TESTING A PROPOSED MODEL ON
SOCIAL SUPPORT, ILLNESS UNCERTAINTY,
PERCEIVED STRESS & SENSE OF CONTROL

Emily H. Y. Cheuk

An Application Project

Submitted

in Partial Fulfillment of the Requirements
for the Degree of
Master of Arts in Communication

Supervisor: Dr. Vivian Sheer

School of Communication
Hong Kong Baptist University

Hong Kong
August 2000
Acknowledgement

The questionnaire could only be done with the help of the Community Services Centre and the Cancer Patient Resources Centre of Tuen Mun Hospital, who had scheduled some time at the meeting of the patient support groups for me to introduce and participating members to fill out the questionnaire. Special thanks was given to the in-charge of the centres, Ms Rita Kong and Mr William Low, who had made special arrangement on the patient support groups meeting to accommodate my tight schedule. All the work done in this Dissertation was my own original work and was carried out by myself under the supervision of Dr. Vivian Sheer, who had given me the most valuable advise and the greatest patience.

Emily H.Y. Cheuk
M.A. in Communication
School of Communication
Hong Kong Baptist University

Date: August 27, 2000
Abstract

Previous studies reviewed that the social support obtained from the patient support group could help members reduce the illness uncertainty and perceived stress level. Also, the types of support sought by the members are somehow determined by their sense of control outlook. Taking all into consideration, a model incorporating the social support, illness uncertainty, perceived stress and sense of control variables is therefore introduced as a basis to look at how they correlated.

The findings of this study obtained from 98 questionnaire survey fill out by 98 patient support groups members of Tuen Mun Hospital, did support the proposed model and validated that persons did seek for different types of social support according to their control outlook, however, no matter what they chose, the more the social support received, the lower the illness uncertainty, and perceived stress level. As for the sense of control, social support did not show any correlation with it, rather, the higher the sense of control, the higher the perceived stress.

The model proposed here was being simplified taken into account primarily the illness uncertainty, perceived stress and the sense of control while other factors like demographic features, living arrangement, working condition, group ties etc are not being taken into consideration or controlled, which might affect the validity of the result.
## Table of Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>5</td>
</tr>
<tr>
<td>II. Literature Review</td>
<td>9</td>
</tr>
<tr>
<td>a. Social Support</td>
<td></td>
</tr>
<tr>
<td>b. Patient Support Group</td>
<td></td>
</tr>
<tr>
<td>c. Sense of Control</td>
<td></td>
</tr>
<tr>
<td>d. Illness Uncertainty</td>
<td></td>
</tr>
<tr>
<td>e. Perceived Stress</td>
<td></td>
</tr>
<tr>
<td>III. Proposed Model and Research Questions</td>
<td>24</td>
</tr>
<tr>
<td>IV. Operationalisation</td>
<td>26</td>
</tr>
<tr>
<td>a. Measurement of Social Support</td>
<td></td>
</tr>
<tr>
<td>b. Measurement of Sense of Control</td>
<td></td>
</tr>
<tr>
<td>c. Measurement of Illness Uncertainty</td>
<td></td>
</tr>
<tr>
<td>d. Measurement of Ties</td>
<td></td>
</tr>
<tr>
<td>e. Measurement of Stress</td>
<td></td>
</tr>
<tr>
<td>V. Methodology</td>
<td>37</td>
</tr>
<tr>
<td>a. Sample</td>
<td></td>
</tr>
<tr>
<td>b. Procedures</td>
<td></td>
</tr>
<tr>
<td>c. Questionnaire Design</td>
<td></td>
</tr>
<tr>
<td>d. Construction of Questionnaire</td>
<td></td>
</tr>
<tr>
<td>VI. Results and Analysis</td>
<td>49</td>
</tr>
<tr>
<td>VII. Discussion</td>
<td>67</td>
</tr>
<tr>
<td>a. Implication</td>
<td></td>
</tr>
<tr>
<td>b. Limitation</td>
<td></td>
</tr>
<tr>
<td>c. Conclusion</td>
<td></td>
</tr>
<tr>
<td>VIII. References</td>
<td>82</td>
</tr>
<tr>
<td>IX. Tables</td>
<td>88</td>
</tr>
<tr>
<td>X. Appendix</td>
<td>94</td>
</tr>
</tbody>
</table>

A: Letter of Approval from Tuen Mun Hospital  
B: The James Internal-External Locus of Control Scale  
C: The Nowicki-Strickland Locus of Control Scale  
D: The Reid-Ware Three-Factor Internal-External Scale  
E: The Illness Uncertainty Scale  
F: The Hassles Scale  
G: Questionnaire (English Version)  
H: Questionnaire (Chinese Version)
List of Tables

Table 1. Data for members’ participation and group ties .................. 88
Table 2. Demographic Data ....................................................... 89
Table 3. The mean and standard deviation for the sought and received level of the five types of social support ......................... 90
Table 4. The mean score and standard deviation for illness uncertainty, perceived stress and sense of control ....................... 91
Table 5. Correlation between types of social support and illness uncertainty, perceived stress, sense of control .................. 92
Table 6. Correlation among illness uncertainty, perceived stress and sense of control ......................................................... 93
I. Introduction

When an individual experiences a serious illness, disabling condition, or both, he or she faces a lot of problems: self-care, employment, social relationship, communication, emotional, etc. The person may need additional help and support if the problems persist or become permanent, he or she may need different kinds of social support on a long term basis. People attempt to reduce the uncertainties and anxieties from health threats by seeking information. Since information can help reduce uncertainty and hence give us more personal control, it functions as a form of social support. Individuals turn to three broad sources of information to help them understand the health problem and develop a plan to cope with it: intrapersonal, interpersonal, and mass communication. Intrapersonal communication includes body sensations experienced as well as the individual’s image of reality developed from previous knowledge, beliefs, and attitudes. Interpersonal includes health professionals, support groups, and family/friends. Mass media sources include printed materials such as newspapers and patient education materials, electronic media, encompassing public service announcements, health programs, and entertainment programs; and radio, telephone, and new communication media. Information from all these sources can be supportive by helping the individual reduce uncertainty, and hence anxiety and stress. Support groups particularly, can offer the additional supportive function of providing models of coping behaviour.

In Hong Kong, patients typically tend to go to medical professionals for information and support in order to gain control over their life, if this kind of support was not available, states of high uncertainty, low personal control and hence depression, anxiety and psychosomatic problems arise.
The situation is more critical in Hong Kong, since the ratio of the medical professional to patient is so small, often, each physician in public hospital has to handle more than 100 patients per day that time does not permit the luxury of being thorough in any method of communication under this circumstance (Bennett, Smith & Irwin, 1999). Uncertainty and inadequate information is therefore widely believed to be a central feature in illness experiences and also the core reasons for patient complaints. Cost effectiveness and value enhancement are the terms most frequently heard in the hospitals in Hong Kong nowadays, the time for each medical professional is too precious for taking care of the feeling and expectation of each individual patient intensively but to give brief description of diagnosis and prescription only. As medical professionals are not available for the purpose of allocating resources in the most cost effective manner, the Hospital Authority has adopt the prevailing idea of “Helping people to help themselves” of the West, and started to organise the Patient Support Group in all public hospitals since its establishment in 1990. Up to November 1999, there was about 300 patient support groups organised by the hospitals in Hong Kong. Practically, no one can deny that patient support group is a cost-effective approach not only because many clients receive service simultaneously, but also because the groups need not be led by a highly trained professional as well as relieving the work of the professional in being ignored yet highly important work - social support.

Dr the Hon C H Leong, the Chairman of Tuen Mun Hospital Governing Committee, said at the Opening Ceremony of the Community Services Centre that the patient support groups were organised for the purpose of helping patients through participation by themselves and their relatives. Along the logic of thinking, patient
support group can be considered as an expression of the democratic ideal; that is, a striving for participation, and a desire to provide and receive mutual help rather than depending on the assistance of professional like Killilea’s(1976) suggestion. She also pointed to patient support group as an alternative to the formal help giving system and a solution to manpower shortages in the human services. She further suggested that support group is one manifestation of social support and support systems phenomena. It is generally designed as a brief, high-impact intervention designed to bring the patient’s social network together as a functioning, integrated system.

Apart from economic benefit bring forth by patient support group, it also help patient achieve a better health status. It has been known for some time (House, Landis, & Umberson, 1988) that interpersonal relationships and health are related. For example, Kaplan, Cassel, and Gore (1977) examined the role of social support and health outcomes (from etiology to recover) in human communication systems and emphasised the protection provided by effective support. Such support may include an appraisal of an event and coping strategies or emotional support by reassuring the individual that he or she is valuable and being cared for by others, or both. Connell and D’Augelli (1990) noted that individuals reporting adequate social support perceived themselves as being healthy and social support has been correlated with health-promoting behaviours. It may be that socially involved individuals have more access to information, practice more healthy behaviours, or simply feel more in control of their lives (Bernard & Krupat, 1994). Cottrel & Epley (1977) found that support group does increase feelings of universality and lessen feelings of being deviant and isolated from meeting others with similar problems.
Owing to the proved importance of the role of social support in human life especially when experiencing serious illness, together with the need of organising patient support groups in the health care system of Hong Kong, being the main source of social support, patient support group if organised in a proper context, would be most beneficial to the society as a whole, at least economically, socially (health condition) speaking. I, therefore, would like to examine the extent to which how different kinds of social supports offer by the group and the group members are most valued by and used by the recipients with different degree in the context of sense of control, and how the social support received would intervene the recipients’ degree of illness uncertainty and stress, which would ultimately affect the sense of control.

It hoped that the study could provide the basis for evaluating and improving the patient support group effectiveness in terms of the provision of social support and contribute to understanding process factors within a patient support group which members find beneficial.
II. Literature Review

Social Support

Social support is a resource channelled to and from individuals through and by the structure of their interpersonal environment, it is a special kind of communication in a interpersonal construct. Lin and Ensel’s (1979, p. 109) defined social support as “support accessible to an individual through social ties to other individuals, groups and the larger community”. The characteristics of social support have been outlined by Bowlby in his attachment theory. This theory states that each person required a set of relationships that provide: (i) meaningful attachment to significant others; (ii) social integration in a network of common interest relationships; (iii) an opportunity for the nurturing of others, especially of children; (iv) a sense of reliable alliance with kin; and (v) access to guidance from a trustworthy and authoritative person in times of stress. Support group, with a rationale to let the members to feel cared for and loved, provides a feeling of social worth, and allows members to see themselves as part of a network of communication and mutual obligation is a perfect manifestation of social support. It helps increase the opportunities for support seekers to connect with similar others and being able to speak is half the cure. A number of social and emotional problems like depression, loneliness, alienation, lack of information and social interaction, etc, result from the condition of being “cut off” from the larger society, the existence of social support help remedy the situation.

The construct of social support has been defined in a number of ways. According to Cobb’s formulation (1976), social support is information that conveys care and love, esteem and mutual obligation. It has been known for some time (House, Landis, & Umberson, 1988) that interpersonal relationships and health are
related. For example, Kaplan, Cassel, and Gore (1977) examined the role of social support and health outcomes (from etiology to recover) in human communication systems and emphasise the protection provided by effective support. Such support may include an appraisal of an event and coping strategies or emotional support by reassuring the individual that she or he is valuable and cared for by others, or both. Connell and D’Augelli (1990) noted that individuals reporting adequate social support perceived themselves as being healthy, and social support has been correlated with health-promoting behaviours. Albrecht and Adelman (1987) provided a definition that was adopted in this study, “social support refers to verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one’s experience” (p. 19).

**Effect of social support.** Albrecht and Adelman (1987) have argued that social support’s main function is uncertainty reduction. Decreased uncertainty usually carries a companion function of perceived mastery or control over one’s life and social environment. Albrecht and Adelman (1987) perceived that if one has a reliable support system of kin, friends, and more distant associates has been found to reduce the risk of disease, enhance recovery from mental and physical illness, and reduce the possibility of abuse to self and others. Buffer hypothesis predicts that high levels of stress will produce distress in individuals experiencing low levels of social support but not in individuals who experience high levels of social support. Social support, therefore, enables people to manage the uncertainty associated with stress and to increase a sense of personal control of efficacy over their environments. Uncertainty,
stress and personal control are therefore the core concern of social support, they can be a product as well as a determinant of it.

Henderson (1988) has listed three separate hypotheses about the effects of social support and suggests there may be others. First, “that it has a direct and independent effect in its own right on mental and/or physical health, whether or not adversity is also present”; second, ‘that it provides a buffer or cushioning effect against stress, but has no independent effect in its absence’; or third, ‘that in persons who have already developed affective or neurotic symptoms, it has a therapeutic effect shortening the episode and reducing symptoms’. Henderson (1981) in their extensive study concluded that those who construe their social relationships as inadequate are more likely to develop bad symptoms’.

From the above mentioned, social support is a natural desire of people, it should be deemed as a concept of health communication, in which it carries a special function of managing uncertainty and stress as well as helping to strive a better control of oneself.

Patient Support Group

According to Query and James (1989), support or self-help groups are based on principles of empowerment, inclusion, non-hierarchical decision making, shared responsibility, and a holistic approach to people’s cultural, economic, and social needs. The values of these groups include co-operative self-organisation, non-bureaucratic mutual helping methods, social support, and free services (Segal, Silverman, & Temkin, 1993).
Patient support is a group of patients who get together on a regular basis and, with the help of a leader, discuss their problems and feelings adjusting to the world. People in grief give each other support while they are learning, enjoying themselves, developing new skills, and giving help to others. They talk, compare feelings about their new or unwanted challenges, and learn that their fears and pain are validated and relieved, which helps them manage the stress of adapting to new life-styles. They are meeting people, making new friends, developing new hope, enhancing their self-esteem and self-confidence, and giving and receiving support.

As a manifestation of social support phenomenon, patient support group shares the specific ways explored by House (1981) for the role of social support and how it aids individuals:
- As supportiveness increases, the presence of noxious influences in individuals’ life situations is eliminated or reduced.
- A supportive environment serves to increase the general health of individuals, thus increasing their ability to withstand the negative effects of noxious physical and social factors.
- Social support serves to aid individuals by buffering them, fully or partially, from the negative impact of environmental stressors.

Support or self-help group, having the crucial healing element of acceptance and expression of feeling which allows the members to move forward into and face the new life, have become a permanent fixture in hospital culture in Hong Kong nowadays and provide an important social resource for individuals. These groups are mostly organised by nurses and social workers with an attempt to group patients or
their relatives with similar problems or facing similar situations to exert control over circumstances that affect their lives.

A patient support group is a physical and psychological place, which gives their members a safe place to experience the pain, accept and adjust the pain. Members can hold themselves together from meeting to meeting knowing that they have a place to go and people to call, where they can talk, cry and share. As they verbalise, as they communicate with each other, they hear and understand themselves and thus can better help themselves.

