

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2012 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

7-15-2012

Exploring Individuals' Loyalty To Online Support Groups From the Perspective Of Social Support

Tung-Ching Lin

*Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C.,
tclin@mis.nsysu.edu.tw*

Jack Shih-Chieh Hsu

Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., jackshsu@gmail.com

Hsiang-Lan Cheng

*Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C.,
slcheng0001@gmail.com*

Chao-Min Chiu

*Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C.,
cmchiu@mis.nsysu.edu.tw*

Follow this and additional works at: <http://aisel.aisnet.org/pacis2012>

Recommended Citation

Lin, Tung-Ching; Hsu, Jack Shih-Chieh; Cheng, Hsiang-Lan; and Chiu, Chao-Min, "Exploring Individuals' Loyalty To Online Support Groups From the Perspective Of Social Support" (2012). *PACIS 2012 Proceedings*. 103.
<http://aisel.aisnet.org/pacis2012/103>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Exploring Individuals' Loyalty to Online Support Groups From the Perspective of Social Support

Tung-Ching Lin, Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., tclin@mis.nsysu.edu.tw

Jack Shih-Chieh Hsu, Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., jackshsu@gmail.com

Hsiang-Lan Cheng, Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., slcheng0001@gmail.com

Chao-Min Chiu, Department of Information Management, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., cmchiu@mis.nsysu.edu.tw

Abstract

Prior research indicates that social support allows individuals to have additional skills to handle stresses, enhance self-esteem, and increase psychological well-being. Online social networks have become an emerging and important source of social support. However, little research has been done to explore how IT usage may improve the well-being and life quality of individuals, especially patients. Little research has been done to empirically examine individuals' loyalty toward online social groups from the perspective of social support. This study aims to develop an integrated research model to the impact of online social support on psychological well-being and group identification, and individuals' subsequent loyalty toward online social groups. Online social support group was operationalized as a second-order construct with four components: informational, emotional, esteem, and network supports. Data collected from 537 users of online support groups for mothers in Taiwan provide strong support for the research model. The results indicate that online social support is positively associated with psychological well-being and group identification, which in turn have a positive effect on moms' loyalty toward online social groups. Implications for theory and practice and suggestions for future research are provided.

Keywords: Online Support Groups, Social Support, Psychological Well-Being, Group identification, Loyalty.

1. INTRODUCTION

Social support groups have the characteristics of small groups and social supporters and are formed by individuals with similar situations. Members of social support groups share their experience, information, and emotional support. Prior research indicates that social support allows individuals to have additional skills to handle stresses, improve their parenting skills, and enhance their self-esteem (Kissman & Torres 2004; Memmott & Young 1993), and improve life quality (Pedro 2001). There are various face-to-face social support groups offering discussion and support with a special focus on cancer, HIV/AIDS, motherhood, etc. In this study, we focus on support groups for moms.

Mothers need support which their immediate family and friends are often unable to provide. Mothers need support in terms of finding resources for themselves and their babies/children—especially when they are pregnant, first-time moms, or they've just started a family. They need information about various subjects such as pregnancy, breastfeeding, maternal and child health, child development,

family relationships, food and drinks, and finances. There are even some support groups focus on mothers in crisis—through either incarceration, domestic violence victimization, or homelessness.

Recently, social networks (e.g., Facebook) have been popular platforms for connecting with friends and sharing information. Basically, these social networks are for entertainment-oriented social interaction. However, there is a trend to apply Internet/Web to online moms support groups or forums. These positive social forces are worthy of encouragement and concerns. Prior researches indicate that individuals who participate in online support groups can receive social supports (Coursaris & Liu 2009), and get more information and enhance well-beings (van Uden-Kraan et al. 2009; Liang et al. 2012).

While initial use (acceptance) of IT is the important first step toward realizing IT success, an eventual IT success further depends on its continued use or “continuance” (in contrast to initial use or “acceptance”) after initial use. Bhattacharjee (2001) even argue that long-term viability of an IS and its eventual success depend on its continued use rather than first-time use. As with any other IS, the success of an online support group or website depends largely on members’ loyalty toward it. The concept of continuance or loyalty has been studied in many contexts, including IS usage (Bhattacharjee 2001), virtual community (Fang & Chiu 2010), Web service (Kang & Lee 2010). In the past years, the IS research has focused on adoption of IT, the impact of IT on organizational performance, e-commerce, knowledge management, etc. However, little research has been done to explore how IT usage may improve the well-being and life quality of individuals. Little research has been done to empirically examine individuals’ loyalty toward online social groups from the perspective of social support. Therefore, this study aims to develop an integrated research model to explore the impacts of social support on social well-being, group identification, and individuals’ subsequent loyalty toward online social groups.

