

## **Online Social Support: Which Posts Were Answered?**

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The purpose of the study was to find out which posts were answered in a text-based computer-mediated social support group. Specifically, the present study examined the effects of two variables on support-seeking behaviors: support-seeking strategies and gender. A revised typology of support-seeking strategies originally proposed in the Sensitive Interaction Systems Theory (SIST) model was employed for the study. Data were collected from the PTT psychosis discussion group, the largest BBS in the Chinese-speaking community, for a period of 30 months from February 2004 to July 2006. In general, the results indicated that posts with more asking, less crying and less hinting were answered more than posts with more hinting, more crying and less asking. However, although different support-seeking strategies did affect support-seeking behaviors, gender did not have an impact on which posts were answered.

### **Introduction**

Social support is crucial to individuals' health status. Empirically, there have been well-established positive associations between individuals' physical and mental well-being, and social support demonstrated in different academic disciplines (Burleson and MacGeorge, 2002). Undoubtedly, individuals constantly engage in support-seeking activities to help them through everyday upsets or to face critical moments in their lives. In the past, abundant research has examined various aspects of social support in face-to-face (FtF) close relations (e.g., Barbee, Rowatt, and Cunningham, 1998; Cutrona and Suhr, 1992). With the advent of computer-mediated social support, more and more researchers have looked closely at the social support behavior transmitted via computer-mediated communication (CMC) (e.g., Coulson, 2005; Ley, 2007; Wright, 2000; Ye, 2006; Xie, 2008). However, relatively few studies have focused on support-seeking behaviors within a computer-mediated environment.

Unlike FtF relations, personal relations formed in most computer-mediated social support groups are so-called "weak-tie networks". That is, a group of loosely connected strangers whose "only connection is their common affliction or concern over a source of personal discomfort" (Walther and Boyd, 2002: 154). It is not uncommon for people to exchange different types of network capital through their relationships with close friends, family, acquaintances and business contacts (Miyata and Kobayashi, 2008; Plickert, Cote, and Wellman, 2007). However, without any relational bases, how does one stranger successfully seek social support from another stranger? It has been suggested in the traditional FtF social support literature that certain types of support-seeking strategies could activate the subsequent supportive interactions more effectively than other strategies (Barbee, Rowatt, and Cunningham, 1998). Also, gender may have an impact on support-seeking behaviors (MacGeorge, 2003). Thus, the goal of the present study is to examine support-seeking behaviors within a computer-mediated support group with emphasis on two variables: support seeking-strategies and gender. Specifically, the present study aims to discover which posts were answered when

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distressed strangers sought support from one another. Do the answered posts display certain types of seeking strategies and/or are they written by a certain gender?

In Taiwan, long-term bi-party political conflicts and overall declining economic growth have led this country into turbulence. Statistical data reported by the Department of Health indicates an average increase of 10.8% for individuals hospitalized for psychosis-related syndromes in the past 5 years (from 2001 to 2005) ([www.doh.gov.tw](http://www.doh.gov.tw)). For this reason, the present study focused on a mentally disordered group so that some research questions could be made about these individuals. The group selected for examination was the psychosis group located at PTT, the most popular Bulletin Board System (BBS) in Taiwan and the largest BBS in the Chinese-speaking community; the study was conducted for a period of 30 months, from February 2004 to July 2006.

## Literature Review

I will first define social support and explore the distinctive aspects of online social support. Then, in the second section, I will introduce a revised version of a typology of support-seeking strategies which will be used as the analytical framework for the present study. Thirdly, gender and CMC will be discussed. Corresponding research questions will be raised at the end of the second and third sections.

### *Online social support*

Social support is the interaction of supportive communication where individuals use verbal and/or nonverbal behaviors to seek or provide help (Albrecht, Burleson, and Goldsmith, 1994). It is the “transaction of empathy and concern, information and advice, or tangible aid (i.e., goods and services) between two or more individuals” (Mickelson, 1997: 157). With the advent of the Internet, a computer-mediated environment has been considered as an alternative setting for seeking social support. In fact, the Internet has been argued to be a superior (Robinson and Turner, 2003) and “a fabulously successful medium” for social support (Walther and Park, 2002: 545).