**Group ties.** Patient support group is defined as an ongoing system that provides members with opportunities for feedback about themselves and for validation of their worldviews. As a network of valued others, it is characterised by sharing same diagnosis though different degree of seriousness, members’ similar experiences help bridge the gap created by life difficulties, allow members to understand and discuss a certain set of problems they are facing, sitting down and talking, sharing, and commiserating together make up an important method of support. The effect and efficiency is very appealing in support group because members face similar problems in life. As defined by Lin, Woelfel and Light (1985), people sharing similar diagnosis mean having homophily relationship. They found that once an important life event is experienced, those receiving help from strong and homophilous (sharing similar characteristic) ties should exhibit lower levels of depressive symptomatology than those who do not. Gottlieb (1982) found that support group provides the opportunities to meet others with similar problems, which is one of the most beneficial aspects of group participation. Citron, Solomon and Draine (1999) found
that members acknowledge sharing a common bond and have their feelings validated by others who share similar burdens. The findings reiterate the study of Lieberman (1979) from members of women’s consciousness-raising groups that the factor of “sharing of commonalties” was ranked highest among “…major therapeutic mechanisms of change”

Lin, Woelfel and Light (1985) found that individuals showed an increased level of depressive symptoms if they experienced a most important and undesirable event, but that the effect was reduced when help came from strong (rather than weak) ties.

For successful expressive action, the most effective relationships are those characterised by caring, trust, intimacy and empathy. These kinds of relationships are most likely to be provided by strong rather than weak ties and homophilous rather than heterophilous (dissimilar in characteristics) ties. The relationship hypothesis above flow in part from the frequent observation that the frequency and intensity of social interactions is associated with similarity of social characteristics and psychological makeup, i.e., people tend to seek out others like themselves. People of similar characteristics, attitudes and lifestyles tend to congregate in similar residential, social, and work environments, all of which promote interaction and association (Blau, 1977). The homophily relationship is thus the fundamental ingredient in the formation of social circles and networks. If we tend to interact with others like ourselves and if through increased interaction, we become more and more similar and therefore capable of empathising with one another’s problems, then it makes sense to suggest that psychological problems are likely to be reduced through strong and homophilous ties. The homophily relationship is the fundamental
ingredient in the formation of patient support group, while the strength of ties depends on the involvement of patients in the group.

From the above mentioned, several positive outcomes of participating in patient support group can be concluded, including sharing information such as ideas, facts, and resources, discussing taboo subjects, engaging in problem solving and rehearsing, overcoming alienation and isolation, taking on the role of helper, developing inspiration and hope, developing social networks and assisting more people less expensively. This echoed the remark by Ms Rita Kong, the centre in charge of Tuen Mun Hospital Community Services Centre that organises, coordinates and manages the 14 patient support groups with a total membership of about 211. She said the sole criterion of joining any patient support group is the sharing of the same disease type, or sharing the same problems, which enables the members to interact more freely with others and have their feeling easily understood. The feeling of being in the same boat also kill the sense of loneliness and sadness somehow someway while all of their fear, sadness being legitimated by others. With all these meetings, discussions, sharing, the feeling of being accepted by others developed. The more they have seen each other, the more intimate feeling will be developed, and the more they would like to share, discuss, it is what the organiser want to cultivate in the group and within the group members, said Rita. Therefore, homophily relationship is the pre-requisite of the group while it helps increase interaction and hence develop a stronger ties.

**Sense of Control**

How patient utilise or benefit from the patient support groups services determine largely by their sense of personal control over life events. Different names
are being assigned to sense of low control – helplessness (Seligman, 1975); loss of freedom (Worthman & Brehm, 1975); external locus of control (Rotter, 1966); or powerless (Seeman, 1972), moreover, in this study, sense of control refers to how much control people believe they typically have over events.

According to the social learning theory proposed by Rotter (Rotter, Chance & Phares, 1972), control refers to the persons’ expectancy that the outcome is contingent on the persons’ actions. That is, the greater the expected contingency between acts and outcomes, by definition, the more control the person anticipates having. In this connection, sense of control of difference person varies, it builds up over time through one’s personal experience, it is not taken as a simple isolated incident, but rather as a pervasive and profound reaction, holding implications for one’s judgement of his or her potential for survival as well as perception and understanding of the world.

Every individual has a different degree in the sense of control, which is, differentiate by having a position/point in between the dichotomy of high and low sense of control. Individual with different sense of control tends to perceive the world in a different way, and their behavior or preference would then be varied. Seeman and Evans (1962) conducted a study which shown that internals (patients who score high in the sense of control) would be more attuned to mastery-relevant information available in their environment and would therefore, learn more about the nature and management of their disease, while externals (patient who score low in the sense of control) believe in the mastery by nature, self do not has any control over life,
life is determined by fate, by luck, by opportunity instead of being controlled by oneself.

Given that illness is an ambiguous and stress-producing condition for most people, perceptions of control become especially salient for the ill (Arntson & Droge, 1987; Sullivan & Reardon, 1985). Perceptions of control have been linked to health related factors such as life stress, coping with illness or disability (Sullivan & Reardon, 1985), the benefits derived from social support (Albrecht & Adelman, 1987) and the success of health preventive practices and rehabilitation. The research on attributional activity reviewed suggests, high sense of control people may spend a large amount of time gathering all the information they can to deal with the problem most effectively (Burger, 1992).

As expected, high sense of control subjects are more likely to collect information and consider many options for dealing with the situation. They also generally seem to rely on more active strategies, such as trying harder to make things work and obtaining information and advice from friends. On the other hand, low sense of control subjects are less likely than high sense of control subjects to cite active strategies or to seek out helpful information. This phenomenon can be explained by Kelly (1971), one of the seminal contributors to attribution theory. Based on his theory on the assumption that persons tend to perceive their worlds in ways that optimise their control over events. Information helps high sense of control person to understand the difficult situation they are in while emotional support offer support to the low sense of control people in a spiritual way during their hard time. They both engage in action that would help them to maximise their outcome.
Because the high sense of control people are more likely to gather information and consider alternative solutions and then take active steps to resolve the problem, high sense of control people may do a better job than their low sense of control counterparts in handling the large and small difficulties that life throws this way. This helps to explain why high sense of control people usually report lower level of anxiety in their daily lives and score higher on measures of well being than people with a lower sense of control.

Illness Uncertainty

Belief in one’s ability to predict and control experiences has emerged as a prerequisite of psychological well being and social adjustment (Brenders, 1987). However, the significance of uncertainty is underscored by research on coping with stress, illness, helplessness and perceived control.

“Uncertainty as inadequacy in one’s schematic representation of an illness experience” (Babrow, Dasch, & Ford, 1998, p. 2). When an individual is facing some unprecedented situation or critical moment, his or her level of uncertainty will rise and tend to strike for greater control over the future. Especially in medical setting, patients are in a life and death crisis, not knowing what will be happening in the next minute, finding themselves in an environment full of strangers, would of present themselves with tremendous amount of vagueness and ambiguity.

Berger and Calabreses (1975) proposed that high levels of uncertainty produces high levels of information seeking, while decreasing uncertainty levels leads to decreased information seeking. This relationship reflects the expectation that when
individuals are uncertain, they will seek information to reduce this uncertainty; but as their uncertainty is reduced, information seeking is less necessary. According to Albrecht and Adelman (1987), “Uncertainty is essentially the lack of attributional confidence about causes and their effects” (p.24). The discomfort of uncertainty motivates individuals to engage in communicative transactions. When these transaction reduce uncertainty, they enhance the supportee’s ability to predict events in the coping process, which, in turn, enhances the supportee’s sense of control and ability to manage stress.

It is in line with the saying of Robin, et al that adequate information would presumably reduce stress and enhance the sense of control by increasing the likelihood that the individual has engaged in the most reasonable or appropriate behaviours, while expectancy and predictability may reduce stress and enhance control by providing the opportunity to select and prepare coping strategies.

In short, supportive communication facilitates coping by reducing uncertainty about the stressor, while reduce uncertainty could help attain a higher sense of control, and congruent with the cognitive belief of the high sense of control person, both (reduce uncertainty and high control) could help individual to be better off, this echoes with the study of Langer (1975), who contends that persons intrinsically want to perceived control over events.

**Perceived Stress**

There is disagreement about the meaning of the term stress. Numerous definitions have been provided, varying in the extent to which they emphasis stressful
events, responses, or individual appraisals of situations as the central characteristic of stress (e.g. Appley & Trumbull, 1967; Mason, 1975; McGrath, 1970). A strong commonality could be found among these approaches that allows them to be integrated in a theoretical model of the role of stress in disease. They all share an interest in a process in which environmental demands exceed the adaptive capacity of an organism, resulting in psychological changes that may place persons at risk for disease.

The term stress refers to the psychological state which derives from the person’s appraisal (Lazarus, 1966) of the success with which he or she can adjust to the demands of their environment (Cox, 1987). Thus stress is not a dimension of the physical or psychosocial environments; it cannot be defined simply in terms of workload or the occurrence of events determined by consensus to the stressful. Equally, it cannot be defined in terms of responses that are sometime consequences of stress, such as physiological mobilisation or performance dysfunctional. Stress resides in the person’s perception of the balance, or ‘goodness of fit’, between the demands on them and their ability to cope with those demands. The absolute level of demand is therefore not the important factor in determining the experience of stress at work. What is important is the discrepancy that exists between the person’s perception of those demands and his or her ability to cope with them. In this regard, the concept of perceived stress is adapted in this study.

Stress effects are assumed to occur only when both (a) the situation is appraised as threatening or otherwise demanding and (b) insufficient resources are available for the person to cope with the situation. This echoed with the argument of Sells (1970),
who said that stress occurs when two conditions are met: (a) An individual is called
upon to respond under circumstances in which he has no adequate response available,
and (b) the consequences of not responding are important to the individual. In other
words, the lack of control (i.e., the nonavailability of an adequate response) is a
necessary if not sufficient condition for stress. Chronic disease, to most or even all
the people, should be a life threatening issue, in which a prompt and accurate
response is crucial, however, most of the people do not have this kind of experience
to take reference when making decision, they could only put themselves in a critical
dilemma and highly stressful situation. Talking to those who are experienced in the
issue, like the medical professional or passer-by would put some light to oneself as
they could communicate with them their experiences and information or even give
suggestions for their decision. They would be the one who is most easily and treasure
to communicate with during that condition.

Just like the finding of Camasso and Camasso (1986), they said that undesirable
life events (stressors) contributed to higher levels of depression, while support,
independently, had the inverse effect on depression. They also noted that stress had
an indirect effect on depression by weakening support. Again, Lin and Ensel (1979)
found that social support contributes significantly and negatively to illness symptoms
and the social support measure was much more significantly (and negatively) related
to psychiatric symptoms which all together would reduce the stress one experienced.
It seems to expect that the stronger social support an individual can amass, the less
likely he or she would be to experience illness and stress.
Similarly, a buffering effect was found by Wilcox (1981) in a sample of community residents, social support has a significant negative effect on depression in the presence of high life stress, but no such effect in its absence. It argues that all life events are potentially stressful and if unbuffered will have detrimental effects on mental health. As a general principal, an individual experiencing a significant life event will show a lower degree of mental health than someone who does not. Therefore, if an individual experiencing a significant life event is able to mobilise a strong social-support system, then such potential detrimental effects can be reduced. Social support in this model is seen to exert an effect only in conjunction with an adverse condition (stress). Conversely, the effect of exposure to stress will be most pronounced in the absence of supports. For example, Lin, Woelfel and Light (1985) hypothesises that individuals high in support resources prior to stressful experiences will succeed in mobilising members of their social network in response to threat, while on the other hand, individuals low in resources will fail to do so. Many researchers have devoted a lot of studies to evaluate the effect of social support on stress, however, very little or even no study is devoted to examine or address the level of stress on social support. Individual’s stress level may moderate or buffer against the effect of social support and/or affect his or her choice of most value support services.

As illustrated before, support groups especially patient support groups, provide a channel for the delivery of information, material and emotional assistance. These support systems act as mediating structures by bridging the gap between their members’ needs and unresponsive societal institutions, which is especially applicable in the situation of Hong Kong. Within these mediating groups, individual work
together to help one another resolve existing, seemingly insurmountable issues. The group itself is a strong social-support system for group members to mobilise during hard time to resolve problems. Group members could also share ego-threatening information and common experiences from within. The goal of these supportive interactions is to reduce situational equivocally and anxiety by enhancing the perceived sense of control among group members (Albrecht & Adelman, 1984). As Albrecht & Adelman, 1987 suggested that such transactions enable people to cope independently with stress and perceived some personal control over their situations as well as reducing their uncertainty level.

Along the line of thinking, if a person with high sense of control over events, demands and pressures may arise if the person’s resources are not well matched to the level of demand placed on them. Especially when the ease and success and with which the person manages those demands and problems are partly determined by the constraints that he or she operates under and thus the control over his or her coping activities, and the success of the events are very crucial to the person concerned, while at the same time little social support is available for coping, the person may fail to manage the demand made on him or her and this implies the lack of control over the total situation which will then put himself or herself in a very stressful situation. Social support would then be very exigent for a person under this stressful condition to regain personal control or psychological well-being.
III. Proposed Model and Research Questions

Proposed Model

It is found that from the studies conducted by the various researchers, results shown that social support has some kind of relations with illness uncertainty, perceived stress and sense of control. Though the results were not consistent and the direction of correlation can not be proved, a commonly accepted direction can be reached, I therefore, in this study would like to proposed a model consisted of 4 primary constructs: sense of control, social support, illness uncertainty and perceived stress in figure 1.

![Diagram](image)

(→) indicate the flow of the chart

**Figure 1**
Hypotheses and Research Questions

According to the logic of the proposed model in figure 1, some hypotheses and research questions are listed below:

RQ 1: How the sense of control affects the types of social support sought?

H 1: The more the social support received, the higher will be the sense of control

H 2: The more the social support received, the lower will be the illness uncertainty level.

H 3: The more the social support received, the lower will be the perceived stress level.

RQ 2: How the perceived stress and the sense of control affect each other?

RQ 3: How the illness uncertainty and the sense of control affect each other?
IV. Operationalisation

Measurement of Social Support

Social support that ranges from quiet listening to active problem solving can be helpful to people who are striving to cope with stressful events. However, the same behaviours can have no impact, or they can have even negative impact if provided in the wrong context (Lehman, Ellard, & Wortman, 1986). A variety of factors may influence the degree to which help-intended communications are actually helpful. These include the nature of the relationship between the helper and the recipient (Cutrona, Cohen, & Igram, 1990); whether help was provided spontaneously or upon request (Cutrona, Cohen, & Igram, 1990); the timing of the help-intended communication (Jacobson, 1986); the personality of the recipient (Hobfoll, Nadler, & Leiberman, 1986).

In this study, I would like to study how the sense of control affects the types of social support sought, as well as finding out the effect of social support received on illness uncertainty and stress, which is based on the belief that social support is beneficial to the extent that it promotes adaptive coping with stress (Thoits, 1986).