2 LITERATURE REVIEW

2.1 Social Support

The concept of social support began to receive major attention in the 1970s, principally through the work of Cassel (1974) and Caplan (1974) as they began to examine factors that could ameliorate the effects of negative events. There is no universally accepted definition of this construct. Cobb (1976) stated that social support is information that confirms that an individual is cared for, valued, and “belongs to a network of communication and mutual obligation” (p. 300). Caplan (1974) has defined a support system as “an enduring pattern of continuous or intermittent ties that play a significant part in maintaining the psychological and physical integrity of the individual over time” (p. 7).

Although there is no universally accepted definition of social support, there is a consensus—social support is a multi-dimensional construct. Researchers have provided taxonomies of social support. For example, Cutrona and Russel (1990) classified social support into five dimensions: (1) emotional support- the ability to receive comfort and security during times of stress from others, leading a person to feel that he or she is cared for; (2) network support- the feeling of belonging to a group who share common interests and concerns; (3) esteem support- the bolstering of a person’s sense of competence or self-esteem by others; (4) tangible support- instrumental assistance where necessary resources are offered in order for one to cope; (5) informational support- providing one with advice or guidance concerning possible solutions to a problem. This study adopts the taxonomy of social support by Cutrona and Russel (1990) since it is more complete and is gradually accepted by other researchers in recent years.

Cohen and Wills (1985) argued that social support has three types of functions or effects: (1) enhance an individual’s physical and psychological health; (2) decrease or prevent the occurrence of crisis; (3) decrease the impact of stress. Prior research indicates that people with relatively strong social support

have better well-being than those with weak social support (McCorkle et al. 2008). Prior research (e.g., Wonderlich-Tierney & Vander Wal 2010) also indicate that social support can reduce social anxiety.

2.2 Online Social Support Groups

With the emergence and vigorous development of the Internet, personal social networks can be extended to online or computer-mediated social networks. Online social networks have become an emerging and important source of social support. Comparing to traditional face-to-face communication, online interaction has the advantages of higher anonymity, better control of self-presence, more intimate self-disclosure, lower social risk, lower social responsibility (Lakey & Orehek 2011). Those advantages are important factors to promote the development of social networks. Recently, some online support groups have been established, including support groups for cancer and HIV/AIDS patients, and motherhood.

Recently, there are some studies on online social support groups. For example, Barak et al. (2008) conducted a qualitative research on the influence of online support groups on personal empowerment. Coursaris and Liu (2009) explored what social supports a HIV/AIDS will receive for participation in online social support groups. The results showed that among online interaction messages, 41.6% of them belong to information support, 16% of them belong to emotional support, 6.8% of them belong to network support, 6.4% of them belong to esteem support, and 0.8% of them belong to tangible support. van Uden-Kraan et al. (2009) conducted a quantitative research to examine the impact of online support group on personal empowerment. The finding indicated that patients feel some extents of personal empowerment, including receiving more information and enhancing personal well-being. Prior research on online support groups focus on personal empowerment and well-being. However, there are few empirical (quantitative) studies to broadly discuss the effects of the dimensions of social support on social well-being, group identification, and subsequent loyalty towards online support groups, especially online cancer support groups.

3 RESEARCH MODEL AND HYPOTHESES

Figure 1 presents the proposed model. In this study, loyalty refers to that extent of commitment on the part of the individuals which induce them to continue to use the same online support group and recommend it to other people.