Compared to FtF social support, online social support has been found to be more attractive for the following reasons. First, a computer-mediated environment provides opportunities to extend individuals’ personal networks without temporal and space constraints (Franzen, 2000; Shaw and Gant, 2002). In fact, studies have demonstrated that intimate relationships could be built in online settings even among strangers (Colvin, Chenoweth, Bold, and Harding, 2004; Tidwell and Walther, 2002). If more time was spent on the Internet, individuals would feel more socially supported (Shaw and Gant, 2002). Actually, among older adults, increasing use of Internet communication also increases the amount of satisfaction with online social support (Wright, 2000). Xie (2008) also demonstrated the positive relationship between the use of three different modes of online communication (voice chat rooms, online forums, and instant messaging) and social support among older Chinese within an OldKids online community. Moreover, Miyata and Kobayashi (2008) found that among Japanese Internet users, the use of personal computer emails increased social ties. Furthermore, as one’s personal network extends, the likelihood of greater expertise provided by the personal network increases as well (Walther and Park, 2002).

Second, the anonymity provided by online settings ensures personal buffer zones. Online, individuals presented themselves with greater confidence and felt more encouraged to write and discuss sensitive issues (Walther and Boyd, 2002; Wright, 1999).

Third, the structure of a bulletin-type arrangement of posts in most dedicated online support settings helps to maintain better interaction management than in terms of reading, writing and replying to messages (Walther and Park, 2002). Most bulletin-type sites work via asynchronous written communication. This gives individuals plenty of time to deliberate more thoughtfully before they post and reply to messages. Eichhorn (2008) acknowledged the advantages of the asynchronous features of the computer-mediated environment and examined the interactions of social support within online eating disorder support groups. She argued that it would be easier and beneficial for “individuals suffering from an eating disorder because it allows them to plan, contemplate, and edit comments carefully” (p. 68).

In addition, this text-based asynchronous communication transmitted via bulletin-type posts also facilitates and satisfies support seekers’ personalized needs (Colvin et al., 2004; Turner, Grube, and Meyers, 2001). Eichhorn (2008) found that for individuals suffering from an eating disorder, the most frequent topics discussed on the board were sharing personal experiences and positive affect. Observing a split of an online pregnancy and mothering group, Ley (2007) found that the sense of “we-ness” was crucial for members to commit to both old and new sites.

The most famous and well-studied text-based asynchronous venues are Usenet in the United States, and PPT in Taiwan. PPT is structured into a variety of discussion groups (similar to newsgroups in Usenet) with topics covering almost everything that is related to everyday living. Thus, individuals log into the discussion topics that most closely reflect their personal needs. Within each discussion group, individuals post, read and reply to messages. “Threads”, chains of replies, are formed when more than one message is posted with the same subject line.

However, hundreds of messages are posted on the bulletin boards every day. Which written posts initiate threads among distressed strangers seeking support from one another?

### *Support seeking strategies*

Generally speaking, individuals with problems engage in a series of conversations with their prospective helpers to seek support. This type of conversation is termed “troubles talk”, in which the social support process is initiated. The term is coined and defined by Jefferson (1980: 153) as “a conversation in which troubles are reported” (from Goldsmith, 2004: 4). While it might be difficult for researchers to observe troubles talk taking place FtF in real life situations (Burlison and MacGeorge, 2002), it is easier to conduct research in online settings when “most of the posts in electronic groups are conversational; they are responses to other posts and are directed to a particular person’s remarks or questions” (Galagher, Sproull, and Kiesler, 1998: 498).

However, what was written in the posts that initiated a thread? Little research has addressed this question in the past. Eichhorn (2008) examined the strategies used to solicit social support within the top five most popular *Yahoo!* eating disorder support groups. Five strategies including shared experiences, requests for information, self-deprecation, statements of personal success, and statements of extreme behavior were explored. The results indicated that more than fifty percent of the group members (51.9%) solicited social support by sharing experiences (statements of self-disclosure or description of an experience), followed by requests for information (25.4%).