Although different terms are used to describe social support, researchers in the area of social support have converged on five different types of social support: informational, tangible, esteem, emotional, and social companionship (Cobb, 1979; Kahn, 1979; Schaefer, Coyne, & Lazarus, 1981).
Types of Support

**Social companionship.** It includes messages that appear to broaden the recipient’s social network, by connecting him or her to others with similar interests or situations, including access, presence, and companions. Social relationships may provide an important supportive function because of the possibility for social companionship: enjoyable social activities such as social visiting, dinner, parties, films and concert, excursions and outdoor activities, or causal get-together. This dimension of relationships has been shown to be of importance for contributing positive mood. And of course, leisure and recreational activity are surely a major contributor to global satisfaction. Having more social relationships increases the probability of pleasurable activities in general, and entering into a new, significant interpersonal relationship would typically make oneself more available for more social and other activities. The companions’ categories help keep correspondent company and kill the sense of loneliness. Thus, a relationship between the social companionship function and indices of well-being can be predicted.

It should also be noted that people who engage in more social companionship activity probably have access to more tangible support and probably more esteem support, because shared activities and interests undoubtedly lead to perceptions of reciprocity and in some cases to closer friendships.

**Informational support.** Messages that convey instructions, including (a) advice, (b) referrals to experts, (c) situation appraisal, and (d) teaching would be put into this category. Messages code, as information support appears to reduce uncertainty or
help make life more predictable for the message recipient. Messages in this category typically offer suggestions or guidance for coping with the challenges offered by a disability or difficult condition. Referrals are efforts to link the recipient with a source of help or expertise. Situation appraisals reassess or redefine circumstances, often in a manner that help make them more positive or reveal new information that could be helpful; in short, they provide a different way to look at things. Teaching includes comments that provided factual or technical information about situations.

Under ordinary circumstances, most people probably have the information necessary for effective functioning. It is only when environmental stresses exceed – the person's available knowledge and problem-solving ability that additional information and guidance become necessary, and group members may provide valuable assistance under these conditions. Thus, this type of support should be most relevant for persons who are highly stressed.

**Tangible support.** The provider of tangible support offers to take concrete, physical action in support of the recipient can include a wide range of activities such as providing assistance with household chores, taking care of children, lending or donating money, providing transportation, helping with practical tasks, looking after a household when the owner is away, and providing material goods such as furniture, tools, or books, etc. Three types of tangible assistance can be concluded: (a) performing a direct task, (b) active participation, and (c) expressing willingness (the categories of loaning and performing an indirect task). The direct task category includes messages to perform an action in response to a need or request.
Providing help in times of physical injury or illness, which encompasses most of these activities, is a particularly important form of support because in this case the recipient is almost completely unable to perform necessary instrumental tasks while under ordinary circumstances, instrumental support could be related to well-being because it reduces task load or provides increased time for leisure activities.

This type of support is probably particularly relevant for low-income persons, who often are overburdened with instrumental chores, have smaller social networks and are financially unable to buy assistance.

**Esteem support.** People encounter threats to their self-esteem during occurrences that raise doubts about their own ability, social attractiveness, or career performance. An interpersonal resource with a strong effect for counteracting self-esteem threats is having someone available with whom one can talk about problems; this supportive function has been termed esteem support. Because talking about important problems generally involves revealing negative aspects of the self, most people tend to confine serious problem discussions to a person when they feel particularly close to, and or with whom there has been a mutually respectful. Studies of social support typically show a large difference in symptomatology between persons who have no such relationship and persons who have at least one such relationship (Cohen & Wills, 1985).

This type of support helps validate the recipient’s self-concept, importance, competence, and rights as a person that includes compliments, validation, and relief from blame. Compliments convey positive assessments of the recipients and his or
her abilities. This type of support would be especially important in the psychological well-being of the members who are under considerable stress, from which they would experience a great sense of relief and an easing of guilt and depression from the support.

**Emotional support.** This category includes all attempts by the sender to express empathy, support the emotional expressions of the recipient, or reciprocate emotion. The emphasis is on supporting emotional states rather than the recipient’s identity or self-concept and there are at least seven types of emotional support: (a) relationship, (b) physical affection, (c) confidentiality, (d) sympathy, (e) understanding, (f) encouragement, and (g) prayer.

Relational support stresses the importance of closeness and love. Physical affection refers to body touch like hugging. Confidentiality is another means to express support to one another, an indirect way to show the care and concern. It is mostly symbolic. Members also offer one another messages of sympathy, such as “Sorry it had to happen to you.” Understanding is the messages of empathy, stressing the similarity of one person’s experiences with another’s. Encouragement messages provide the recipient with hope or confidence. Prayer messages are straightforward offer of emotional support in the form of prayer for members who are suffering or in need of help. This type of support helps members to air out their sadness and grievances, share their smiles and tears, which has the similar effect of esteem support, help to build up a psychologically healthy human being.
To make it simple, in this study, the five types of support would be further classified into three categories: action-facilitating support, nurturant support and network support (Cutrona, 1990; Cutrona & Russel, 1990).

**Action-facilitating support.** It is intended to assist the stressed individual to solve or eliminate the problem that is causing his or her distress. Both informational support and tangible aid are put into this category. Information includes advice (“I think you should tell your supervisor”); factual input (“If you don’t treat the infection quickly, it will get worse”); and feedback on actions (“You shouldn’t have told her so bluntly”). Tangible aid includes offers to provide needed goods (e.g., money, food, books) and services (e.g., baby-sitting, transportation, housework).

**Nurturant support.** It encompasses efforts to comfort or console, without direct efforts to solve the problem causing the stress. Emotional support and esteem support fall into this category. Emotional support includes expressions of caring (“I love you”), concern (“Are you feeling better?”), empathy (“You must have been really hurt by his coldness”), and sympathy (“I’m so sorry you’re upset”). Esteem support refers to expressions of regard for one’s skills, abilities (“I know you’ll do a good job”) and intrinsic value (“Losing your job doesn’t mean you’re worthless”). Expressing belief in a person’s abilities may be helpful in promoting positive attitude even when person is confronting an uncontrollable event; telling someone that he or she is valued may be helpful in maintaining the self-esteem.

**Network support.** It entails a sense of belonging among people with similar interests and concerns (“We’d like you to join our support group”), it is the potential
source of support and the pool available for both informational and emotional support in times of need. It is also hypothesised to be important to both high- and low-controllable events.

Similarly, Lazarus and Folkman (1984) have proposed two broad types of coping: problem-focused coping and emotion-focused coping. The first type, problem-focused coping, is directed at “managing or altering the problem causing the distress.” Problem-focused coping is most adaptive in situations that are perceived to be potentially controllable, that is, situations in which the person consider themselves can do something to prevent, eliminate, or diminish the stress. The second type, emotion-focused, is directed at “regulating emotional response to the problem,” that is, lessening emotional distress (Folkman & Lazarus, 1980, p.150). This form of coping is most adaptive when the stressful situation cannot be controlled, that is, there is nothing that the people perceived themselves can do to prevent, eliminate, or diminish the stress.

The illustration by Lazarus and Folkman (1984) described above is similar to the classification of the study enlightened by the optimal matching model of Cutrona and Russell (1990). The problem-focused coping is similar to the description of action-facilitating support while the emotional-focused coping is similar to the nurturant support.

From the above, the speculation of sense of control having an effect on the types of social support being sought is given more consideration. A table summarising the different categorisation of types of support is shown in below:
Different categorisation of types of support:

<table>
<thead>
<tr>
<th>5 types of support</th>
<th>Informational</th>
<th>Tangible</th>
<th>Esteem</th>
<th>Emotional</th>
<th>Social Companionship</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Cobb, 1979; Kahn, 1979; Schaefer, Coyne, &amp; Lazarus, 1981)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service types</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Advice</td>
<td>• Performing a direct task</td>
<td>• Self-concept</td>
<td>• relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Referrals to expert</td>
<td>• Active participation</td>
<td>• Self-importance</td>
<td>• physical affection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Situation appraisal</td>
<td>• Expressing willingness</td>
<td>• Competence</td>
<td>• confidentiality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teaching</td>
<td></td>
<td>• Right</td>
<td>• sympathy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• encouragement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• prayer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• broaden the network</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• have more companion</td>
<td></td>
</tr>
</tbody>
</table>

| 3 types of support | | | | | |
| | | | | | |

| 2 types of support | | | | | |
| (Lazarus & Folkman, 1984) | Problem-focused | Emotional-focused | | | |
| | | | | | |

**Measurement of Control**

Health care interaction is in large measure an influence process. Factors that affect the client’s acceptance or co-operation with treatment affect treatment success. Research has shown that expectancies for internal or external control influence the person’s susceptibility to and reactions to various sorts of social influence (Lefcourt, 1982).

When control and support have been empirically linked, most operationalizations of control have been limited to the locus dimension. That is, one’s successful management of a stress event has been associated with the

- 33 -
perception of an internal (personal) causal attribution rather than one of an external (environmental) origin.

The Wallston items are fatalistic (external) and control-oriented (internal) statements about health with which the respondent can agree or disagree on a four-point scale, e.g., If I take care of myself, I can avoid illness, or I can control my seriousness of disease if I engage more in the health promotion behavior. The essential distinction is between the individual’s personal sense of mastery- what I can do to determine my own outcomes- and a more general ideological view of the role of luck or external constraints, e.g., systematic discrimination.

In social learning terms the construct, perceived control, is referred to as a generalised expectancy of internal or external control of reinforcement. The formal terms, the generalised expectancy of internal control, refers to the perception of events, whether positive or negative, as being a consequence of one’s own actions and thereby potentially under personal control. The generalised expectancy of external control, on the other hand, refers to the perception of positive or negative events as being unrelated one’s own behavior and therefore beyond personal control.

Taken all the above into account, in this study, two factors would be employed to measure the sense of control of each participant. The first one is personal mastery and the second one is luck denial. Through the measurement items, it helps capture the respondent’s denial of the luck component in health. A high score on luck denial, therefore, signifies a high sense of control, as does a high score on the personal mastery factor.
Measurement of Illness Uncertainty

It is the degree to which an individual feels uncertain about his or her illness situation using the eight sources identified by Mishel (1988): (a) diagnosis; (b) the nature of the illness; (c) the seriousness of the illness; (d) prognosis; (e) substance; (f) steps; (g) side effects of treatment options; and (h) the care system. It is similar to the scale developed by Sheer and Cline (1995) which also put emphasis on the diagnosis, seriousness, management, nature and predictability of the illness. Scale measuring these area would be used to measure the respondents’ illness uncertainty level.

Measurement of Ties

Lin, Woelfel and Light (1985) found that strong ties are pre-eminent in the case of health-related outcomes, where tie strength is defined as a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie.

Measurement of Stress

Perceived stress can be viewed as an outcome variable measuring the experienced level of stress as a function of objective stressful events, coping processes, personality factors (Cohen, Kamarck & Mermelsein, 1983). In this study, I would use the perceived seriousness of illness as an indicator of the perceived stress. The perceived seriousness of illness would be measured in terms of the amount of pain, the chronicity of the condition, the likelihood of recovery and the threat to survival and the threat on the future. The higher the level of pain, the more the chronicity of the illness condition, the lesser the likelihood of recovery, and the more the threat to survive and the future perceived by a patient, the higher the level of
stress he/she experiences, the more the uncontrollable, unpredictable, and overloading is his/her life, which found to be central components of the experience of stress (Cohen, Kamarck & Mermelstein, 1983). These items measure the respondent’s ongoing illness experiences, their expectations concerning future events.
V. Methodology

Sample

All members of the 14 patient support groups listed below organised by Tuen Mun Hospital would be chosen as the participants, they should take part in the study voluntarily. The sample size is 211.

- the Kidney Patient’s Association (19 members);
- the Cooley’s Anemia Patients Support Group (13 members);
- the Neonatal Patients Support Group (14 members);
- the Oncology Patients Support Group (21 members);
- the Neuro Pal (13 members);
- the Stoma Group (11 members);
- the Mentally Handicaps’ Parents Co-Aid Association (12 members);
- the Association of Relive (17 members);
- the Bauhinia Club(Breast Cancer Group) (19 members);
- the Counselling & Support Group (Psychiatric) (11 members);
- the Haematology Patient Support Group (15 members);
- the Diabetic & Mellitus Group (19 members);
- the Asthma Patient Support Group (Adult) (17 members); and
- the Asthma Patient Support Group (Child) (10 members).

The age range is from 8 to 73 and the mean age of the samples is 42. The male to female ratio is about 1 to 2.
Procedures

As a standard procedure, permission from the hospital has to been applied before carrying out any data collection within the hospital premises with patient or staff. The approval letter from the hospital is enclosed at Appendix A.

Discussion with the co-ordinators of the support groups made and consent was given to the researcher to attend the group meeting of the support group during the data collection period (3 weeks). Questionnaires were then distributed by the researcher to the members attending the gathering of the groups during that period. Researcher would attend their meeting more than one time (if the groups have scheduled more than one meeting during the period assigned by the researcher for data collection) for getting more returns since not all members would attend the same gatherings (consent obtained from the group leader and the hospital coordinator). Before they fill out the questionnaires, researcher would inform the participants of their rights as research subjects, introduce the questionnaire, and thank them for their participation. This is a self-administrated questionnaire, and therefore, no interruption would be allowed. Respondents would be encouraged to fill out the questionnaire by themselves and discussion was not encouraged. Respondents were also encouraged to complete the questionnaire with their instant bold response in order to tap their instant reaction and gut feeling, while re-evaluation and re-consideration was discouraged. The researcher kept monitor the data collection and collected the questionnaires when they had been completed.
Questionnaire Design

Apart from the respondents’ demographic data, it would also design to gather data on the respondents’ sense of control, degree of uncertainty in illness, the strength of group ties, their perceived stress level. The design of the question regarding the above scale was developed according to the operationalisation of each item as mentioned.

The design of questions on measuring the respondents’ sense of control have been taken reference from the James Internal-External Locus of Control Scale (Appendix B), the Norwicki-Strickland Locus of Control Scale (Appendix C) and The Reid-Ware Three Factor Internal-External Scale (Appendix D).

The scale developed by Sheer and Cline in 1995 (Appendix E) and the eight sources identified by Mishel (1988) have been adopted in measuring the respondents’ degree of illness uncertainty.

The original Hassles Scale (DeLongis et al., 1982; Kanner et al., 1981) in Appendix F, consists of a list of 117 items generated by the research staff covering the areas of work, health, family, friends, the environment, practical considerations, and chance occurrences have been adopted as guidelines in developing the questions for measuring the level of stress of the respondents in this study. Special consideration has been given especially on the areas of health and practical considerations developed by the Scale.
Moreover, statements on the various types of social support would be developed and the respondents’ would be requested to weight the importance of each statement. In so doing, data on the respondents’ perceived value of each type of social support could be tapped.

While on the measurement of group ties, questions on how regular the respondents join the group’s activities, and how they treated and value the other members, etc would be used.