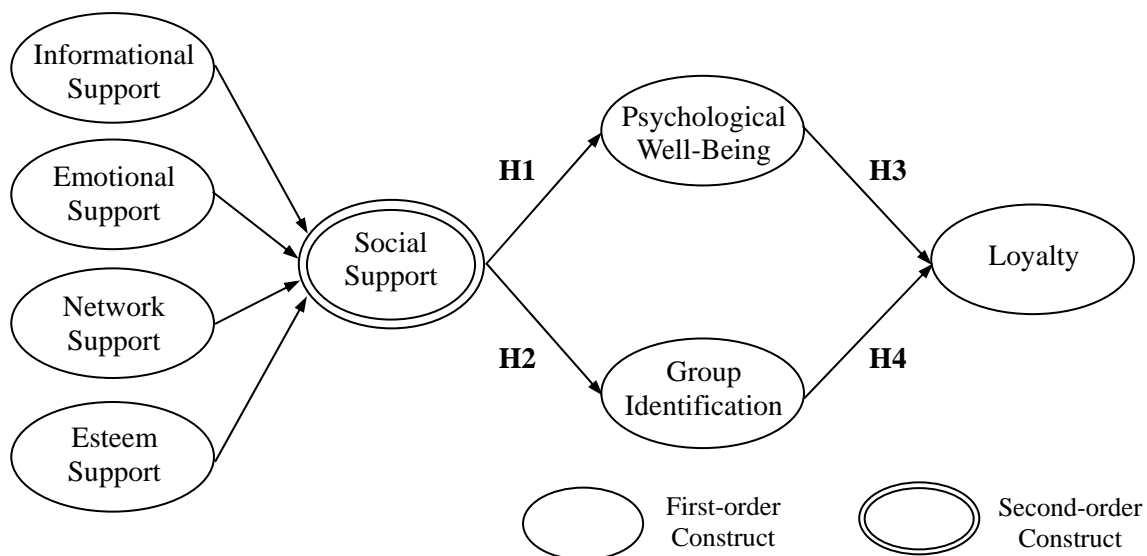


Figure 1. Research Model

3.1 Social Support

Social support refers to the function of social relationships. Well-being is the absence of negative conditions and feelings. According to Cohen and Wills (1985), there are two general models of social support effects on well-being. The direct model hypothesizes that social support has positive psychological and health effects irrespective of whether persons faced stressful events. The stress-buffering model argued that social supports positively influenced health and well-being by protecting people from the pathogenic effects of stressors. In others, social support has direct and indirect effects on well-being. Prior research has repeatedly found that people who report a high level of social support enjoy enhanced well-being (Cohen & Wills, 1985; Kumakech et al. 2009). Miyata (2008) indicated that social support has a positive effect on mothers' psychological well-being in the context of childcare-related online communities. Therefore, the following hypothesis is proposed:

H1: Social support is positively associated with an individual's psychological well-being.

Social support can be explained by social exchange theory. Blau (1964, p.91) defines social exchange as "voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do, in fact, bring from others." Social exchange entails unspecified future obligations. Thus, the norm of reciprocity (Gouldner 1960) is an essential part of moving the exchange relationship forward. According to social exchange theory (Blau, 1964), positive beneficial actions directed at individuals by other parties create an impetus for individuals to reciprocate in positive and beneficial ways to avoid becoming indebted to the exchange parties. This study theorizes that individuals who receive social support from other members in the online support group may build up their satisfaction and reciprocate by translating it to be a feeling of identification with the online support group.

H2: Social support is positively associated with an individual's group identification.

3.2 Psychological Well-Being

Psychological well-being refers to how individuals self-evaluate and their ability to fulfill certain aspects of their lives (Flouri & Buchanan 2003). High psychological well-being may encounter higher levels of happiness and satisfaction, while experiencing low levels of distress (Amato 1994). Satisfaction is an affective response that is known to be associated with intense states of arousal that lead to focused attention on specific targets and may therefore impact on ongoing behavior (Patterson & Spreng 1997). Korman (1970) hypothesized that "all other things being equal, individuals will engage in and find satisfying those behavioral roles which maximize their sense of cognitive balance or consistency" (p. 32). It is expected that people who actively participate in an online support group are more likely to experience connectedness and feel happier (Valkenburg et al. 2006). The relationship between personal contentment and online support groups also could be reciprocal (Valkenburg et al. 2006). The norm of reciprocity (Gouldner 1960) establishes that people feel obliged to respond positively to favourable treatment received from others. We theorize that individuals who have high levels of happiness and satisfaction with life due to receiving social support from other members in the online support group may be motivated to reciprocate, which may be manifested in loyalty towards the online support group. Therefore, the following hypothesis is proposed:

H3: An individual's psychological well-being is positively associated with his or her loyalty towards the online support group.

3.3 Group Identification

Based on Tajfel (1979), this study defines group identification as the individual's knowledge that he belongs to the online support group together with some emotional and value significance to him or her of this group membership. Individuals classify themselves in various social categories in order to facilitate self-definition within their own social environment (Ashforth & Mael 1989; Tajfel & Turner 1985). Ashforth and Mael (1989) proposed that the consequences of identification should include

support for the social group, which may be manifested in loyalty towards the social group. van Knippenberg (2000) argued that organizational identification elicits a sense of oneness with the social group, which makes the individual take the group's perspective and goals as his or her own. An individual's sense of oneness or identification with the social group (e.g., organization) resulting in them being engaged and attached to its fate (DeConinck 2011). In addition, people with a strong identification will work for their group (Ellemers et al. 2004) and will focus on tasks that benefit their organization. Members' continued use and positive word-of-mouth (i.e., loyalty) are critical to the survival and sustainability (i.e., fate) of the online support group. Accordingly, individuals who have a strong sense of oneness or identification with the online support group will benefit the group by displaying loyalty towards it. Therefore, the following hypothesis is proposed:

H4: An individual's group identification is positively associated with his or her loyalty towards the online support group.