Barbee and her associates (1995, 1998) have developed a typology of support-seeking strategies to explain support-seeking behaviors in a FtF environment. The typology was part of a general mode, Sensitive Interaction Systems Theory (SIST). SIST posits that ‘internal emotional conflicts and ambivalences may be reflected in the communication of both the

support seeker and the support giver in particular supportive interactions’ (Barbee, et al., 1998: 282). The model describes the supportive interaction in four phases: first, support seekers’ choice of support-seeking strategies based on seekers’ emotional state; second, support providers’ coping behaviors (approach or avoidance); third, immediate seekers’ reaction (accept or resist); and finally the relational outcomes between seekers and supporters (satisfied/dissatisfied with self/partner). Later on, Barbee and her associates (Derlega, Winstead, Oldfield III, and Barbee, 2003) tested SIST by examining the associations between close relationships and social support among 125 individuals with HIV. The results indicated that SIST was a useful analytical scheme to study social support process.

Although SIST was originally developed to describe supportive interaction in FtF close relationships, it is by far the most comprehensive model proposed to explain the social support-seeking process. Therefore, for the purpose of the study, the typology of support seekers’ seeking strategies and their corresponding coping behaviors proposed by SIST (the first two phases) were used and revised to some extent to examine the PTT psychosis group.

The SIST seeking strategies are described in two dimensions: direct/indirect and verbal/nonverbal (Table 1). Verbally, individuals could articulate their troubles directly or indirectly. That is, they could just ask for help by providing factual information about their problems, or they could beat around the bush by hinting or complaining about the problems without requesting assistance. Nonverbally, individuals can display their emotions directly or indirectly. They can cry to indicate directly their distress, or they can express their negative emotions in more subtle ways, such as sighing, sulking and fidgeting.

**Table 1: SIST Support Activation Strategies**

	<b>Direct</b>	<b>Indirect</b>
<b>Verbal</b>	Ask	Hint Complain
<b>Nonverbal</b>	Cry	Sigh Sulk Fidget

*Source:* Adapted from original SIST (Barbee et al., 1998, p. 283)

The most notable distinction to apply to this typology of support-seeking strategies in online settings is the interpretation of nonverbal behaviors. While in a FtF situation, one can observe nonverbal cues from body language and facial expressions, these nonverbal cues can only be displayed by the linguistic and extralinguistic behavior with emoticons in a CMC environment (Mann and Stewart, 2000). Accordingly, two modifications were made to the original support-seeking strategies (See Table 2). First, for each type of support-seeking strategy, a parallel nonverbal category was added. Thus, for example, ‘ask’ indicates posts written all in text while ‘ask+’ represents posts with text plus emoticons. The second modification is to put the original three indirect nonverbal strategies - sighing, sulking and fidgeting - into one category under ‘complain+’. The reason for doing this is that no specific definition was provided for each of these strategies, and they were always discussed together as negative emotions in the original version. As a result, a typology of eight support-seeking strategies was developed for the present study.

SIST predicts that direct seeking strategies lead to supporters’ approach in the form of solve and solace, while indirect strategies lead to avoidance in the form of dismiss and escape (Gulley, 1993, from Barbee et al., 1998). The researchers argued that individuals tended to communicate in a synchronized way. “Each individual’s behavior tended to elicit a reciprocal behavior from their interaction partners” (Barbee et al., 1998: 286-7). Thus, if support seekers are direct in requesting aid, support providers would tend to reciprocate their behaviors by

offering assistance; on the contrary, if support seekers are ambiguous in expressing their problems, support providers tended to ignore them. Such synchronized behavior was found among the HIV support group mentioned above (Derlega, et. al., 2003). The researchers found that “ask and cry” as direct support-seeking strategies were positively associated with “approach” support providing behaviors; “hint and sigh” as indirect support-seeking strategies were positively associated with “avoidance” support providing behaviors.

**Table 2: Revised Support Activation Strategies**

Direct	Indirect
Ask	Hint
Ask+*	Hint+
Cry	Complain
Cry +	Complain +

\* indicates usages of emoticons

Aside from individuals’ communicating in synchrony, Barbee and her associates also argued that controllability of emotions demonstrated by support seekers was a key to support providers’ coping behaviors. When support seekers directly asked for assistance, it was perceived that they were in greater control of their emotions than those in the complaining category.

