
- 10-14 Dissatisfied
- 5-9 Extremely dissatisfied

Appendix D Peer-to-Peer and Group Demographic Sheet

(For Peer Advocate and Group Leaders only)

1. How many male members in your group? _____
   (For Peer-to-Peer, how many male peers do you serve?)

2. How many females in your group? _____
   (For Peer-to-Peer, how many female peers do you serve?)

3. How many members in each age group?

Males		Females	
20-35 years	_____	20-35 years	_____
36-45 years	_____	36-45 years	_____
46-55 years	_____	45-55 years	_____
Older than 55 years	_____	Older than 55	_____

4. How long has your group existed? _____

(Research demographics)

Appendix E Demographic Results

The demographic sheet sent for peer and group leaders to fill out and return showed a total of 99 male participants and 79 female participants post six exclusions. Data showed 28 male peer-to-peer and 51 peer-to-peer females. Group showed 71 male participants and 28 female participants. Amputee participants for this study involved those obtained via the National Amputee Network.

Male -Peer	Male - Group	Female -Peer	Female - Group
28	71	51	28
Total 99 male		79 female	

Appendix F

Item descriptive statistics output

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
In most ways my life is close to ideal	178	5	2	7	990	5.56	1.275	1.626
The conditions of my life are excellent	178	5	2	7	974	5.47	1.194	1.426
I am satisfied with my life	178	5	2	7	957	5.38	1.275	1.626
So far I have gotten the important things I want in life	178	5	2	7	914	5.13	1.273	1.620
If I could live my life over, I would change almost nothing	178	6	1	7	829	4.65	1.526	2.328
There is a special person who is around when I am in need	178	4	3	7	1060	5.96	.932	.868
There is a special person with whom I can share joy and sorrows	178	5	2	7	1045	5.87	1.058	1.119
My family really tries to help me	178	5	2	7	1026	5.76	1.047	1.097
I get the emotional help & and support I need from my family	178	4	3	7	1017	5.71	.964	.929
I have a person who is a real source of comfort to me	178	5	2	7	1000	5.62	1.014	1.028
My friends really try to help me	178	6	1	7	988	5.55	1.169	1.367
I can count on my friends when things go wrong	178	6	1	7	990	5.56	1.130	1.276
I can talk about my problems with my family	178	5	2	7	1003	5.63	.960	.922
I have friends with whom I can share my joys and sorrows	178	6	1	7	980	5.51	1.146	1.314
There is a special person in my life who cares about my feelings	178	5	2	7	1004	5.64	1.039	1.079
My family is willing to help me make decisions	178	4	3	7	1035	5.81	.917	.841

I can talk about my problems with my friends	178	5	2	7	1028	5.78	1.017	1.034
Valid N (listwise)	178							

Appendix G Reliability

Case Processing Summary

		N	%
Cases	Valid	178	100.0
	Excluded[a]	0	.0
	Total	178	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.918	17

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
94.60	154.878	12.445	17

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.790	.790	5

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
5.238	1.752	1.308	5

Appendix H Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
SWLT	Peer-to-Peer	74	31.27	2.023	.237	30.80	31.75	26	35
	Group	104	22.63	3.941	.386	21.86	23.40	10	30
	Total	178	26.19	5.383	.405	25.40	26.99	10	35
MSPT	Peer-to-Peer	74	73.44	6.238	.730	71.98	74.89	55	84
	Group	104	64.89	8.454	.829	63.25	66.54	31	84
	Total	178	68.42	8.691	.653	67.13	69.71	31	84

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SWLT	Between Groups	3205.007	1	3205.007	296.052	.000
	Within Groups	1894.518	177	10.826		
	Total	5099.525	178			
MSPT	Between Groups	3131.253	1	3131.253	53.914	.000
	Within Groups	10163.809	177	58.079		
	Total	13295.062	178			

Appendix I Test for Normality

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SWLT	177	99.4%	1	0.6%	178	100.0%
MSPT	177	99.4%	1	0.6%	178	100.0%

Descriptives

			Statistic	Std. Error
SWLT	Mean		26.19	.405
	95% Confidence Interval for Mean	Lower Bound	25.40	
		Upper Bound	26.99	
	5% Trimmed Mean		26.44	
	Median		26.00	
	Variance		28.975	
	Std. Deviation		5.383	
	Minimum		10	
	Maximum		35	
	Range		25	
	Interquartile Range		8	
	Skewness		-.535	.183
	Kurtosis		-.004	.363
MSPT	Mean		68.42	.653
	95% Confidence Interval for Mean	Lower Bound	67.13	
		Upper Bound	69.71	
	5% Trimmed Mean		68.68	
	Median		68.00	
	Variance		75.540	

Std. Deviation	8.691	
Minimum	31	
Maximum	84	
Range	53	
Interquartile Range	12	
Skewness	-.611	.183
Kurtosis	1.211	.363

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SWLT	.108	177	.000	.959	177	.000
MSPT	.063	177	.086	.971	177	.001

a. Lilliefors Significance Correction

Appendix J

Univariate analysis of variance

Tests of Between-Subjects Effects

Dependent Variable: Support

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	41.393[a]	138	.300	7.599	.000
Intercept	263.476	1	263.476	6674.721	.000
Swtot	19.521	23	.849	21.501	.000
Mstot	1.019	33	.031	.782	.762
Swtot * Mstot	3.205	82	.039	.990	.528
Error	1.500	38	.039		
Total	489.000	177			
Corrected Total	42.893	176			

a. R Squared = .965 (Adjusted R Squared = .838)