4 RESEARCH METHODOLOGY

4.1 Measurement Development

Measurement items were adapted from the literature wherever possible. A pilot study of the questionnaire was conducted using 5 ladies with experience of using line social group for mothers to assess its logical consistency, ease of understanding, sequence of items, and contextual relevance. Then, a small-scale pretest with 27 users of the target online social support was also conducted to assess the measurement properties of the final items. All of the measurement items are on a seven-point Likert scale, with anchors from strongly disagree (1) to strongly agree (7).

4.2 Survey Administration

The research model was tested with data from users of online support groups for mothers in Taiwan. Data were collected from two sources: paper survey and online survey. For the online survey, a banner with a hyperlink connecting to our online survey was published on a number of bulletin board systems (BBS), chat rooms and virtual communities. Individuals with experience of using online support groups for mothers were invited to participate in this survey. The first page of the questionnaire will explain the purpose of this study and ensures confidentiality. Thirty randomly selected respondents were offered an incentive of US\$16 in 7-Eleven gift certificate. The survey yielded a total of 537 complete and valid responses for data analysis. Table 1 lists the demographic information of the respondents.

Measure	Items	Freq.	Percent	Measure	Items	Freq	Percent
Age	< 30	93	17.3	Education	Junior High School	4	0.7
	30-35	286	53.3		High school	61	11.4
	36-40	116	21.6		College	128	23.8
	40 ~	42	7.8		University	271	50.5
					Graduate school	73	13.6
Now in pregnancy	No	399	74.3	Internet Experience (in years)	< 3	59	11.0
	Yes	138	25.7		3-7	184	34.3
					8-12	163	30.3
					12 ~	131	24.4

Table 1. Demographic Information of Respondents (N = 537)

4.3 Data Analysis

Data analysis utilized a two-step approach, as recommended by Anderson and Gerbing (1988). The first step involves the analysis of the measurement model, while the second tests the structural relationships among the latent constructs. The aim of the two-step approach is to establish the reliability and validity of the measures before assessing the structural relationship of the model. SmartPLS 2.0.M3 (Ringle et al. 2006) was used because it allows latent constructs to be modeled as formative or reflective indicators. PLS places minimal restrictions on the measurement scales, sample size, and residual distribution (Chin & Newsted 1999). For social support, the rationale for operationalizing it as a formative second-order construct is threefold: (1) its underlying dimensions are indicator variables that form or cause the creation or change in it (latent variable), (2) its underlying dimensions are not highly correlated, and (3) its underlying dimensions are not interchangeable.

4.3.1 Measurement Model

The second order construct (i.e. social support) was approximated using the approach of repeated indicators suggested by Chin et al. (2003). The repeated indicators approach is easiest to implement (Chin et al. 2003). In this approach, a second order construct is directly measured by observed variables for all of the first order constructs. While this approach repeats the number of manifest variables used, the model can be estimated by the standard PLS algorithm (Chin et al. 2003). The repeated indicators approach can be used with approximately equal numbers of indicators for each construct.

The adequacy of the measurement model was evaluated on the criteria of reliability, convergent validity, and discriminant validity. Reliability was examined using the composite reliability values. Table 2 shows that all of the values were above 0.7, satisfying the commonly acceptable level. The convergent validity of the scales was assessed by two criteria (Fornell & Larcker, 1981): (1) all indicator loadings should be significant and exceed 0.7 and (2) the average variance extracted (AVE) by each construct should exceed the variance due to measurement error for that construct (i.e. AVE should exceed 0.50). All of the items exhibited a loading higher than 0.7 on their respective construct and, as shown in Table 2, all of the AVEs ranged from 0.65 to 0.79, thus satisfying both conditions for convergent validity.

Constructs	Items	Composite Reliability	Mean (STD)	AVE
Informational Support (IS)	5	0.95	5.54 (0.99)	0.79
Emotional Support (ES)	5	0.94	4.65 (1.19)	0.77
Network Support (NS)	5	0.91	4.94 (1.09)	0.68
Esteem Support (ETS)	5	0.94	4.96 (1.09)	0.75
Psychological Well-Being (PWB)	6	0.92	5.20 (1.12)	0.65
Group Identification (GI)	6	0.94	4.19 (1.25)	0.73
Loyalty (LO)	5	0.94	4.94 (1.19)	0.76

Table 2. Descriptive Statistics of Constructs

Discriminant validity was examined using the following two tests. First, the loading of each measurement item on its assigned latent variable is larger than its loading on any of the other constructs indicates the existence of good discriminant validity (Chin 1998) (Table 3). Second, the square root of the AVE from the construct is much larger than the correlation shared between the construct and other constructs in the model (Table 4) (Fornell & Larcker 1981). Therefore, we conclude that the scales should have sufficient construct validity.