Do communicating in synchrony and controllability of emotions fare well in a text-based computer-mediated environment? For the first argument, communicating in synchrony, it is plausible that individuals interacting with each other via written communication would also reciprocate each other’s behaviors. However, it is also possible that reciprocity is not a concern when anonymity shields individual identities. In terms of controllability of emotions, although better interaction management is provided within a computer-mediated environment, management skills may vary from person to person, especially when they each may suffer from different types of health problems. Thus, it is instructive to find out whether direct seeking strategies were used more often in posts that initiated threads than posts that did not get answered. Accordingly, the first research question is proposed as the following:

*RQ1: Are there different seeking strategies between posts that are answered and those that remain unanswered?*

In addition, the SIST typology looked at the nonverbal dimension of support-seeking strategies as well. In the original SIST model, nonverbal strategies follow the same arguments as verbal strategies: direct nonverbal strategies elicit more supportive behaviors than indirect strategies in FtF relations. Yet, in a text-based computer-mediated environment, nonverbal cues may have different functions. Previous research has shown that nonverbal cues have an additive effect on message interpretation: negative nonverbal cues enhance readers’ inclinations to interpret negative messages; a similar relationship existed between positive nonverbal cues and positive messages (Walther and D’Addarion, 2001). It is not clear whether the additive effect exists in a text-based computer-mediated support group. That is, do posts with nonverbal cues elicit more reciprocal responses from support providers such that they were answered? Accordingly, the second research question is proposed as:

*RQ2: Are posts with nonverbal cues answered more than those without?*

## *Gender and social support seeking*

Most of the studies exploring gender differences in supportive interactions focused on the effects of gender on the provision of social support in FtF situations. Yet, somewhat conflicting results were reported: on the one hand, women are demonstrated to be better than men in comforting and providing emotional support (Bertero, 2000; Kundel and Burleson, 1999); on the other hand, studies have shown that the level of expressive/nurturing traits, rather than gender, was related to support responses (Basow and Rubenfeld, 2003), and gender differences accounted for a very small percentage of variance in terms of the types of supportive provision manifested (Goldsmith and Dun, 1997).

Examining gender differences from both provider's and seeker's perspective, MacGeorge (2003) found gender influences the process of support-seeking interactions 'in subtle and interesting ways' (p. 179). She drew on the 'attribution-emotion-action' model of helping, which posits that if support seekers are perceived to be more responsible for their own problems, subsequent support provision will be weaker or lower in quality, and she explored whether gender plays a role in the formation of responsibility and effort attribution. Her study showed that men tended to attribute more responsibility to male support seekers when the male support seekers were responsible for their own problems and had not tried to resolve them.

To date, few studies have examined gender differences in support-seeking interactions in a computer-mediated environment. However, previous studies have found gender differences in language use in CMC. Herring (2000), in her series of works on gender and language use in asynchronous CMC, found that in a mixed-sex group, males tend 'to assert opinions strongly as facts, [...], and in general, manifest an adversarial orientation towards their interlocutor [...]. In contrast, females are more likely to qualify and justify their assertions...express support of others, and in general, manifest an aligned orientation towards their interlocutors' (p. 2).

Based on the preceding discussion in this section, it is not clear whether gender has an impact on online supportive interactions, especially in the phase of support seeking within a text-based support group. It seems plausible to argue that female support seekers may receive answers more than males because females may be attributed less responsibility for their problems. However, it is also plausible to infer that male support seekers may get answered more than females because they employ more direct language than females. Accordingly, the third research question is proposed as follows:

*RQ3: Does gender have an effect on which posts are answered?*

## **Method**

This study used content analysis to analyze posts within the PTT psychosis discussion group. Content analysis is a research technique for objective, systematic, and quantitative description of the observed phenomenon. It is also suitable for describing manifest communication content and characteristics of messages (Bauer, 2000; Herring, 2004).

## **Research site**

Founded in 1995 in Taiwan, PTT.CC ([telnet://ptt.cc/](http://ptt.cc/)) is the largest BBS in Taiwan, as well as in the Chinese-speaking community (<http://zh.wikipedia.org/wiki>). It hosts more than 30,000

discussion boards and has more than 600,000 registered users. On average, more than 1,000,000 individuals visit the site every day. The mean age of PTT users is 21 years old.

The psychosis discussion group, set up in PTT in 2003, aims to provide a discussion space for people suffering emotional distress, and also to provide the public an alternative channel to acquire updated and accurate psych-related information.