The questionnaire in English in Appendix G was being translated to Chinese in Appendix H for respondents’ easy reference since all of them are Chinese and the medium of language is Cantonese. In case the respondent is illiterate, the researcher would conduct the questionnaire separately with him or her in the form of an interview.

**Construction of Questionnaire**

The questionnaire consists of a total of 49 items is designed to ask and measure the respondents on their frequent of participation and group ties, the types of social support sought and received, their level of illness uncertainty, their perceived stress, their sense of control and some demographic data.

At the very beginning of the questionnaire, an introduction, stating clearly the purpose of the study is being written, clarifying that the questionnaire is anonymous and the data collected would be used only academically.
Members’ Participation

The first four items aimed at tapping the respondents’ details of participation in the group and their ties with other members.

I 1: How long have you been in this support group?
I 2: Usually, how many times per month would you participate in the group’s activities?
I 3: How many hours per week would you spend in meeting the group members?
I 4: How many group members whom you could share with?

Types of Support Sought and Received

From item five to item fourteen, respondents are being asked to weight their sought and received level of each item accordingly on a 7-point scale, from (1) not a bit in terms of sought and received level to (7) sought desperately or very satisfy in regards to received level. Having the scale placed on the sought level deducted by the scale put on the received level, the difference would show clearly whether the respondents having a deficit or surplus regarding the item, that is whether they have actually received the item from the group or not. Having five different types of support being distinguished (social companionship, informational support, tangible support, esteem support, and emotional support), the result would show the respondents’ sought level and received level regarding each type of social support by adding the total score obtained from the relevant items. Two items would be used for each type of social support.

Social companionship.
I 5: Meet more friends in the same boat.
I 6: Widen the social circle.

**Informational support.**

I 7: Obtain more health care information.

I 8: Obtain more disease-related information.

**Tangible support.**

I 9: Receive tangible support from group members.

I 10: Enjoy more resources, like purchase discount, faster referral services, etc.

**Esteem support.**

I 11: Receive validation from group members.

I 12: Receive compliment from group members.

**Emotional support.**

I 13: Sharing with group members.

I 14: Understanding from group members.

**Measuring Scales for Illness Uncertainty, Perceived Stress and Sense of Control**

Items 15 to 41 are used for asking the respondents on their illness uncertainty, perceived stress and sense of control level. Respondents would be requested to weight each item on a 7-point scale (absolutely untrue to absolutely true).

**Illness uncertainty.** The below eight items (15-22) are used for measuring the illness uncertainty level. The total score of the eight items would be added
together and divided by the number of items, say if 40 is the total number of score of items 15 to 22, the score would be divided by 8, getting an average of 5, the illness uncertainty of the respondent would then be 5, that is relatively high.

I 15: I don’t know what is wrong with me.
I 16: I have a lot of questions without answers.
I 17: I am unsure if my illness is getting better or worse.
I 18: It is unclear how bad my pain will be.
I 19: Because of the unpredictability of my illness, I cannot plan for the future.
I 20: I don’t know how I should manage my situation.
I 21: It is not clear what is going to happen to me.
I 22: I don’t know what the diagnosis is or will be.

\textbf{Perceived Stress.} The below ten items (23 -32) are used for measuring the perceived stress level of the respondents. The total score of the ten items would be added together and divided by the number of questions, say if 60 is the total number of score of items 23 -32, the score would be divided by 10, getting an average of 6, the perceived stress level of the respondent would then be 6, that is very stressful.

I 23: Your health situation prevents you from doing things you like to do.
I 24: Your health situation makes you dependent on others in which you feel very uneasy.
I 25: You have no hope over the future.
I 26: Your health put a lot of stress on you.
I 27: You feel anxious about the development of your health condition.
I 29: You are often afraid of dying.
I 30: You have trouble relaxing.
I 31: You are anxious about the process of medical treatment.
I 32: Your health condition put forth the worry about the prejudice and discrimination from others.
I 33: Your health condition put forth the worry about the physical appearance.

**Sense of control.** Items 34 to 41 are used for measuring the sense of control of the respondents. High score obtained in items 34 to 37 constituted a relatively high sense of control, while a high score obtained in items 38 to 41 constituted a low sense of control.

I 34: A great deal that happens to me is probably just a matter of chance and uncontrollable.
I 35: I don’t believe that a person can really be a master of his fate.
I 36: I have usually found that what is going to happen will happen, regardless of my actions.
I 37: It isn’t wise to plan too far ahead because most things turn out to be a matter of good or bad fortune anyhow.
I 38: I always feel in control of the result.
I 39: I belief I could be the master of the fate.
I 40: Most of the time, you feel that you can change what might happen tomorrow by what you do today.

I 41: I think it’s better to be smart than to be lucky.

Reliability Test for Scales

In order to ensure that reliability of the measuring instruments used in this study, which is to ensure that the test yields similar results when different people administer it and when alternative forms are used, the Cronbach’s alpha, one of the most commonly used reliability coefficients is being adopted as the reliability scale in the study. Alpha is a model of internal consistency, based on the average inter-item correlation, it tells how much correlation between the scale and all other possible scales measuring the same thing. In the Cronbach’s alpha model, it was assumed that the items on a scale were positively correlated with each other because they were measuring, to a certain extent, a common entity. If the Cronbach’s alpha is large, indicating that the scaled used is quite reliable.

Cronbach’s alpha is mainly used to test the reliability of the three scales designed to measure the illness uncertainty, perceived stress and the sense of control of the respondents. This reliability analysis is done by using the SPSS software.

Scale for measuring illness uncertainty (Items 15 –22). The reliability coefficients for items 15 to 22 measuring the illness uncertainty of the respondents is 0.9063, indicating that the scale is very reliable.
Scale for measuring perceived stress (Item 23 –33). The reliability coefficients for items 23 to 33 measuring the perceived stress of the respondents is 0.9191, indicating that the scale is also very reliable.

Scale for measuring sense of control (Item 34 – 41). The reliability coefficients for items 34 to 41 measuring the sense of control of the respondents is -0.0556, indicating that the scale is not reliable.

It might be owing to the factor that the items are not positively correlated with each other, therefore, they are not correlated with other possible items that might have selected. In this case, it is not expected to see a positive relationship between this test and other similar tests. In this connection, covariance matrix is being used to find out the underlying reason for the negative correlation.

The inter-item covariance matrix of the scale shows that negative value occurs when items from 34 to 37 are being covariant with item from 38 to 41. However, if only items from 34 to 37 and items from 38 to 41 are being covariant with themselves, the value is positive.

Moreover, from the inter-item correlation coefficients between question 34 to 41, it shows that whenever the first 4 items is being correlated with the last 4 items, negative value appeared. However, if only the first four items are correlated with each other or the last four items are correlated with each other, it would result in positive value.
Since alpha can be interpreted as a correlation coefficient, it ranges in value from 0 to 1. Negative alpha values occur when items are not positively correlated among themselves and the reliability model is violated. The result is valid in this study since high score in items 34 to 38 constitutes a high sense of control while a high score in items 39 to 41 constitutes a low sense of control, which is obviously negatively correlated. In this connection, the score obtained from items 38 to 41 is being reversed. The reliability coefficients for items 34 to 41 would then become 0.8912, which is quite high.

Moreover, the reliability coefficients for item 15 to 41 after the reversal would become 0.9216, a bit higher than 0.9154 before the reversal.

In sum, therefore, the scale for illness uncertainty, perceived stress and sense of control presented here appear to be consistent across data sets. In addition, the items have shown high reliability, the result they generate should be satisfied in the manner that the scale stood up to rigorous testing.

**Demographic Data**

Items 42 to 49 used to tap the respondents’ demographic data like sex, age, qualification, total family income, and number of family members, status, working status, and religious belief.

I 42: Sex:
I 43: Age:
I 44: Education:
I 45: Total family income per month
I 46: Total number of cohabited family members:

I 47: Status: (single, married, divorced, separate, or widow)

I 48: Working status: (full-time, part-time, odd jobs, students, unemployed, housewife, or retired)

I 49: Religion: (Buddhism, Taoism, Catholicism, Christianity, nil, or others)
VI. Results and Analysis

Results

From the sample size of 211, 98 have completed the questionnaires and returned for analysis. The male to female ratio is 33:65, very close to the ratio if the population which is 1:2. The mean age of the total respondents is 41.6, while the male group is 50.76 and the female group is 36.98. Table 1 displays data regarding the total respondents’, male subgroup’s and female subgroup’s participation rate in the group and their group ties. The mean for the length of joining the group since its establishment is 12.04 months. On average, the respondents would participate the gathering of the group about twice a month and the hour of meeting is about 3.3 per week. It is found that each member on average would have about 3 members whom can be shared with. It can be found that the participation rate and the group tie for the female subgroup is higher than the male subgroup.

Table 2 shows the educational level, marital status, working status, religious belief of the respondents, and the different sex. It is learned that the educational level of the respondents is relatively low, only 15.3% of the total respondents were tertiary educated. The mean total family income is $19163.27, it ranged from $8000 (8.2%) to $40000 (9.2%). Regarding the living arrangement, none of the respondents lived
alone; all of them lived with at least one family member, while most of them (77.6%) lived with 2 to 4 family members. The mean income per person of the respondents’ family is $7364.7. Regarding the marital status, 79.6% of the total respondents are married and only 17.3% are single. The others account for only 3% are divorced. As for the working status, half of the respondents have a full-time job while 26.5% of the respondents are housewife (all of them are female). In the current high unemployment rate (5.6%) in Hong Kong, the unemployment rate of the respondents is 5.1%, which is very close to the global rate of Hong Kong. Religious belief is not popular among the respondents, only 16.3% of the total respondents has religious belief, 85.7% do not have.

Table 3 shows the mean level and the standard deviation for the types of social support sought and received. It can be found that all five types of social support have a higher received level than the sought level in both sex and all respondents as a whole. In this regard, the need for social support have been satisfied by participating in the patient support group, they received more than they sought. When different sex is being considered, it can be found that the sought level o the female subgroup in all five types of social support is higher than the male subgroup, similar phenomenon appeared in the received level. The received level of the female subgroup was higher than the male subgroup.
There is a difference between the sought level and the received level because both the receiver and provider have different conception on the social support perception and it would further impede by the impersonal supportive environment. As Hansson et al. (1984) have noted, the so-called social support environment is a complex interpersonal environment that is not necessarily supportive, and contains a variety of barriers to effective access. The interpersonal and impersonal environment contribute to the possible difference between the sought and received level of social support.

Table 5 shows the mean score and the standard deviation for the illness uncertainty scale (the mean of item 15 – 22), perceived stress (the mean of item 23 – 33) and the sense of control (the mean of item 34 – 41) of the respondents. The scale ranged from 1 to 7, from absolutely untrue to absolutely true. In this regard, 4 is the mid score of the scale. If the score is higher or lower than 4, it reflects a high or low in either end. Regarding the illness uncertainty scale, the mean score is 3.37, which means that the illness uncertainty level is a bit low, the respondents are on the average, quite sure about their problem on illness, or their diagnosis, prognosis, future development of their disease, and health condition. The illness uncertainty level for the female group (3.29) is a bit higher than the male group (3.14). The response is quite positive. For the perceived stress scale, the mean score is 3.4, which is also lower than 4, it is a good indicator, because the higher the score, the higher the perceived stress. In this connection, the perceived stress scale of the respondents can
be said to be quite low, they are not very stressed and constrained by their illness or health condition, they are not so anxious by the curing process and the future development of their health condition, they do not perceived themselves as hopeless and can get relax too. In this aspect, the female group scoring (3.48) is again higher than the male group (3.24), which means in general, the male is less stressful than the female. As for the sense of control scale, after the score reversal in item 38 to item 41 (for easy coding and higher reliability of the scale), the mean rank is 4.34, which is higher than the mid rank of 4. It reflects that the respondent is quite low on average regarding the sense of control, that is they are more believed in the external control of life events, the fortune and luck than personal mastery. Generally speaking, respondents inclined to believe that they are not in control of the result and their future, and they would rather be lucky than to be smart. Female, in this respect, is lower in the sense of control than the male.

In order to test the proposed model in figure 1, the correlation coefficient of the variables has to be found out. In this study, the Pearson correlation coefficient was used to assess the correlation between the types of social support sought and received, the degree of illness uncertainty, the perceived stress level, and the sense of control. A significance level of 0.05 and 0.01 were used for each hypothesis. Statistical analysis was again done by using the SPSS software.

The results of the intercorrelation between the factors were shown in table 5.

Insert Table 5 about Here
while the intercorrelation between the degree of illness uncertainty, the perceived stress level and the sense of control were shown in table 6.

| Insert Table 6 about Here |

From table 6, the analysis in the social companion shows that no significant correlation is found between the sought level and the illness uncertainty level, perceived stress level, or the sense of control, all the p value is larger than 0.05. However, the received level of social companion and illness uncertainty has very high statistically significant level ($r=-0.28, \ p \leq 0.01$), while the received minus sought level shows significant correlation between the illness uncertainty level too ($r=-0.25, \ p \leq 0.05$).

The intercorrelation coefficient for the sought level of informational support and sense of control was very statistically significant ($r=-0.37, \ p \leq 0.01$). Statistically significant correlation was also showed in the received level of informational support with the illness uncertainty level ($r=-0.58, \ p \leq 0.01$) and with the perceived stress level ($r=-0.42, \ p \leq 0.01$). Likewise, the received minus sought level of the informational support also significantly correlated with the illness uncertainty level ($r=-0.45, \ p \leq 0.01$) and with the perceived stress level ($r=-0.35, \ p \leq 0.01$).

As for the tangible support, its sought level shows significant correlation with the perceived stress level ($r=0.23, \ p \leq 0.05$). Its received level also shows significant correlation with the illness uncertainty level ($r=-0.27, \ p \leq 0.01$), and with the perceived stress level ($r=-0.257, \ p \leq 0.05$). Whilst its received minus sought level shows highly
significant correlation coefficient with the illness uncertainty level \( (r=-0.333, p \leq 0.01) \), and with the perceived stress level \( (r=-0.404, p \leq 0.01) \).

Esteem support displays only one significant correlation on its received level with the sense of control \( (r=0.30, p \leq 0.01) \), while for the others, it shows no significant correlation.

Significant correlation was found between the emotional support and the sense of control. Its sought level with the sense of control has a correlation coefficient of 0.30 \( (p \leq 0.01) \), its received level with the sense of control has a \( r \) value of 0.48 and \( p \) value is less than 0.01, while the received minus sought level with the sense of control is \( r=0.23, p \leq 0.05 \).

For the total social support, its sought level is significantly correlated with the perceived stress level \( (r=0.25, p \leq 0.05) \), its received level is correlated with the illness uncertainty level very significantly \( (r=-0.35, p \leq 0.01) \) and its correlation coefficient with the perceived stress level is \(-0.23\), the \( p \) value is larger than 0.05. Its received minus sought level is has a high significant correlation coefficient with the illness uncertainty level and the perceived stress level, both \( p \) value is less than 0.01, its \( r \) value is \(-0.38\) and \(-0.34\) respectively.