	ES	ETS	IS	LO	NS	PWB	GI
ES1	0.81	0.62	0.53	0.41	0.58	0.20	0.39
ES2	0.84	0.55	0.43	0.39	0.56	0.18	0.50
ES3	0.90	0.62	0.52	0.40	0.58	0.18	0.49
ES4	0.92	0.61	0.46	0.34	0.59	0.209	0.529
ES5	0.92	0.60	0.48	0.35	0.62	0.23	0.53
ETS1	0.60	0.87	0.55	0.43	0.64	0.25	0.39
ETS2	0.59	0.89	0.58	0.43	0.65	0.29	0.38
ETS3	0.51	0.78	0.40	0.34	0.52	0.22	0.46
ETS4	0.63	0.91	0.55	0.41	0.65	0.23	0.43
ETS5	0.63	0.88	0.52	0.41	0.64	0.26	0.44
IS2	0.44	0.49	0.85	0.42	0.47	0.23	0.30
IS3	0.46	0.54	0.89	0.43	0.50	0.25	0.26
IS4	0.48	0.55	0.92	0.46	0.54	0.22	0.32
IS5	0.52	0.56	0.90	0.46	0.51	0.24	0.31
IS6	0.54	0.544	0.90	0.47	0.517	0.23	0.36
LO1	0.40	0.45	0.50	0.89	0.50	0.33	0.51
LO2	0.35	0.44	0.51	0.85	0.48	0.31	0.40
LO3	0.36	0.32	0.32	0.81	0.35	0.23	0.44
LO4	0.41	0.42	0.41	0.91	0.48	0.29	0.57
LO5	0.36	0.40	0.46	0.89	0.43	0.29	0.48
NS1	0.51	0.53	0.34	0.42	0.77	0.28	0.54
NS2	0.51	0.57	0.41	0.36	0.83	0.24	0.46
NS3	0.47	0.58	0.55	0.45	0.80	0.28	0.34
NS4	0.62	0.67	0.53	0.47	0.89	0.32	0.47
NS5	0.63	0.60	0.49	0.435	0.82	0.31	0.49
PWB1	0.21	0.26	0.24	0.31	0.32	0.84	0.31
PWB2	0.18	0.23	0.19	0.25	0.29	0.83	0.29
PWB3	0.19	0.27	0.26	0.26	0.31	0.79	0.30
PWB4	0.22	0.27	0.24	0.28	0.31	0.83	0.26
PWB5	0.12	0.19	0.19	0.27	0.21	0.76	0.23
PWB6	0.16	0.15	0.14	0.25	0.24	0.79	0.29
GI1	0.45	0.38	0.26	0.41	0.42	0.32	0.85
GI2	0.52	0.45	0.39	0.57	0.52	0.35	0.90
GI3	0.42	0.32	0.159	0.34	0.36	0.228	0.80
GI4	0.50	0.49	0.389	0.54	0.56	0.33	0.88
GI5	0.50	0.43	0.26	0.47	0.48	0.28	0.91
GI6	0.44	0.36	0.30	0.47	0.46	0.25	0.77

Table 3. PLS Confirmatory Factor Analysis and Cross-loadings

	ES	ETS	IS	LO	NS	PWB	GI
ES	0.88						
ETS	0.69	0.87					
IS	0.55	0.60	0.89				
LO	0.43	0.47	0.50	0.87			
NS	0.67	0.72	0.57	0.52	0.82		
PWB	0.23	0.29	0.26	0.34	0.35	0.81	
GI	0.56	0.489	0.35	0.56	0.56	0.35	0.85

Table 4. Correlation among Constructs and the Square Root of the AVE

4.3.2 Structural Model

In PLS analysis, examining the structural paths and the R-square scores of the endogenous variables assesses the explanatory power of a structural model. Figure 2 shows the results of the structural path analysis. All of the paths exhibited a P-value of less than 0.05. The significance of all of the paths was assessed by 500 bootstrap runs. Overall, the base model accounted for 33.4% of the variance of loyalty (Figure 2). Thus, the fit of the overall model is fairly good.