### Data collection and sampling

Since CMC is ‘irresistible in its availability’ (Jones, 1999: 13), the present study examined all posts that remained on the discussion board when the study started in August 2006. A total of 2,326 messages were posted during the sampling period from February 2004 to July 2006. To meet the goal of the study, posts that addressed problems or sought support on behalf of other people (e.g., their relatives, friends) were excluded from analysis. Also, posts that contained advertisements for medications, doctors/hospitals, and public announcements irrelevant to the aim of the board, were excluded. As a result, a total of 689 posts were collected for final analysis. These posts were then classified into two groups for comparison purposes: threads and isolates. Threads are posts which consist of chains of valid replies (the shortest thread consists of 2 posts); isolates are posts with no replies. It eventuated that 168 threads and 131 isolates were detected for analysis. The 168 threads were written by 344 individuals, and 131 isolates were posted by 113 individuals. Nineteen individuals posted in both thread and isolate groups. An overall participation distribution of thread members and isolates across the sampling period by month is displayed in Table 3. Thus, the study compared the 168 posts which initiated the threads to the 131 isolate posts on support-seeking strategies and gender distribution.

**Table 3: Participation Distribution of Thread Members and Isolates**

Month	2004		2005		2006	
	Isolates	Thread Members	Isolates	Thread Members	isolates	Thread Members
1	n/a	n/a	1	1	7	15
2	1*	6	1	1	6	2
3	2	0	1	1	7	23
4	0	2	3	21	1	16
5	0	0	12	57	5	16
6	0	2	10	23	6	17
7	0	4	10	28	5	13
8	2	2	9	30	n/a	n/a
9	2	1	6	24	n/a	n/a
10	1	1	5	21	n/a	n/a
11	1	1	13	4	n/a	n/a
12	1	1	2	18	n/a	n/a

\*individuals who post more than once in a month are counted once in the same month

## Coding categories

Three coding schemes will be discussed in this section: topics of posts, the typology of support-seeking strategies, and gender.

## Topics

A preliminary examination of posts on the psychosis board showed that various types of topics were discussed on the board. To make sure that the comparison between the isolate and thread groups was on the same basis, the topics discussed needed to be categorized first. Since no previous coding scheme had been established to categorize topics discussed within a text-based psychosis group, this study employed an inductive approach to code topics of these posts. Ten per cent of posts were read and categorized by discussion theme. As a result, five major categories emerged from this process, as follows (See Table 4):

- Information-seeking: Post seeks information on medication, physicians/psychologists, and health institutions.
- Distressed emotion: Post contains descriptions of individuals' psychosis-related syndromes, of how they deal with the syndromes, and of how they live their lives with these syndromes.
- Suspicious: Post contains remarks about individuals' who suspect themselves of being mentally-disordered by providing descriptions from their daily lives of irregular behaviors (e.g., repeatedly checking whether a door is locked) or emotions (e.g., feel to commit suicide).
- Old birds: Individuals with similar problems share their experiences about how to deal with and/or overcome the disease.
- Others: Miscellaneous posts.

A satisfactory inter-coder agreement/reliability, 0.92/0.96, was achieved for the above categories (Bauer, 2000).

**Table 4: Discussion topics**

<b>Types</b>	<b>Thread Frequency (percentage)</b>	<b>Isolate Frequency (percentage)</b>
<b>Information-seeking</b>	53 (31.5)	60 (45.8)
<b>Distressed emotion</b>	73 (43.5)	40 (30.5)
<b>Suspicious</b>	32 (19.0)	22 (16.8)
<b>Old birds</b>	3 (1.8)	4 (3.1)
<b>Other</b>	7 (4.2)	5 (3.8)
<b>Total</b>	<b>168 (100)</b>	<b>131 (100)</b>

## Support-seeking strategies

Eight types of support-seeking strategy were developed from the SIST model. Three coders (one male, two females) with research methodology backgrounds were trained for the coding process. The inter-coder reliabilities for the eight categories of supportive activation strategies (See Table 5) were all at acceptable ranges for both thread and isolate groups. The operational definitions of these strategies with examples are as follows:

*Asking:* Direct support-seeking messages include writing about the problem in a factual manner, describing and/or giving details of the problem, and disclosing what has been done so far about the problem. For example,