Table 7 shows the correlation matrix of the illness uncertainty level, perceived stress level and the sense of control. Illness uncertainty level achieved a very good correlation with perceived stress level with a coefficient of 0.81 \( (p \leq 0.01) \) while its
correlation coefficient with the sense of control is –0.39 (p≥0.01). The perceived stress level and the sense of control also achieved a significant correlation (r=0.20, p≥0.05). In this regard, the three scales are correlated with each other.

**Analysis**

Wrapping the findings, I would like to discuss a number of issues surfaced regarding the proposed model in figure 1 and also the hypothesis as well as the research questions mentioned.

**RQ 1: How the sense of control affects the types of social support sought?**

Overall, the finding of the study provide some indication on the interactive relationship between sense of control and health-related information seeking. It indicates that the sought level of informational support would be higher if the sense of control of the respondent is higher (lower in score reflects a higher in the sense of control). The acceptability of information at least in part depends on its relevance to the person’s control outlook (r=−0.37, p≤0.01). Moreover, the sought level for the emotional support would be higher for the low sense of control person (r=0.30, p≤0.05). The findings confirmed the reviewed as mentioned. The result validated that low sense of control people avoid acquiring information that highlights their vulnerability to disease or discomfort and that they adapt better when the available information is vague rather than specific. High sense of control people seem more inclined to use information to adjust their predicaments, but they do not appear to be routinely active health-related information seekers without an immediately relevant challenge to their coping resources.
Just like the optimal matching model of the support process by Cutrona and Russell (1990), which predicts that spouses will prefer and provide instrumental forms of support (e.g., advice, information) when confronting a stressful event that is controllable but will prefer and provide nurturant support (expressions of caring and sympathy) when dealing with uncontrollable stressors.

It is speculated that no correlation is found between the sought level of social companion, tangible support, and esteem support, and the sense of control because social companion is the source for all kinds of support, the more social companion one has (provided that the relationship is positive), the easier and the more the other types of support one could obtain. It is relevant for people no matter their sense of control are. Similar argument is applied for the esteem support, because ego-threat is a common element in stressful life events and because a large proportion of negative events involve criticism or devaluation by others or self. Relationship in which a person is esteemed and valued provides both a source of active self-enhancement and a set alternative, accepting relationships, which may serve as an antidote to a relationship where there is unresolved conflict. Relationship between tangible assistance and well-being is straightforward no matter how the sense of control is. When a person has a specific instrumental need, he or she will need others to help resolve that need. One issue is that under ordinary condition people have a general reluctance to seek help, even for simple instrumental task (DePaulo, 1982), this is especially true in Chinese culture, which explained why the sought level of tangible support is far low comparing with other types of support. However, the reluctance
may be reduced if a person is imbedded in a network of reciprocal exchanges (Wills, 1983) or when there is a communal relationship.

H 1: The more the social support received, the higher will be the sense of control

The finding reviewed that there is no correlation between the social support received and the sense of control. Hypothesis 1 is therefore not being supported.

People seek for different types of support according to their control outlook. The person acts in a given way is determined by the value of the outcome and whether the way they choose is consistent with their worldview. People develop their sense of control over time, the higher the sense of control the more information they would like to have, because according to their belief, it might be beneficial. However, the likelihood of particular actions would be diminished if the outcome were not valued. The outcome here talking about is the person’s well-being. Higher sense of control person seek out for informational support while lower sense of control person aim for emotional support but not to gain a even higher sense of control nor even a lower sense of control but to uphold their worldview and control outlook, which would ultimately (if successfully upheld) enhance their psychological well-being. Therefore, there should be no correlation between the social support received and the sense of control, but correlation should exist between the types of social support seek for and the sense of control. If social support has to be correlated with some thing, then psychological well-being should come before sense of control.

It is always seemed paradoxical that a person in the same sentence could say that God determined his or her life and that at the same time he or she gained personal
strength, among other things, from God. However, I wonder if there is a similar psychological function occurring when the newly converted Christian says that he or she regained his or her personal strength through God’s counsel and when the victim of cancer or the survivor of a deceased loved one regains his or her personal strength through the counsel and guidance of significant others. In each case there is personal participation with an external source of strength and direction to help one adapt to one’s existence and conditions. Perhaps this is a basic function of social support from the so-called social support groups, particularly at times of increased anxiety, crisis, or confusion. That is social support did help one to gain a better psychological status, by any means, but not necessary sense of control.

**H2: The more the social support received, the lower will be the illness uncertainty level**

Illness uncertainty level is negatively correlated (r=-0.38) with the social support received. Hypothesis 2 is therefore supported.

The relation between them is very straightforward, the more social support received, no matter the social companion support which enhance the network of support and enrich the source of information, etc, the information support, tangible support, the easier the problems arisen get resolved or uncertainty comes up get reduced. Apart from the esteem support and emotional support which show no correlation with illness uncertainty level, all three other types of support show negative correlation with illness uncertainty level.
The correlation between this straightforward relation is not so perfect because information obtained from others’ personal experiences may need to go through some complicated process, especially when the person who give out information are not professional or has not developed strong ties with the receiver, or the information received is inimical with the receiver’s personal situation. Under these situations, the social support received may deem as negative and would heighten the illness uncertainty level in the short run. In addition, some social support received might be judged as unsupportive because they are painful (such as honest feedback forcing the patient to face certain realities) might also increase the illness uncertainty level in the short run but would be beneficial in the long run.

**H 3: the more the social support received, the lower will be the perceived stress level**

The correlation between the social support received and the perceived stress level is -0.34, i.e. the higher the received level of social support, the lower would be the score in perceived stress which reflects a lower in the stress level. In this connection, hypothesis 3 is supported.

Being reviewed before, people who are lacking ties that provide for intimacy, a sense of belonging, opportunities for nurturance, and reassurance of worth may experience this situation as stressful. Some individuals may then respond with a changing psychological state (becoming depressed or fatalistic, for example). When demanding situation arises which is beyond the control of the people while resources or network of support are not available, people would be put in a very stressful situation, if this kind of situation persist, in long run, would generate a sense of hopelessness and the person would be less able to develop a definite measure of his
own worth. Perceived control is positively associated with access to opportunity. Those who are able, through position and group membership, to attain more readily the valued outcomes through the availability of more resources and support, would allow a person to feel personal satisfaction, and are more likely to hold positive view as well as more healthy psychological status and less stress level.

Put it in another way, according to the investigations by Corah and Boffa (1970) and Haggard (1943), they found that stress, as measured by physiological changes, was reduced when subjects were able to control the onset and termination of aversive stimulation. It is this perception of the ability to “do something” that gives rise to the concept of perceived control. In this regard, for the high sense of control people to receive as much information to fulfil their need for knowledge and low sense of control person to obtain emotional support for ego enhancement, both could get what they want to achieve a sense of satisfaction.

Winnubst, Buunk and Marcelissen, (1988) found that “social support can protect or buffer individuals against the negative consequences of stressful circumstances upon mental and physical health, including depression, psychosomatic symptoms and physical disease” and if someone experiences feelings such as anxiety, anger and depression more frequently would lower the degree of social support available to him or her. This statement further confirmed the hypothesis.

RQ 2: How the perceived stress and the sense of control affect each other?
The correlation coefficient between the perceived stress and the sense of control is 0.20, which means that the higher the sense of control, the higher the perceived stress.

One implication of locus of control research is that to reduce stress one should gain more control, even if it is illusory (e.g., Lefcourt, 1973). However, another way stress might be reduced in many situations is to cease trying to regain control and to accept the apparent circumstances. Similarly, adjustment to a chronic disease may be made easier if the person can first come to accept the permanence of the disease and its influence on everyday life. One needs to accept not only the disease but also the consequence and the cause of the disease.

Barker (1955) appears to be one of the first to suggest that the acceptance of one’s loss is a step toward adjustment to being disabled without self-devaluation. Keegan, Ash, and Greenough (1976), in a study of the psychological and social implications of blindness, found that among a random sample of 114 legally blind persons the most significant variable affecting a variety of adjustment measures was whether or not the person had given up the false hope (acceptors) of regaining his or her vision. The acceptors scored lower on dependence and depression reported more adequate coping.

High sense of control people are more driven to achieve, have higher ambitions, are more competitive, and are more responsive to challenges than people with a low sense of control. Although these reactions often lead to increased performance and achievement, the down side is that in the extreme these people sound anything but
relaxed and stressfree (Burger, 1992). Even if high desire for control people correctly report that they experience less anxiety than low desire for control people, this may be because they are better able to deal with the stress that they encounter, not because they have less stress in their lives.

Folkman (1984) defined stress in terms of a person’s perception that the demands of the situation were “taxing or exceeding” his or her resources to deal with the situation effectively. Because many of the demands on high desire for control people are self-imposed, it is reasonable to predict that high desire for control will be associated with higher levels of stress and anxiety.

People with a high sense of control may become more upset about a moderately stressful situation than low sense of control people, particularly if the situation is one that frustrates their need to feel in control. These people also are more likely to deal with the problem through active efforts to resolve the issue.

Low sense of control people, who are more likely to take things as they come, seem to have fewer stressful moments in their lives. However, perhaps because of their efficiency in dealing with problems, high sense of control people tend to look better on measure of anxiety and general well being. Low sense of control people may be less susceptible to stress-induced health problems.

If people with high sense of control continue to find that their efforts to control the event are unproductive, they will eventually suffer from severe depression and
highly stressed. Therefore, high sense of control people is more susceptible to depression when they experience uncontrollable events.

However the opposite prediction also is possible. Because they achieve more, high sense of control people may feel better able to deal with the events in their lives than people with a low sense of control. When problems occur, high sense of control people more often takes direct action to resolve the issue or diffuse the threat. Some researches indicate that such active, problem-solving efforts typically are more effective for long-term stress reduction than trying to deal with emotional reactions to the stressor or trying to avoid or deny the problem (Suls & Fletcher, 1985). Further, taking action, even when ineffective, may provide high sense of control people with the feeling that they can deal with a problem situation rather than become resigned and helpless. Thus there are reasons to suspect that either a high sense of control or a low sense of control will be associated with higher levels of anxiety.

RQ 3: How the illness uncertainty and the sense of control affect each other?

The correlation coefficient between the illness uncertainty and the sense of control is –0.39 which indicates that the lower the illness uncertainty (lower score), the lower the sense of control (higher score).

The finding contradicts with our common sense that the higher the illness uncertainty, the lower the sense of control. Usually, the more the information available for a person to deal with the situation, the more alternatives and resources,
and channel is appeal to him or her, and the more able he or she can deal with the situation in ease, i.e. to control the situation. However, if the situation or the genuine reality for the situation is really beyond control, the more the person learn about the reality, the more would be his or her learned helplessness, and for his or her betterment, accept the reality and to lower the sense of control in this case.

As mentioned in the review, the assumption that having control is a desired end in and of itself leads one to assume that having low sense of control is undesirable. Furthermore, having low sense of control or being externally controlled would be contrary to one’s natural tendencies and frustrating to one’s needs. As such, having low sense of control would lead to poor psychological well-being. Given such assumptions, we are lead to wonder why some persons may desire to be of low sense of control and how persons can continue to live in a state where being externally controlled is a salient reality. Any answer that simply suggests that a person in such a state somehow manages to retain a sense of control (illusory or not) merely bags the question (Lefcourt, 1976). How does one either regain, retain, or achieve a sense of control, particularly when doing so can be very distressful and contrary to the physical and/or social reality in which the person exists?

As mentioned by Lefcourt (1976) that people would sometimes retain a sense of control despite that the reality does allow them to have it, this is just an illusion control. People of high sense of control would try to gain as much information as they can which is their usual practice, but the more they learn about the reality, the more they know that the issue (health condition in this study) is out of their control. They might accept the reality but still they have to do something in order to gain the
control (illusion), that is the way they get compensated. However, deep in heart, they
cannot but accept the reality in this aspect only (health condition) but on the other
hand, in other aspect of life, they still have high sense of control. This might only be
possible if person can make reasonably clear distinctions between where they do not
have control and where they do have control.

The findings in this study validates that the more we know about the reality by
having more information, sooner or later, we have to accept the reality, that is we can
no longer retain the sense of control in some areas even we get used to it. It might be
a painful process but the sooner we accept, the shorter will be the hard time.

In a nutshell, the proposed model in figure 1 is to a certain extent supported.
There is certain relation exists between the sense of control, perceived stress, illness
uncertainty and the types of social support sought as found from the findings of this
study. In addition, the findings convey that there is correlation between the illness
uncertainty and sense of control in which the model has not proposed. The
correlation coefficient is 0.81 while the p value is less than 0.01. It suggests that the
higher the illness uncertainty level the higher the perceived stress. It is
understandable since there is a natural bias for a person to know as many as they can,
the more they know, the more they believed would be under their control and
prediction and the less would be the risk. If they live in a predictable world, they
could prepare for the future for better or for worse, the perceived stress level would
be much reduced then.
From the findings, it is obvious that the concepts of control, stress, illness uncertainty and demand or constraint are in a real or practical sense confounded. The person’s perception and description of the demands that they face will be coloured by their perceived level of sense of control, and questions about that level of sense of control and stress can only be meaningfully answered in relation to the recognition of demand. Furthermore, as implied in most ‘transactional’ approaches to stress, and made explicit by Fisher (1986), the perception of control and demand is dependent on the wider person’s situation interaction, and neither is a passive property of the situation. In addition to these psychological responses to stress, there may be significant changes in physiological function, some of which might facilitate coping, at least in the short term, but in the longer term may threaten physical and psychological health. The more accessible the social support is, the lesser would be the chance to develop high stress level and hence, the deteriorating psychological and physical status.
VII. Discussion

Patient support groups in Hong Kong are usually organised for patients with chronic diseases or for parents with chronically ill children. People having chronically ill especially Chinese would usually surrender control to health care professionals, or external agents as they are considered more competent than the patients. Chronic diseases refer to here are those which (a) by definition cannot be cured, (b) significantly influence one’s everyday life, and (c) necessitate the assistance of or treatment by others. Having a chronic disease or disability would in a long run leads to reduced ambulation, energy levels, and the like which as a result would develop a lower sense of control. Furthermore, living under the care of others (e.g., hospital staff) leads to excessive dependencies (Barton, & Baltes, & Orzech, 1980) and conformity to necessary routines, among other things that might well undermine one’s sense of control. Indeed, simply trying to gain or retain a high degree of personal control may lead to considerable frustration and stress. It even seems that the more adjustive strategy would be to become more external, to surrender one’s control as the finding of this study convey.