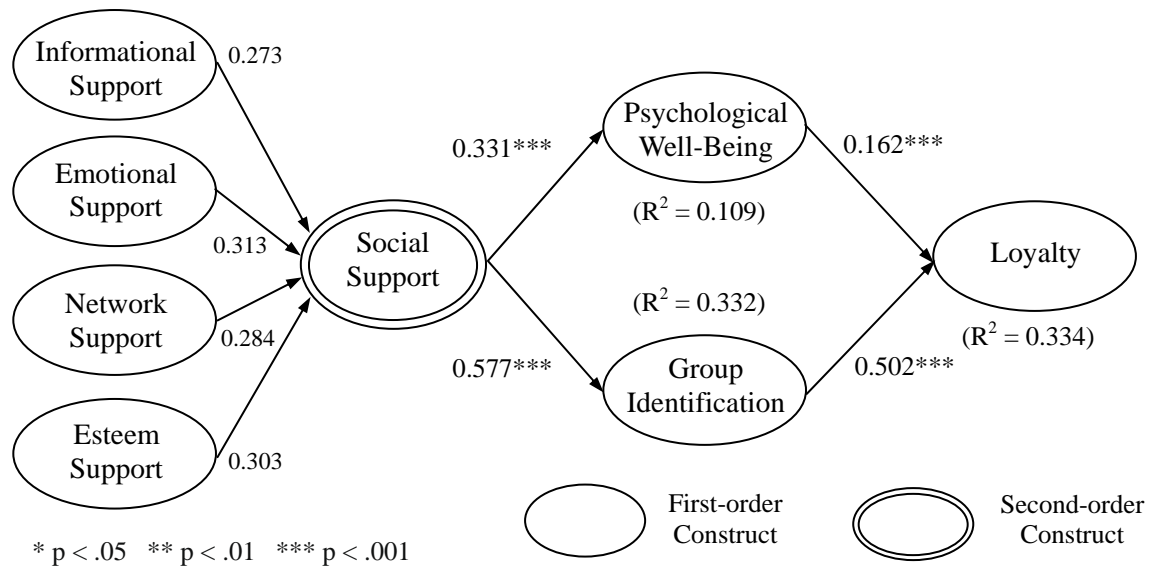


Figure 2. PLS Analysis of the Research Model

5 DISCUSSION AND IMPLICATIONS

This paper aims to shed light on the phenomenon of individuals' loyalty to online social support group/website. Drawing on social support, social identification and psychological well-being literature, the study theoretically develops and empirically tests a model that explains individuals' loyalty to online social support group/website.

5.1 Summary of Results

The findings indicate that online social support groups have a lot of promise: online social support groups can provide social support; people can get social support through asynchronous interactions on social website. Results indicate that, although all four social support types are significant formative indicators of social support, their importance is not the same. Emotional support is the strongest source of social support, followed by esteem support. The dominant importance of emotional support indicates that individuals join the online support group to seek caring, concern, and sympathy towards relieving anxiety and stress. An analysis of social support exchanges in online HIV/AIDS self-help groups (Coursaris & Liu 2009) shows that information support (41.6%) and emotional support (16.0%) were exchanged most frequently, followed by network support (6.8%) and esteem support exchanges (6.4%). A possible explanation for the inconsistency is that although informational support might be exchanged most frequently, but it is not the most important driver in increasing psychological well-being and increasing group identification.

Prior research has repeatedly found that people who report a high level of social support enjoy enhanced well-being in off-line context (Cohen & Wills 1985; Kumakech et al. 2009). We have clearly demonstrated that online social support can have influence on the well-being of mothers in pregnancy and concern about baby care. However, online social support has a stronger effect on group identification than on psychological well-being. It suggests that the effectiveness of online social support in increasing an individual's sense of oneness with the social group is better than increasing his/her psychological well-being.

Results indicate that group identification has a stronger effect on loyalty to the online social group than psychological well-being. We performed additional analyses, which indicated that the path coefficient of psychological well-being increased from 0.164 to 0.267 by removing group identification from the research model. One possible explanation for this finding might be that when the impact of group identification is taken into account, members of online social support groups are more concerned about the self-concept which derives from their knowledge of the membership of the social groups together with the value and emotional significance attached to that membership than the psychological well-being that will produce to themselves.

5.2 Implications for Theory

In terms of theory building, this study attempts to develop a parsimonious model to examine the overarching effects of the four dimensions of social support on individuals' group identification and psychological well-being by modeling social support as a second-order formative construct. From a descriptive standpoint, social support represents an additional key element of social relationships in online social support groups that has been ignored in the literature. The integration of the four distinct dimensions of social support also results in a more descriptive model that better explains individuals' loyalty to online social support groups. In addition, the extent of explained variance in group identification implies that the four dimensions of social support are possibly among the most important antecedents of group identification. The study extends the social support literature from face-to-face social relationships to online social relationships, shedding light on the potential of the four dimensions of social support as sources of individuals' identification with online social support groups and psychological well-being.