“[...] lately, I’ve been mentally very unstable. I have always been the kind of person who gets nervous all the time. I’ve been suffering from heart and stomach pains since 12th grade because of the pressure of getting into a better high school [...]. Then, I felt similar kinds of pain when I prepared myself for graduate school [...]. The strangest thing is that I’m not under any pressure right now, but those pains keep coming back [...]. Should I go to a doctor?” (02/18/2004)

*Asking +:* Operationally, this is the same as Asking. However, in this category, posts need to contain nonverbal cues. For example,

“Could someone tell me do zoloft and rivotril have strong side effects? I lose all appetite and feel like throwing up sometimes. I am really depressed [...] ☹ rz” (08/02/05)

*Crying:* While similar to the preceding category, this category includes crying posts without displays of distressed symbols. Some support seekers just wrote that they were crying, for example,

“I am speechless now [...] just keep crying...” (07/24/2004)

“Although I’m a male, I can’t help crying.” (08/25/2005)

*Crying+:* The operational definition of this category is similar to those in the previous category, but here posts were written in an emotional manner, with use of nonverbal cues. For example,

“I am afraid that I might be sick. Lately, I hate everyone around me, friends or strangers [...] Sometimes, I have an impulse to kill someone [...] What happened to me? I used to be a happy and optimistic girl. Am I sick? What if I really kill someone some day?? T\_T” (09/04/05)

*Hinting:* Support seekers to some extent describe their problems in a rational manner without directly asking for assistance. For example,

“So many unpleasant things have happened over this past year. This lousy feeling followed me everywhere. Maybe I need closure for all these things. I feel so weighed down. I cannot concentrate at all. I am deeply worried!!” (11/18/05)

*Hinting+:* Similar to the definitions provided in the previous category, but, in this category, nonverbal cues must be contained in posts. For example,

“[...] After the college entrance examination on July 3rd, I only felt down. I was confused by my own feelings...I have nightmares all the time...I’m anxious. I am afraid I will be going crazy some day [...]. > < [...] Maybe I should go and see a doctor!” (09/09/05)

*Complaining:* Support seekers to some extent describe their problems in an emotional manner without directly asking for assistance. For example,

“ FXXX. I regret everything I’ve done in my life. I am so afraid of expressing myself badly. I am so afraid that people hate me. I am rotten right through. Is any one like me? I am truly crap” (03/28/2006)

*Complaining+*: Similar to the definitions provided in the previous category, but, in this category, posts must contain text representation of negative effect in the form of sighing, sulking or fidgeting. For example,

“I was looking forward to seeing this psychologist.... It turned out that he was an intern. And he did not tell me that a lot of other interns would be sitting in on my session. FXXX! I feel that I was conned [...] I feel worse after talking with him [...] FXXX! Lousy psychologist! Shit >.<” (08/04/05)

## Gender

Since a single indicator may result in inaccuracy for gender categorizing in online settings (Cornetto and Nowak, 2006), for the present study, gender was detected by the combination of the following indicators: the obvious linguistic statements; the extralinguistic cues “given off” from the written texts (Goffman, 1955); paralinguistic cues (e.g., emoticons, exclamation points); and use of nicknames. An acceptable inter-coder reliability, .83, .91, was achieved respectively for both isolate and thread groups.

**Table 5: Distribution of Support Seeking Strategies**

<b>Seeking Strategies (inter-coder reliability)</b>	<b>Thread Initiators Frequency (percentage)</b>	<b>Isolates Frequency (percentage)</b>
<b>Ask (.92/.96)</b>	110 (66.5)	36 (27.5)
<b>Ask + (1/1)</b>	14 (8.3)	7 (5.1)
<b>Cry (.75/.86)</b>	14 (8.3)	39 (30.0)
<b>Cry + (1/1)</b>	10 (5.9)	3 (2.3)
<b>Hint (.67/.80)</b>	12 (7.0)	43 (32.8)
<b>Hint+ (1/1)</b>	0 (0)	3 (2.3)
<b>Complain (1/1)</b>	7 (3.5)	0
<b>Complain + (1/1)</b>	1 (.05)	0
<b>Total</b>	<b>168 (100)</b>	<b>131 (100)</b>