Though social support renders in the patient support group in this study would not enhance a person’s sense of control, but the group could help patient especially those with high sense of control to fulfil some kind of control in an alternative way, which is similar to the concept of participatory control (Reid, 1984) which predicated on an argument that humans do not remain in a state of total helplessness (no personal control) for an extended period. Those extreme stresses, depressions, and so on that are associated with the loss of personal control are typically transitory. Similarly, most chronically ill or disable patients, even in the later stages of their life, do not
remain in a state of abject helplessness for very long. Thus a person dying from cancer whose treatments have been repeatedly unsuccessful and whose disease is out of control may find some reduction in anxiety either through helping others or undertaking instrumental actions in areas other than those concerned with the treatment of his or her own disease. This regaining of a form of control may contribute to a reduction of anxiety and the effects of trauma for the person. In one way or another, people manage to regain an acceptable sense of control and do so despite their realistic loss of considerable control.

There are two components of participatory control that could be found from the result of this study. First, patients must come to the resolution whereby they concede and accept the fact that there are others who are better able than themselves to take care of their physical health. Thus, as they become more involved in participatory control they also become more external in their beliefs, and more willing to have others take control of outcomes important to them. These more external beliefs reflect an attitude of co-operation. Therefore, once they accept their invulnerability to control their disease, they would have lesser stress, or else, the unacceptable reality would drag them to the immense stress.

Second, because such a surrender of control is threatening, the patient must operate so as to minimise this threat. To do this, it helps for the patient to feel that he or she has input into the decisions of medical staff. For example, the patient would like the staff to have all available data necessary or consult their counterpart in patient support group to make the best decisions. Furthermore, the patient, though clearly surrendering control to the caregivers, wants to know about the decisions being make
so that he or she might be assured that his or her case is being examined and considered properly. Being kept informed either through the support group members or through the support group coordinator provides the illusion of monitoring one’s treatment and supports beliefs in the integrity of the caregivers. The underlying psychological dynamics of this surrender of control is that the patient, unable to control his or her physical condition directly, attempts to gain control over his or her condition through the abilities and efforts of others (group member). One ramification is a developing sense of membership in a team dedicated, it is hoped, to the best care of the patient’s conditions. Thus compliance and co-operation should be greater when participatory control is operating. The caregivers and the patient are working together, but with the staff viewed as being more expert and in control. In essence the patient participates in a system in which he or she is ultimately externally controlled. Like the condition in Hong Kong, health care professional would sometimes join the group meeting to develop a deeper understanding on their patients’ condition.

The style with which participatory control is maintained varies from patient to patient and setting to setting. However, there are some basic features necessary to assist the development of participatory control. First, patients require the ability to express their needs and fears, and also to communicate either their encouragement or displeasure to the staff in an effective way. Such abilities will operate more effectively if there are existing social norms that encourage such behavior on the part of patients. Thus patients should be encouraged to be involved in their care as much as is reasonable. In short, there should be arrangements whereby all issues are discussed openly, regular consultations made with patients, reinforcement offered for
their giving information and suggestions, and encouragement provided to take the
initiative in everyday activities other than their health care. In Chinese culture, the
expressive style would take a longer time to develop, as Chinese are introverts who
are less likely to express themselves openly especially for some negative issues with
strangers.

The provision of participatory control makes it possible for the ill especially
chronically ill to adjust more easily to the reality of being dependent on the care of
others. At the same time, it can reduce the anxiety and stress attendant on having sole
responsibility for oneself and thus lead to greater adjustment, contentment, well-being,
and life satisfaction.

In Hong Kong, where the workload of the health care professional is so high
that some times accidents happen. Health care professionals are ordinary individuals
and a part of large impersonal health care system, can make mistakes and are not
necessarily thorough or consistent in the care they provide. The concept of
participatory control having fulfilled by patient support group, both care giver and the
receiver could have a better understanding of the others, the diagnosis and the health
condition. By talking to other members, they could even precipitate the future, which
help to reduce their uncertainty and stress and finally face the reality. Furthermore, if
the group ties is strong enough, they could even develop a close support network,
which would even offer help on their ordinary life. Not to say communication skill
and healthy life style develop through the active expression or peer pressure. All
these demonstrate the merits of support group to patients’ well-being.
Patient participating in the patient support group especially Chinese is already higher in the sense of control than other since they choose to participate to do something for their disease. In the Chinese culture, patient are generally reticent about their desire to gain more personal control and feared that the pursuit of control could result in a reduction of the care they currently received. That is why the sought level for the five types of social support is so low as they did not expect to obtain much at the very first beginning, most of the patients who join the support group because they were referred by the health care professional whom they dare not obey. Therefore, in Hong Kong, in this Chinese majority culture country, in order to strengthen the benefit the group offer to members, one should not differentiate the types of social support offer with reference to the control but to firstly let the patient enjoy the group and the service, let them learn the reality as well as their resources, offer them chances to do something and to participate, it would help the high sense of control person to gain some kind of control in an alternative way and the low sense of control person to express.

Apart from the sense of control, illness uncertainty, and perceived stress, there are some other factors that deserve consideration when thinking about how the benefit of social support could be maximised. In this study, I am aware of the relevance of many other factors, such as sociodemographic characteristics, and group ties and participation rate. But the purpose here is to outline a model of social support in the simplest forms. Extension and expansion of the model are deferred to a more comprehensive study may be in the future. The other factor like sex, group ties, length of participation, peer pressure and modelling effect, marital relations and living arrangement, and working condition, etc would also influence the effect of
social support to the person concerned. The same person, having different conditions in terms of any one of the above mentioned factors, receiving the same level of social support would have different effect.

Sex

From an examination of the mean scores it was found that the female report higher stress level, lower sense of control than did the male (in table 4). Such mean differences explained why the sought and received level of the emotional support for the female is remarkable higher than the male (in table 3). The findings showed only the difference, but sex may help explain somewhat the result.

Group ties

“The degree of access to and the use of strong and homophilous ties are indicators of social support” (Lin, Woelfel, & Light, 1985). Without strong and homophilous ties as mentioned, an individual though be put in a very supportive environment, could not receive as much social support than those who have develop strong and homophilous ties with the providers, therefore, social support would not be effective in helping reducing the stress and illness uncertainty of the receiver. Therefore, group ties should be control or put into the proposed model for more reliable evaluation.

Timing

Information provision and gaining support and self-understanding from the group process was helpful and were longer-term participants in their group were more
likely to perceived benefit from belonging to the group. The findings in this study shows that the correlation of the length of participation with illness uncertainty is \( r = -0.82, p \leq 0.01 \), while the length of participation with perceived stress is \( r = -0.68, p \leq 0.01 \), and with the sense of control is \( r = -0.25, p \leq 0.01 \). All validate that timing is a crucial factor mediating in the model proposed.

**Peer Pressure and Modelling Effect**

Peer pressure and modelling effect is another mechanism related to social integration that has to do with group ties and timing. That is, individuals in a network frequently feel constrained to behave like other network members. Thus people who have ties with people, who smoke cigarettes, drink alcohol, are physical active, or maintain certain dietary practices may follow the patterns set forth by their group simply to maintain their group identity (not because of the health value of the behavior). Therefore, groups or networks have the potential to be either health promoting or not, and this may influence the health status of the individuals, it would also model the effect of social support to its members. If the prevailing sense of control of members are high, the newly join members may also develop a high sense of control no matter how the social support and vice versa. Therefore, it may influence the effect of social support to sense of control or even mistaken social support as the contributor to the high sense of control of the members.

**Marital Relationships and Living Arrangement**

In some cases, social support is measured by simply looking at living arrangements, or the presence and nature of marital relationships. The social support is sometimes measured by the following indicators: living arrangements, marital
status and the breadth and intensity of interaction in the social network. Marital status includes the categories of married, widowed, divorced, separated, or single. Living arrangements is a dichotomised variable defined as living alone or with others. The social network is measured in terms of the presence or absence of children, siblings, relatives, and friends. The better the marital relationship, the more the family members living together, the more availability is the social support network and hence the social support, the lesser would be the stress level and better would be the psychological well-being.

Changes in marital status, such as widowhood and divorce, were associated with lower reported well-being. Change in marital status through divorce or widowhood may precipitate changes in other areas such as living arrangement, place of residence, and income. Increasing dependency was found the number one cause of low moral among older people (Clark & Anderson, 1967). Apparently, the negative attitudes toward financial or physical dependency and the strong positive valuation of independence combine to undermine the general well-being of the dependent older person.

Furthermore, change in living arrangement may result from the departure of children or loss of spouse, leaving the individual living alone. Isolation which develops relatively late in life is quite stressful. It increases vulnerability to illness, accidents, malnutrition, and loneliness as found from the study of Katz and Akpom (1976).
All these affect the person’s social support in stress, illness uncertainty scale and the sense of control as well as the effectiveness or the correlation of social support offer by the support group to the scales.

**Working Condition**

Retirement may occur concomitantly with a series of age-related changes, including a decline in economic status, marriage, or more likely remarriage, and a change to living alone. There are often several life events occurring at or near retirement age. For instance, decline of economic well-being or most older people even experience a loss of income. Moreover, after retirement, a fixed income can mean a continuing deterioration in relative position within the income structure. The longer a person lives after retirement, the lower his income status is likely to become as compared to the income of those still working. Conditions surrounding retirement such as state of health and level of income are more important in determining morale and attitude after retirement than is actual loss of work role. Furthermore, the emotional impact of retirement is based on the cumulative effect of many factors such as the life-change events cited above.

Occupational change is less likely to occur among the older than the younger workers. However, if this change occurs, it involves more emotional distresses, loss of working relationship, loss of income, and so forth.

Since the effect and magnitude of social support to one’s sense of control and stress or even illness uncertainty would be affected by many other factors, we could not precisely examine the effect of social support. But one thing I could tell is social
support as a helpful way of communication behavior, is beneficial to a person especially during stressful condition and the more social support one could access, the better psychological well being one would be in.

Implications

The study reviews a current upsurge of interest in social support from other patients with similar disease in the Hong Kong Health Care System. It highlights important factors contributing to the current trend in assistance from patient support group systems. However, perhaps it is important to point out again that while they may be important in understanding the current upsurge of interest in social support from support group systems, none of these factors (i.e., the need to participate, suspicion of professionals, or unavailability of professionals) is really new. No matter what factors accounted for the recent upsurge of the patient support group, there is intrinsic merit in this system, and there is genuine need for patient to participate in their health care decision. Though Chinese would like to surrender control to professionals, but surrendering control can engender a state of threat unless the patient comes to have a complete faith in the health care staff. However, such blind faith is unlikely, particularly over time, when opportunities to summing control of oneself is not a likely choice after a probable history of frustration in trying to cope one’s own. Usually, it is the case that the person has struggle to attain or retain as much personal control as possible, but the failures in doing so and the greater relief and reduced frustration when in the care of others make external control desirable. Thus the loss of external control may be as threatening as the loss of personal control. No one can deny that with the ever increasing cost in health care provision beared by the government, and the rising demand of health care quality, the existing health care
system cannot meet the increasing expectation of the general public, which endanger the traditional way of surrendering control to the professional. With the loss of personal control during the onset of chronic illness, together with the loss of external control caused by the increasing cost burden, the ill will be collapse both psychologically and physically. Therefore, the system of support group would be exigent for remedy during the current situation.

Address the impact of group participation on members’ perceptions of helpfulness of group process and benefits from participating from a longitudinal perspective, in which perceived stress delivered and illness uncertainty reduced by social support obtained from group members both at entrance to the group and over the course of their participation, one may find support groups a more accessible source of advice about medical conditions than visits to physicians or other professionals.

Limitations

As mentioned before, the relationship between sense of control and uncertainty and even group ties or stress scale are not unilateral, rather they have a reciprocal relationship. They are conceived to be both a result of one’s experience with health or illness, life experiences and a determinant of its own right. Hence, this study, by using one-shot survey design could not tell whether change in the items produce change in the value of social support or vice versa and of course, not to say the magnitude. Panel study for say once a month administration for a continuous period (consecutive months/years) is therefore preferred to obtain a valid and precise data on the correlation matrix on the various variables.
The data is collected during the meeting of the group. In this connection, only active members’ opinion received but the less active’s data may not be tapped owing to the time constraint. It is commonly known that members would only be active when they feel that they have received help and support within the context of the group. They move on since they feel that the group has served its purpose, or they may feel that it is time to give back and shift into a helping mode. Therefore, the result may be somehow one-sided (positive). The result would be all-rounded if the time for collecting data is lengthened and the members were being called upon to have the questionnaire completed.

As mentioned, apart from the sense of control, illness uncertainty, and perceived stress, there are some other factors that deserve consideration when thinking about how they and social support are related to each other. In this study, none of these factors, such as sex, group ties, length of participation, marital relationships and living arrangement, working condition, peer pressure and modelling effect, income, religion, etc are taken into consideration or being controlled, only a simplified model proposed.

As discussed, the clustering of these life-change events may be considered as one of the various necessary but not sufficient cause for the development of the sense of control, stress and illness uncertainty a of illness and may account, in part, for the increasing or decreasing effect of social support. If the above mentioned factors are being controlled or manipulated, the result of the study could be more valid and the magnitude for the influences of the variables would be found. These factors may be
acted as an intervening variables that affect the finding of the study. If they were being controlled, the findings would be somewhat different.

**Conclusion**

Reid and Ziegler (1981) suggested that there is a natural bias for persons to see their worlds in terms of cause-effect relationships and that these causes in turn are differentiated as dimensions of personal control versus control by external sources. Put in these terms, wishing to see the world in orderly, causal internal-external ways is not only a need, it is a natural way of thinking. When our experiences are not readily interpretable in terms of causation or the internal-external sources, we become uncomfortable and seek to restore an order or understanding of a cause-effect relationship along an internal-external pattern. However, given order, we prefer to see ourselves as the causal or instrumental agents because this permits us to be more adaptive. Nevertheless, control by oneself is usually not the case, especially when one has caught a chronic illness which lead one to be controlled by other professionals.

Choosing to have one’s health and well-being controlled by others may produce anxiety, leaving the person discontent and in a rather unhappy situation. The irony is that in many cases persons do not see themselves as having any choice in surrendering control to other persons. Surrendering control to others might be the undesirable reality to most of the patients, to safeguard the psychological well-being of the patients, they are very much encourage by carers to participate in whatsoever ways, join the patient support is one of the most cost-efficient ways. Especially in
Hong Kong where the workload of health care professional is too high to look after the psychological need of patients.

In this connection, patient support group, being the source of social support, and based on the principal of empowerment, inclusion, patient participation has emerged as a permanent feature in the Hong Kong medical and health care system. Patients with chronic illness are very much encouraged to join the relevant disease patient support group by the care giver hoping that they could get the social support needed from the similar others, with an ultimate aim to plug the loopholes of medical care created by the present shortage of medical professional.

The result of the study reviewed that social support provided by the support group was very effective in reducing the illness uncertainty and perceived stress of the members. Furthermore, no matter how their sense of control is, they would acquire what they want, which ultimately lessen their stress and illness uncertainty. The most important issue to deal with is to help them (the members) to develop a strong tie where they could find trustful and reliable relationship and willing to surrender their control to others without much psychological distress.