From the perspective of the manager/developer of the online social support group/website, it would be especially unfortunate to interpret our results to imply that informational support and network support may be paid less attention. The appropriate interpretation is that, given the situational context of our sample, further increases in informational support and network support may be less potent than similar increases in emotional support and esteem support.

Sociologist Weiss (1974) notes that theories focusing on primary relationships (i.e., strong ties) state that an individual's sense of wellbeing is sustained largely through social support stemming from

one's closest relationships. Online social support groups are characterized by weak ties of acquaintanceships which might be a possible reason that social support does not exert a very strong influence on psychological well-being.

In addition, the social support-group identification-loyalty linkage is more salient than the social support-psychological well-being-loyalty linkage. This suggests that group identification is a powerful mediator between social support and loyalty to the online social support group.

5.3 Implications for Practice

From the perspective of the manager/developer of the online social support group/website, it would be especially unfortunate to interpret our results to imply that increasing members' psychological well-being may be paid less attention due to its relatively weak effect in determining members' loyalty. A member may or may not use the online social supports that are helpful in increasing his/her psychological well-being, but he/she will definitely not use the online social support groups that are not helpful in increasing his/her psychological well-being.

This study suggests that the manager/developer of the online social support group/website should pay attention to four ways of forming online social support and increase members' identification with the online social support group. Eichhorn (2008) indicated that shared experiences (51.9%) was the most frequent soliciting strategy for social support. This involved statements of self-disclosure, described experiences, or questioned similarities among members. Accordingly, the developer of the online social support group/website should design mechanisms to enable members to disclose personal information and experience.

A larger network size generally implies greater availability of network resources, such as knowledgeable people who can provide valuable informational support, which can translate into higher levels of social support (Cohen & Wills 1985). In addition, the greater awareness, engendered by increased network IT usage, enhances the level of online social support available to and realized by these users (Lin & Bhattacharjee, 2009). Accordingly, the manager/developer of the online social support group/website should design strategies to increase its awareness, members' usage frequency, number of users.

5.4 Limitations

Even though we tried our best to design and implement this research, there are still some limitations. The results should be interpreted carefully in the light of these limitations. First, our sample comprised only active users of online social support groups. The results may have been influenced by self-selection bias. Users who had already ceased to participate in online social support groups might have different perceptions about social support, group identification, and psychological well-being. Therefore, the results should be interpreted as only explaining the loyalty of current users of online social supports. Establishing whether the results can be generalized to non-users or disaffected users will require additional research. Second, as the data are cross-sectional, all of the statistically supported relationships can only be viewed as tentative.

References

- Amato, P.R. (1994). Father-child relations, mother-child relations, and offspring psychological wellbeing in early adulthood. *Journal of Marriage and Family*, 56, 1031-1042.
- Anderson, J.C. and Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Ashforth, B.E. and Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14 (1), 20-39.
- Barak A, Boniel-Nissim, M., and Suler, J. (2008). Fostering empowerment in online support groups. *Computers in Human Behavior*, 24 (5), 1867-1883.