## Results

The overall descriptive results for topics, support-seeking strategies and gender are shown in Tables 4, 5, and 6 respectively. For topics discussed on the PTT psychosis board, the ranking for both isolate and thread groups are the same; information seeking first, followed by distressed emotion, suspicious, and old birds (Table 4). However, the two groups displayed different patterns of using support-seeking strategies (Table 5). The isolate group utilized hint and hint+ most (35.1%) while the thread group used asking and asking+ most (74.8%). As for

gender distribution (Table 6), more than 40 percent of posts on both isolate and thread groups were written by females (42.0%, 45.2% respectively). Yet, more than one third of gender in both groups cannot be judged (44.3%, 35.2% respectively).

For the first research question, asking whether there are different seeking strategies between posts that are answered and those that remain unanswered, the topics of both isolate and thread groups were examined first so that the base for comparison was the same. As a result, a chi square test showed that topics discussed within both groups did not significantly differ from each other ( $\chi^2 = 20.36$ ,  $df = 16$ ,  $p > .05$ ). Since both group members discussed comparable topics on the board, another chi square test was performed to see if different support-seeking strategies were used between isolate and thread groups. The result indicated that significant difference was found between the two groups ( $\chi^2 = 90.86$ ,  $df = 7$ ,  $p < .01$ ). Therefore, overall, posts with more asking, less crying and less hinting got answered more than those with more hinting, more crying and less asking (See Table 5).

For the second research question, whether posts with nonverbal cues got answered more than those without, the research showed that although, overall, few nonverbal cues were used within the PTT psychosis group (See Table 5), it appears that the thread group (14.3%) employed more nonverbal cues than the isolate group (9.7%).

For the third research question, whether gender has an effect on which posts received answers, no significant differences were found between the distribution of females, males, and gender neutrals (un-judged) between isolate and thread groups ( $\chi^2 = 3.23$ ,  $df = 2$ ,  $p > .05$ ). Also, no significant differences were found between gender and support-seeking strategies ( $\chi^2 = 8.18$ ,  $df = 14$ ,  $p > .05$ ). In other words, gender did not play a part in support-seeking interactions. Posts written by females, males, as well as gender neutrals were answered/unanswered equally. No particular gender type was favored over the other. In addition, females, males, as well as gender neutrals utilized similar support-seeking strategies within the PTT psychosis group.

**Table 6: Gender Distribution**

<b>Gender</b>	<b>Thread Frequency (percentage)</b>	<b>Isolate Frequency (percentage)</b>
<b>Female</b>	76 (45.2)	55 (42.0)
<b>Male</b>	33 (19.6)	18 (13.7)
<b>Unjudged</b>	59 (35.2)	58 (44.3)
<b>Total</b>	168 (100)	131 (100)

## Discussion

The goal of the study was to find out which posts were answered in a text-based computer-mediated social support group. Specifically, the present study examined the effects of two variables on support-seeking behaviors: support-seeking strategies and gender. A revised typology of support-seeking strategies originally proposed in the SIST model was employed for the study. Data were collected from the PTT psychosis discussion group, the largest BBS in the Chinese-speaking community, for a period of 30 months from February 2004 to July 2006. In general, the results indicated that posts with more asking, less crying and less hinting were answered more than posts with more hinting, more crying and less asking. However, although different support-seeking strategies did affect support-seeking behaviors, gender did not have an impact on which posts were answered. All genders detected in this study – fe-

males, males, and gender neutrals – were answered equally in terms of getting answered and thereby receiving support online.

I would like to discuss the current findings with implications for future studies in three areas: support-seeking strategies in a CMC environment; gender and CMC; and nonverbal cues and online social support. Finally, the limitations of the study will be discussed.

### *Support seeking strategies in a CMC environment*

The overall distribution of online support-seeking strategies reported in the current study is to some extent consistent with findings in FtF close relationships. It seems that in both CMC and FtF environments, individuals prefer to provide support to those who are more direct with their requests. An open expression of concerns and frustrations tends to successfully initiate a thread of supportive interactions (Tichon and Shapiro, 2003). However, the major difference found in the current study is that posts with direct crying strategy (with and without nonverbal aids) were not answered as they would have been in FtF settings. The results indicated that posts in the isolate group employed more crying strategies than those in the thread group (32.3%, 14.2% respectively from Table 5). It seems crying, comparatively, is not a favored strategy in this text-based computer-mediated support group. Why?