The effect of social support in this study is so impressive because the support is given out during the onset of chronic disease, which presented an enormous and unprecedented psychological and/or physical crisis. When people are facing something very unpredictable and important, it would create lots of stress since the demand and constraint is so high, social support convey at that moment could levied
the stress by providing more resources both tangible and intangible by the similar others. It is a reliable source of support working together with the professional.
References


Seeman, M. (1972). “Alienation and engagement.” (pp. 467-527). In A. Campbell and P. E. Converse (Eds.), The human meaning of social change. New York; Russell Sage


Table 1
Mean and standard deviation for members’ participation and group ties

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months of joining</td>
<td>11.67</td>
<td>12.23</td>
<td>12.04</td>
</tr>
<tr>
<td>SD</td>
<td>4.83</td>
<td>5.16</td>
<td>5.03</td>
</tr>
<tr>
<td>No. of meeting per month</td>
<td>1.85</td>
<td>1.99</td>
<td>1.94</td>
</tr>
<tr>
<td>SD</td>
<td>0.86</td>
<td>0.98</td>
<td>0.94</td>
</tr>
<tr>
<td>Hours of meeting per week</td>
<td>2.58</td>
<td>3.51</td>
<td>3.28</td>
</tr>
<tr>
<td>SD</td>
<td>0.87</td>
<td>1.98</td>
<td>1.74</td>
</tr>
<tr>
<td>No. of member to share with</td>
<td>2.45</td>
<td>3.38</td>
<td>3.07</td>
</tr>
<tr>
<td>SD</td>
<td>0.90</td>
<td>1.47</td>
<td>1.37</td>
</tr>
</tbody>
</table>
Table 2
Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school or below</td>
<td>19</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>F.1 to F.3</td>
<td>7</td>
<td>34</td>
<td>41</td>
</tr>
<tr>
<td>F.4 to F.7</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>College or university</td>
<td>2</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Family Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0 - $10000</td>
<td>10</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>$10001 - $20000</td>
<td>14</td>
<td>45</td>
<td>59</td>
</tr>
<tr>
<td>$20001 - $30000</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>$30001 - $40000</td>
<td>3</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td><strong>No. of Cohabited Family Members</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>1</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Married</td>
<td>29</td>
<td>49</td>
<td>78</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Separated</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Working Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>18</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>Part-time</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Odd jobs</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Student</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>House doing</td>
<td>0</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Retired</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddhism</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Taoism</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Catholicism</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Christianity</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Nil</td>
<td>30</td>
<td>52</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Social companion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>Mean</td>
<td>2.26</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.49</td>
<td>0.58</td>
</tr>
<tr>
<td>Received level</td>
<td>Mean</td>
<td>4.18</td>
<td>4.42</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.27</td>
<td>1.37</td>
</tr>
<tr>
<td><strong>Informational support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>Mean</td>
<td>2.67</td>
<td>2.71</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.92</td>
<td>0.88</td>
</tr>
<tr>
<td>Received level</td>
<td>Mean</td>
<td>4.18</td>
<td>4.54</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.32</td>
<td>1.35</td>
</tr>
<tr>
<td><strong>Tangible support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>Mean</td>
<td>1.80</td>
<td>2.43</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.67</td>
<td>1.04</td>
</tr>
<tr>
<td>Received level</td>
<td>Mean</td>
<td>3.08</td>
<td>3.99</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.77</td>
<td>1.02</td>
</tr>
<tr>
<td><strong>Esteem support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>Mean</td>
<td>2.52</td>
<td>3.19</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.96</td>
<td>2.74</td>
</tr>
<tr>
<td>Received level</td>
<td>Mean</td>
<td>3.38</td>
<td>4.62</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.71</td>
<td>1.61</td>
</tr>
<tr>
<td><strong>Emotional support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>Mean</td>
<td>2.70</td>
<td>3.78</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.96</td>
<td>1.27</td>
</tr>
<tr>
<td>Received level</td>
<td>Mean</td>
<td>3.61</td>
<td>4.84</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.05</td>
<td>1.30</td>
</tr>
</tbody>
</table>
Table 4

The mean score and standard deviation for illness uncertainty, perceived stress and sense of control

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness uncertainty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.14</td>
<td>3.29</td>
<td>3.24</td>
</tr>
<tr>
<td>SD</td>
<td>0.72</td>
<td>0.77</td>
<td>0.75</td>
</tr>
<tr>
<td>Perceived stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.24</td>
<td>3.48</td>
<td>3.40</td>
</tr>
<tr>
<td>SD</td>
<td>0.85</td>
<td>1.05</td>
<td>0.99</td>
</tr>
<tr>
<td>Sense of control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.18</td>
<td>4.42</td>
<td>4.34</td>
</tr>
<tr>
<td>SD</td>
<td>1.00</td>
<td>0.73</td>
<td>0.83</td>
</tr>
</tbody>
</table>
Table 5
Correlation between types of social support and illness uncertainty, perceived stress, sense of control

<table>
<thead>
<tr>
<th></th>
<th>Illness uncertainty</th>
<th>Perceived stress</th>
<th>Sense of control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social companion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>.02</td>
<td>- .02</td>
<td>-.03</td>
</tr>
<tr>
<td>Received level</td>
<td>-.28**</td>
<td>-.16</td>
<td>-.11</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.25*</td>
<td>-.13</td>
<td>-.10</td>
</tr>
<tr>
<td><strong>Informational support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>-.06</td>
<td>.01</td>
<td>-.37**</td>
</tr>
<tr>
<td>Received level</td>
<td>-.581**</td>
<td>-.42**</td>
<td>-.18</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.45**</td>
<td>-.349**</td>
<td>.052</td>
</tr>
<tr>
<td><strong>Tangible support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>.13</td>
<td>.23*</td>
<td>.03</td>
</tr>
<tr>
<td>Received level</td>
<td>-.27**</td>
<td>-.26*</td>
<td>.11</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.33**</td>
<td>-.40**</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Esteem support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>-.075</td>
<td>.028</td>
<td>.06</td>
</tr>
<tr>
<td>Received level</td>
<td>-.15</td>
<td>.01</td>
<td>.299**</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.02</td>
<td>-.02</td>
<td>.13</td>
</tr>
<tr>
<td><strong>Emotional support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>.07</td>
<td>.11</td>
<td>.31**</td>
</tr>
<tr>
<td>Received level</td>
<td>-.02</td>
<td>-.04</td>
<td>.48**</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.10</td>
<td>-.17</td>
<td>.23*</td>
</tr>
<tr>
<td><strong>Total social support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sought level</td>
<td>.12</td>
<td>.25*</td>
<td>.08</td>
</tr>
<tr>
<td>Received level</td>
<td>-.35**</td>
<td>-.23*</td>
<td>.17</td>
</tr>
<tr>
<td>Received - Sought</td>
<td>-.38**</td>
<td>-.34**</td>
<td>.12</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Table 6  
Correlation among illness uncertainty, perceived stress and sense of control

<table>
<thead>
<tr>
<th></th>
<th>Perceived stress</th>
<th>Sense of control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness uncertainty</td>
<td>.81**</td>
<td>-.39**</td>
</tr>
<tr>
<td>Perceived stress</td>
<td>.20*</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).  
* Correlation is significant at the 0.05 level (2-tailed).
Appendix B

The James Internal–External Locus of Control Scale

The James internal-external scale is a 60-item questionnaire. The higher the score the individual obtains the more external his orientation.

1. I like to read newspaper editorials whether I agree with them or not.
2. Wars between countries seem inevitable despite efforts to prevent them.
3. I believe the government should encourage more young people to make science a career.
4. It is usually true of successful people that their good breaks far outweighs their bad breaks.
5. I believe that moderation in all things is the key to happiness.
6. Many times I feel that we might just as well make many of our decisions by flipping a coin.
7. I disapprove of girls who smoke cigarettes in public places.
8. The actions of other people toward me many times have me baffled.
9. I believe it is more important for a person to like his work than to make money at it.
10. Getting a good job seems to be largely a matter of being lucky enough to be in the right place at the right time.
11. It’s not what you know but who you know that really counts in getting ahead.
12. A great deal that happens to me is probably just a matter of chance.
13. I think that people spend too much time watching television these days.
14. I feel that I have little influence over the way people behave.
15. It is difficult for me to keep well informed about foreign affairs.
16. Much of the time the future seems uncertain to me.
17. I think the world is much more unsettled now than it was in our grandfather’s times.
18. Some people seem born to fail while others seem born for success no matter what they do.
19. I believe there should be less emphasis on spectator sports and more on athletic participation.
20. It is difficult for ordinary people to have much control over what politicians do in office.
21. I tend to daydream more than I should.
22. I feel that many people could be described as victims of circumstances beyond their control.
23. Movies do not seem as good as they used to be.
24. It seems many times that the grades one gets in school are more dependent on the teacher’s whims than on what the student can really do.
25. Money shouldn’t be a person’s main consideration in choosing a job.
26. It isn’t wise to plan too far ahead because not things turn out to be a matter of good or bad fortune anyhow.
27. At one time I wanted to become a newspaper reporter.
28. I can’t understand how it is possible to predict other people’s behavior.
29. I enjoy smoking cigarettes and will continue to be a smoker.
30. When things are going well for me I consider it due to a run of good luck.
31. I believe the federal government has been taking over too many of the affairs of private management.
32. There’s not much use in trying to predict which questions a teacher is going to ask on an examination.
33. I get more ideas from taking about things than reading about them.
34. Most people don’t realize the extent to which their lives are controlled by accidental happenings.
35. At one time I wanted to be an actor (or actress).
36. I have usually found that what is going to happen will happen, regardless of my actions.
37. Life in a small town offers more real satisfactions than life in a large city.
38. Most of the disappointing things in my life have contained a large element of chance.
39. I would rather be a successful teacher than a successful businessman.
40. I don’t believe that a person can really be a master of his fate.
41. I find mathematics easier to study than literature.
42. Success is mostly a matter of getting good breaks.
43. I think it is more important to be respected by people than to be liked by them.
44. Events in the world seem to be beyond the control of most people.
45. I think our country should take a more active role in world affairs.
46. I feel that most people can’t really be held responsible for themselves since no one has much choice about where he was born or raised.
47. I like to figure out problems and puzzles that other people have trouble with.
48. Many times the reactions of people seem haphazard to me.
49. I rarely lose when playing card games.
50. There’s not much use in worrying about things – what will be, will be.
51. I think that everyone should belong to some kind of church.
52. Success in dealing with people seems to be more a matter of the other person’s moods and feelings at the time rather than one’s own actions.
53. One should not place too much faith in newspaper reports.
54. I think that life is mostly a gamble.
55. I am very stubborn when my mind is made up about something.
56. Many times I feel that I have little influence over the things that happen to me.
57. I like popular music better than classical music.
58. Sometimes I feel that I don’t have enough control over the direction my life is taking.
59. I sometimes work at difficult things too long even when I know they are hopeless.
60. Life if too full of uncertainties.
Appendix C

The Nowicki-Strickland Locus of Control Scale

The Nowicki-Strickland locus of control scale is a paper and pencil measure consisting of 40 questions, which are, answered either yes or no by placing a mark next to the question. The higher the score the more external the orientation.

Nowicki-Strickland Scale

1. Do you believe that most problems will solve themselves if you just don’t fool with them?
2. Do you believe that you can stop yourself from catching a cold?
3. Are some kids just born lucky?
4. Most of the time do you feel that getting good grades means a great deal to you?
5. Are you often blamed for things that just aren’t your fault?
6. Do you believe that if somebody studies hard enough he or she can pass any subject?
7. Do you feel that most of the time it doesn’t pay to try hard because things never turn out right anyway?
8. Do you feel that if things start out well in the morning that it’s going to be a good day no matter what you do?
9. Do you feel that most of the time parents listen to what their children have to say?
10. Do you believe that wishing can make good things happen?
11. When you get punished does it usually seem it’s for no good reason at all?
12. Most of the time do you find it hard to change a friend’s (mind) opinion?
13. Do you think that cheering more than luck helps a team to win?
14. Do you feel that it’s nearly impossible to change your parent’s mind about anything?
15. Do you believe that your parents should allow you to make most of your own decisions?
16. Do you feel that when you do something wrong there’s very little you can do to make it right?
17. Do you believe that most kids are just born good at sports?
18. Are most of the other kids your age stronger than you are?
19. Do you feel that one of the best ways to handle most problems is just not to think about them?
20. Do you feel that you have a lot of choice in deciding who your friends are?
21. If you find a four-leaf clover do you believe that it might bring you good luck?
22. Do you often feel that whether you do your homework has much to do with what kind of grades you get?
23. Do you feel that when a kid your age decides to hit you, there’s little you can do to stop him or her?
24. Have you ever had a good luck charm?
25. Do you believe that whether or not people like you depends on how you act?
26. Will your parents usually help you if you ask them to?
27. Have you felt that when people were mean to you it was usually for no reason at all?
28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
29. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?
30. Do you think that kids can get their own way if they just keep trying?
31. Most of the time do you find it useless to try to get your own way at home?
32. Do you feel that when good things happen they happen because of hard work?
33. Do you feel that when somebody your age wants to be your enemy there’s little you can do to change matter?
34. Do you feel that it’s easy to get friends to do what you want them to?
35. Do you usually feel that you have little to say about what you get to eat at home?
36. Do you feel that when someone doesn’t like you there’s little you can do about it?
37. Do you usually feel that it’s almost useless to try in school because most other children are just plain smarter than you are?
38. Are you the kind of person who believes that planning ahead makes things turn out better?
39. Most of the time, do you feel that you have little to say about what your family decides to do?
40. Do you think it’s better to be smart than to be lucky?
Appendix D

The Reid-Ware Three-Factor Internal-External Scale

The Reid-Ware scale is a 45-item forced choice questionnaire composed of the following three factors: self-control, social systems control, and fatalism. The higher the score the more external the individual. There are 13 filler items.

1. (A) Various sports activities in the community help increase solidarity amongst people in the community.
   (B) Various sports activities in the community can lead to rivalry detrimental to the solidarity of the community.

2. (A) War brings out the worst aspects of men.
   (B) Although war is terrible, it can have some value.

3. (A) There will always be wars no matter how hard people try to prevent them.
   (B) One of the major reasons why we have wars is because people do not take enough interest in politics.

4. (A) Even when there was nothing forcing me, I have found that I will sometimes do things I really did not want to do.
   (B) I always feel in control of what I am doing

5. (A) There are institutions in our society that have considerable control over me.
   (B) Little in this world controls me, I usually can do what I decide to do.

6. (A) I would like to live in a small town or a rural environment.
   (B) I would like to live in a large city.

7. (A) For the average citizen becoming a success is a matter of hard work, luck has little or nothing to do with it.
   (B) For the average guy getting a good job depends mainly on being in the right place at the right time.

8. (A) Patriotism demands that the citizens of a nation participate in any war.
   (B) To be a patriot for one’s country does not necessarily mean he must go to war for his country.