- Bhattacharjee, A. (2001), Understanding information systems continuance: an expectation confirmation model. *MIS Quarterly*, 25(3), 139-158.
- Blau, P.M. (1964). *Exchange and power in social life*. John Wiley, New York.
- Caplan, G. (1974). Support systems. In G. Caplan (ed.), *Support Systems and Community Mental Health*, Basic Books, New York.
- Cassel, J. (1974). Psychosocial processes and stress: Theoretical formulations. *International Journal of Health Services*, 4(3), 471-482.
- Chin, W.W. (1998). Issues and opinions on structural equation modeling. *MIS Quarterly*, 22(1), 7-16.
- Chin, W.W., Marcolin, B.L., and Newsted, P.R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and voice mail emotion/adoption study. *Information Systems Research*, 14(2), 189-217.
- Chin, W.W. and Newsted, P.R. (1999). Structural equation modeling analysis with small samples using partial least squares. In: *Statistical Strategies for Small Sample Research*, Hoyle, R.H. (ed.), Sage Publications, Thousand Oaks, CA., pp. 307-341.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38 (5), 300-314.
- Cohen, S. and Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Coursaris, C. and Liu, M. (2009). An Analysis of social support exchanges in online HIV/AIDS self-help groups. *Computers in Human Behavior*, 25 (4), 911-918.
- Cutrona, C.E. and Russell, D.W. (1990). Types of social support and specific stress: Toward a theory of optimal mating. In *Social support: An interactional view* (B.R. Sarason, I.G. Sarason and G.R. Pierce, Eds.), p. 319-366, John Wiley, New York.
- DeConinck, J.B. (2011). The effects of ethical climate on organizational identification, supervisory trust, and turnover among salespeople. *Journal of Business Research*, 64 (6), 617-624
- Eichhorn, K.C. (2008). Soliciting and providing social support over the Internet: An investigation of online eating disorder support groups. *Journal of Computer-Mediated Communication*, 14, 67-78.
- Ellemers, N., De Gilder, D., and Haslam, S. (2004). Motivating individuals and groups at work — a social identity perspective on leadership and group performance. *Academy Management Review*, 29(3), 459-78.
- Fang, Y.H. and Chiu, C.M. (2010). In justice we trust: Exploring knowledge sharing continuance intentions in virtual communities of practice. *Computers in Human Behavior*, 26(2), 235-246.
- Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Flouri, E. and Buchanan, A. (2003). The role of father involvement and mother involvement in adolescents' psychological well-being. *British Journal of Social Work*, 33, 399-406.
- Gouldner, A.W. (1960) The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 165-170.
- Kang, Y.S. and Lee, H. (2010). Understanding the role of an IT artifact in online service continuance: An extended perspective of user satisfaction. *Computers in Human Behavior*, 26 (3), 353-364.
- Kissman, K. and Torres, O.A. (2004). Incarcerated mothers: Mutual support groups aimed at reducing substance abuse relapse and recidivism. *Contemporary Family Therapy*, 26, 217-228.
- Kumakech, E., Cantro-Graae, E., Maling, S., and Bajunirwe, F. (2009). Peer-group support intervention improves the psychosocial well-being of AIDS orphans: Cluster randomized trial. *Social Science & Medicine*, 68(6), 1038-1043.
- Lakey, B. and Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*. 118(3). 482-495
- Liang, T.P., Ho, Y.T., Li, Y.W., and Turban, E. (2011). *International Journal of Electronic Commerce*. 16(2), 69-90.
- Lin, C.P. & Bhattacharjee, A. (2009) Understanding online social support and its antecedents: A socio-cognitive model. *The Social Science Journal*, 46(4), 724-737.
- McCorkle, B.H., Rogers, E.S., Dunn, E.C., Lyass, A., and Wan, Y.M. (2008). Increasing social support for individuals with serious mental illness: Evaluating the compeer model of intentional

- friendship. *Community Mental Health Journal*, 45 (5), 359-366.
- Memmott R. and Young L. (1993). An encounter with homeless mothers and children: gaining an awareness. *Issues in Mental Health Nursing*, 14, 357-365.
- Miyata, K. (2008). Social support for Japanese mothers online and offline. In *The Internet in Everyday Life* (Wellman, B. and Haythornthwaite, C. Eds.), Blackwell Publishers Ltd, Oxford, UK.
- Patterson, P.G. and Spreng, R.A. (1997). Modeling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: An empirical examination. *International Journal of Service Industry Management*, 8 (5), 414-434.
- Ringle, C., Wende, S., & Will, A. (2006). *SmartPLS (Version 2.0 (beta))*. University of Hamburg, Hamburg, Germany
- Tajfel, H. (1982). *Social Identity and Inter-group Behavior*. Cambridge University Press, Cambridge.
- Tajfel, H. and Turner, J.C. (1979). An integrative theory of intergroup conflict. In *The social psychology of intergroup relations* (Austin, W.G. and Worchel, S. Eds.), p. 33-47, Monterey, CA: Brooks/Cole,.
- Tajfel, H. and Turner, J.C. (1985). The social identity theory of intergroup behavior. In *Psychology of intergroup relations* (Worchel, S. and Austin, W.G.Eds.), p.7-24, Nelson-Hall, Chicago, IL.
- Valkenburg, P.M., Peter, J., and Schouten, A.P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology & Behavior*, 9, 584-590.
- van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology*, 49, 357-371.
- Van Uden-Kraan C.F., Drossaert, C.H.C., Taal, E., Seydel, E.R., and van de Laar M.A.F.J. (2009). Participation in online patient support groups endorses patients' empowerment. *Patient Education Counseling*, 74(1), 61-69.
- Weiss, R.S. (1974). The Provisions of Social Relationships. In *Doing Unto Others* (Rubin, Z. ed.), p. 17-26, Prentice-Hall, Englewood Cliffs, NJ.
- Wonderlich-Tierney, A.L. and Vander Wal, J.S. (2010). The effects of social support and coping on the relationship between social anxiety and eating disorders. *Eating Behaviors*, 11(2), 85-91.