Does perceived gender role play a part here? Since it is a tacit understanding that crying is a sign of weakness for males in Chinese culture, it is very unusual to see males cry under any circumstances in Taiwan. Accordingly, individuals' reactions to crying males may vary from not knowing what to do (escape) to completely dismissing the man for being weak. As a result, posts written by males may stand a high chance of not being answered. However, a post hoc analysis showed that crying strategy used by males, females, and gender neutrals was similarly distributed in both groups (5, 12, 7 for thread group; 7, 13, 22 for isolate group). Thus, for the present study, crying is generally dismissed by support providers regardless of gender. Yet, it would still be interesting to find out whether crying males get answered in other types of computer-mediated support groups in different cultural contexts.

The other possible explanation to account for crying as an unfavorable strategy in a computer-mediated environment is that there are no relational bases among a group of strangers. That is, crying may have a stronger effect on individuals who know one another. The original strategy was proposed to describe support-seeking behaviors between close friends in FtF communication. It is not unusual for close friends to offer support when you display such a helpless emotional state. Yet, strangers on the Internet may dismiss or escape from posts filled with sadness. Thus, future studies could explore the effects of crying across different levels of personal relationships online.

### **Gender and CMC**

The effects of gender on support-seeking behaviors are somewhat consistent with the findings of some studies conducted in FtF situations. That is, males and females do not differ in the provision of social support in FtF close relations, and no significant differences were detected between males and females in terms of support-seeking strategies in online settings. In addition, the overall distribution of gender in this study indicated that fewer males seek online social support, which was consistent with findings in FtF as well (Biddle, Gunnell, Sharp, and Donovan, 2004). Moreover, more than one third of posts in both the isolate and thread groups cannot be categorized into traditional gender roles. Thus, it seems that language use (direct versus indirect) rather than gender was a factor in receiving social support online. However, since few studies have examined the effect of gender on supportive interactions in a com-

puter-mediated environment, more research needs to be conducted before any conclusions can be made in this regard.

### **Nonverbal cues and online social support**

The other related topic that deserves further investigation is the use of nonverbal cues in support-seeking posts. In general, limited numbers and representations of nonverbal cues were observed within the PTT psychosis discussion group. Yet, the results indicated that nonverbal cues were used more within the thread group than within the isolate group (25 versus 10 from Table 5). Since most nonverbal cues were used within crying and complaining posts (e.g., : ( , /-\, ><, = =, T\_T, @@, >"<, Q\_Q, >.< ), it seems that posts with negative nonverbal cues elicit a stronger effect on readers' inclinations to reply. This may suggest an additive effect does take place during the support-seeking interactions.

However, these discussions should be considered in the broader context of how to express emotions in CMC in general, and how to seek online social support in particular. More studies need to be conducted to examine "the functional impact of these symbols" (Walther, 2006: 470) in different types of computer-mediated support groups.

Lastly, this study was conducted in Taiwan, a country characterized by a collectivistic culture (Hofstede, 2001). People in collectivistic cultures predominantly use high-context communication (Hall, 1976), which is indirect and ambiguous. It is not easy for Taiwanese to disclose personal information. Taiwan is also a country where Confucianism is still a prevalent philosophy (Chang, 2005). Confucius taught people to respect hierarchy. Less powerful people are inhibited against questioning authority. In addition, Taiwan is characterized by a masculinity culture (Chang and Tseng, forthcoming) wherein boys are taught not to cry and to fight back, and girls are taught that crying is acceptable and that they should not fight (Hofstede, 2001). In Taiwan, it is not easy to reveal information about oneself or question more powerful people (in the case of online support seeking, the healthier people). However, the results of the present study indicate that individuals with health problems still used more asking, less crying and less hinting to seek social support, even when discussing mental health problems. Are there associations between cultural contexts and support-seeking strategies? Future studies should consider culture as a background variable, and cross-cultural studies should be conducted.

### *Limitations*

A major limitation of the present study is its external validity. That is, the results of the study may be specific to the PTT psychosis group only. However, all of the findings may be suggestive and serve as a reference framework for future studies in the area of support-seeking strategies online.

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