9. (A) In my case getting what I want has little or nothing to do with luck.
   (B) It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
10. (A) Sometimes I impulsively do things which at other time I definitely would not let myself do.
   (B) I find that I can keep my impulses in control.

11. (A) In many situations what happens to people seems to be determined by fate.
   (B) People do not realize how much they personally determine their own outcomes.

12. (A) College students should be trained in times of peace to assume military duties.
   (B) The ills of war are greater than any possible benefits.

13. (A) Most people do not realize the extent to which their lives are controlled by accidental happenings.
   (B) For any guy, there is no such thing as luck.

14. (A) If I put my mind to it I could have an important influence on what a politician does in office.
   (B) When I took at it carefully I realize it is impossible for me to have any really important influence over what politicians do.

15. (A) With fate the way it is, many times I feel that I have little influence over the things that happen to me.
   (B) It is impossible for me to believe that chance or luck plays an important role in my life.

16. (A) When I put my mind to it I can constrain my emotions.
   (B) There are moments when I cannot subdue my emotions and keep them in check.

17. (A) Every person should give some of his time for the good of his town or country.
   (B) People would be a lot better off if they could live far away from other people and never have to do anything for them.

18. (A) As far as the affairs of our country are concerned, most people are the victims of forces they do not control and frequently do not even understand.
   (B) By taking part in political and social events the people can directly control much of the country’s affairs.

19. (A) People cannot always hold back their personal desires; they will behave out of impulse.
   (B) If they want to, people can always control their immediate wishes and not let these motives determine their total behavior.
20. (A) Many times I feel I might just as well decide what to do by flipping a coin.
   (B) In most case I do not depend on luck when I decide to do something.

21. (A) Our federal government should promote the mass production of low rental apartment buildings to reduce the housing shortage.
   (B) The best way for our government to reduce the housing shortage is to make low interest mortgages available and to stimulate the building of low cost houses.

22. (A) I do not know why politicians make the decisions they do.
   (B) It is easy for me to understand why politicians do the things they do.

23. (A) Although sometimes it is difficult, I can always willfully restrain my immediate behavior.
   (B) Something I cannot do is have complete mastery over all my behavioral tendencies.

24. (A) In the long run people receive the respect and good outcomes they worked for.
   (B) Unfortunately, because of misfortune or bad luck, the average guy’s worth often passes unrecognized no matter how hard he tries.

25. (A) With enough effort people can wipe out political corruption.
   (B) It is difficult for people to have much control over the things politicians do in office.

26. (A) Letting your friends down is not so bad because you cannot do good all the time for everybody.
   (B) I feel very bad when I have failed to finish a job I promised I would do.

27. (A) By active participation in the appropriate political organizations people can do a lot to keep the cost of living from going higher.
   (B) There is very little people can do to keep the cost of living from going higher.

28. (A) It is possible for me to behave in a manner very different from the way I would want to behave.
   (B) It would be very difficult for me to not have mastery over the way I behave.

29. (A) In this world I am affected by social forces which I neither control nor understand.
   (B) It is easy for me to avoid and function independently of any social forces that may attempt to have control over me.
30. (A) It hurts more to lose money than to lose a friend.
    (B) The people are the most important things in this world of ours.

31. (A) What people get out of life is always a function of how much effort they put into it.
    (B) Quite often one finds that what happens to people has no relation to what they do, what happens just happens.

32. (A) Generally speaking, my behavior is not governed by others.
    (B) My behavior is frequently determined by other influential people.

33. (A) People can and should do what they want to do both now and in the future.
    (B) There is no point in people planning their lives too far in advance because other groups of people in our society will invariably upset their plans.

34. (A) Happiness is having your own house and car.
    (B) Happiness to most people is having their own close friends.

35. (A) There is no such thing as luck, what happens to me is a result of my own behavior.
    (B) Sometimes I do not understand how I can have such poor luck.

36. (A) More emphasis should be placed on teaching the principles of Christianity in public school.
    (B) Christianity should not be included in a school curriculum; it can be taught in church.

37. (A) Many of the unhappy things in people’s lives are at least partly due to bad luck.
    (B) People’s misfortunes result from the mistakes they make.

38. (A) Self-regulation of one’s behavior is always possible.
    (B) I frequently find that when certain things happen to me I cannot restrain my reaction.

39. (A) The average man can have an influence in government decisions.
    (B) This world is run by a few people in power and there is not much the little guy can do about it.

40. (A) When I make up my mind, I can always resist temptation and keep control of my behavior.
    (B) Even if I try not to submit, I often find I cannot control myself from some of the enticements in life such as over-eating or drinking.
41. (A) My getting a good job or promotion in the future will depend a lot on my getting the right turn of fate.
   (B) When I get a good job, It is always a direct result of my own ability and/or motivation.

42. (A) Successful people are mostly honest and good.
   (B) One should not always associate achievement with integrity and honor.

43. (A) Most people do not understand why politicians behave the way they do.
   (B) In the long run people are responsible for bad government on a national as well as on a local level.

44. (A) I often realize that despite my best efforts some outcomes seem to happen as if fate planned it that way.
   (B) The misfortunes and successes I have had were the direct result of my own behavior.

45. (A) Most people are kind and good.
   (B) People will not help others unless circumstances force them to.
Appendix E

Illness Uncertainty Scale

1. I don’t know what is wrong with me.
2. I have a lot of questions without answers.
3. I am unsure if my illness is getting better or worse.
4. It is unclear how bad my pain will be.
5. Because of the unpredictability of my illness, I cannot plan for the future.
6. I don’t know how I should manage my situation.
7. It is not clear what is going to happen to me.
8. I can generally predict how my illness will go.
9. I don’t know what the diagnosis is or will be.

Appendix F

The Hassles Scale

Directions: Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.

Listed in the center of the following pages are a number of ways in which a person can feel hassled. First, circle the hassles that have happened to you in the past month. Then look at the numbers on the right of the items you circled. Indicate by circling a 1, 2 or 3 how SEVERE each of the circled hassles has been for you in the past month. If a hassle did not occur in the last month do NOT circle it.

SEVERITY
1. Somewhat severe
2. Moderately severe
3. Extremely severe

HASSLES

(1) Misplacing or losing things 1 2 3
(2) Troublesome neighbors 1 2 3
(3) Social obligations 1 2 3
(4) Inconsiderate smokers 1 2 3
(5) Troubling thoughts about your future 1 2 3
(6) Thoughts about death 1 2 3
(7) Health of a family member 1 2 3
(8) Not enough money for clothing 1 2 3
(9) Not enough money for housing 1 2 3
(10) Concerns about owing money 1 2 3
(11) Concerns about getting credit 1 2 3
(12) Concerns about money for emergencies 1 2 3
(13) Someone owes you money 1 2 3
(14) Financial responsibility for someone who doesn’t live with you 1 2 3
(15) Cutting down on electricity, water, etc. 1 2 3
(16) Smoking too much 1 2 3
(17) Use of alcohol 1 2 3
(18) Personal use of drugs 1 2 3
(19) Too many responsibilities 1 2 3
(20) Decisions about having children 1 2 3
(21) Non-family members living in your house 1 2 3
(22) Care for pet
(23) Planning meals
(24) Concerned about the meaning of life
(25) Trouble relaxing
(26) Trouble making decisions
(27) Problems getting along with fellow workers
(28) Customers or clients give you a hard time
(29) Home maintenance (inside)
(30) Concerns about job security
(31) Concerns about retirement
(32) Laid-off or out of work
(33) Don’t like current work duties
(34) Don’t like fellow workers
(35) Not enough money for basic necessities
(36) Not enough money for food
(37) Too many interruptions
(38) Unexpected company
(39) Too much time on hands
(40) Having to wait
(41) Concerns about accidents
(42) Being lonely
(43) Not enough money for health care
(44) Fear of confrontation
(45) Financial security
(46) Silly practical mistakes
(47) Inability to express yourself
(48) Physical illness
(49) Side effects of medication
(50) Concerns about medical treatment
(51) Physical appearance
(52) Fear of rejection
(53) Difficulties with getting pregnant
(54) Sexual problems that result from physical problems
(55) Sexual problems other than those resulting from physical problems
(56) Concerns about health in general
(57) Not seeing enough people
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>Friends or relatives too far away</td>
<td>1 2 3</td>
</tr>
<tr>
<td>59</td>
<td>Preparing meals</td>
<td>1 2 3</td>
</tr>
<tr>
<td>60</td>
<td>Wasting time</td>
<td>1 2 3</td>
</tr>
<tr>
<td>61</td>
<td>Auto maintenance</td>
<td>1 2 3</td>
</tr>
<tr>
<td>62</td>
<td>Filling out forms</td>
<td>1 2 3</td>
</tr>
<tr>
<td>63</td>
<td>Neighborhood deterioration</td>
<td>1 2 3</td>
</tr>
<tr>
<td>64</td>
<td>Financing children’s education</td>
<td>1 2 3</td>
</tr>
<tr>
<td>65</td>
<td>Problems with employees</td>
<td>1 2 3</td>
</tr>
<tr>
<td>66</td>
<td>Problems on job due to being a woman or man</td>
<td>1 2 3</td>
</tr>
<tr>
<td>67</td>
<td>Declining physical abilities</td>
<td>1 2 3</td>
</tr>
<tr>
<td>68</td>
<td>Being exploited</td>
<td>1 2 3</td>
</tr>
<tr>
<td>69</td>
<td>Concerns about bodily functions</td>
<td>1 2 3</td>
</tr>
<tr>
<td>70</td>
<td>Rising prices of common goods</td>
<td>1 2 3</td>
</tr>
<tr>
<td>71</td>
<td>Not getting enough rest</td>
<td>1 2 3</td>
</tr>
<tr>
<td>72</td>
<td>Not getting enough sleep</td>
<td>1 2 3</td>
</tr>
<tr>
<td>73</td>
<td>Problems with aging parents</td>
<td>1 2 3</td>
</tr>
<tr>
<td>74</td>
<td>Problems with your children</td>
<td>1 2 3</td>
</tr>
<tr>
<td>75</td>
<td>Problems with persons younger than yourself</td>
<td>1 2 3</td>
</tr>
<tr>
<td>76</td>
<td>Problems with your lover</td>
<td>1 2 3</td>
</tr>
<tr>
<td>77</td>
<td>Difficulties seeing or hearing</td>
<td>1 2 3</td>
</tr>
<tr>
<td>78</td>
<td>Overloaded with family responsibilities</td>
<td>1 2 3</td>
</tr>
<tr>
<td>79</td>
<td>Too many things to do</td>
<td>1 2 3</td>
</tr>
<tr>
<td>80</td>
<td>Unchallenging work</td>
<td>1 2 3</td>
</tr>
<tr>
<td>81</td>
<td>Concerns about meeting high standards</td>
<td>1 2 3</td>
</tr>
<tr>
<td>82</td>
<td>Financial dealings with friends or acquaintances</td>
<td>1 2 3</td>
</tr>
<tr>
<td>83</td>
<td>Job dissatisfactions</td>
<td>1 2 3</td>
</tr>
<tr>
<td>84</td>
<td>Worries about decisions to change jobs</td>
<td>1 2 3</td>
</tr>
<tr>
<td>85</td>
<td>Trouble with reading, writing, or spelling abilities</td>
<td>1 2 3</td>
</tr>
<tr>
<td>86</td>
<td>Too many meetings</td>
<td>1 2 3</td>
</tr>
<tr>
<td>87</td>
<td>Problems with divorce or separation</td>
<td>1 2 3</td>
</tr>
<tr>
<td>88</td>
<td>Trouble with arithmetic skills</td>
<td>1 2 3</td>
</tr>
<tr>
<td>89</td>
<td>Gossip</td>
<td>1 2 3</td>
</tr>
<tr>
<td>90</td>
<td>Legal problems</td>
<td>1 2 3</td>
</tr>
<tr>
<td>91</td>
<td>Concerns about weight</td>
<td>1 2 3</td>
</tr>
<tr>
<td>92</td>
<td>Not enough time to do the things you need to do</td>
<td>1 2 3</td>
</tr>
<tr>
<td>93</td>
<td>Television</td>
<td>1 2 3</td>
</tr>
<tr>
<td>94</td>
<td>Not enough personal energy</td>
<td>1 2 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>(95)</td>
<td>Concerns about inner conflicts</td>
<td></td>
</tr>
<tr>
<td>(96)</td>
<td>Feel conflicted over what to do</td>
<td></td>
</tr>
<tr>
<td>(97)</td>
<td>Regrets over past decisions</td>
<td></td>
</tr>
<tr>
<td>(98)</td>
<td>Menstrual (period) problems</td>
<td></td>
</tr>
<tr>
<td>(99)</td>
<td>The weather</td>
<td></td>
</tr>
<tr>
<td>(100)</td>
<td>Nightmares</td>
<td></td>
</tr>
<tr>
<td>(101)</td>
<td>Concerns about getting ahead</td>
<td></td>
</tr>
<tr>
<td>(102)</td>
<td>Hassles from boss or supervisor</td>
<td></td>
</tr>
<tr>
<td>(103)</td>
<td>Difficulties with friends</td>
<td></td>
</tr>
<tr>
<td>(104)</td>
<td>Not enough time for family</td>
<td></td>
</tr>
<tr>
<td>(105)</td>
<td>Transportation problems</td>
<td></td>
</tr>
<tr>
<td>(106)</td>
<td>Not enough money for transportation</td>
<td></td>
</tr>
<tr>
<td>(107)</td>
<td>Not enough money for entertainment and recreation</td>
<td></td>
</tr>
<tr>
<td>(108)</td>
<td>Shopping</td>
<td></td>
</tr>
<tr>
<td>(109)</td>
<td>Prejudice and discrimination from others</td>
<td></td>
</tr>
<tr>
<td>(110)</td>
<td>Property, investments or taxes</td>
<td></td>
</tr>
<tr>
<td>(111)</td>
<td>Not enough time for entertainment and recreation</td>
<td></td>
</tr>
<tr>
<td>(112)</td>
<td>Yardwork or outside home maintenance</td>
<td></td>
</tr>
<tr>
<td>(113)</td>
<td>Concerns about news events</td>
<td></td>
</tr>
<tr>
<td>(114)</td>
<td>Noise</td>
<td></td>
</tr>
<tr>
<td>(115)</td>
<td>Crime</td>
<td></td>
</tr>
<tr>
<td>(116)</td>
<td>Traffic</td>
<td></td>
</tr>
<tr>
<td>(117)</td>
<td>Pollution</td>
<td></td>
</tr>
</tbody>
</table>

**HAVE WE MISSED ANY OF YOUR HASSLES? IF SO, WRITE THEM IN BELOW:**

**ONE MORE THING: HAS THERE BEEN A CHANGE IN YOUR LIFE THAT AFFECTED HOW YOU ANSWERED THIS SCALE? IF SO, TELL US WHAT IT WAS:**

1 2 3
Appendix G

Questionnaire for Patient Support Group

Introduction

This questionnaire, aim at studying how the patient support group could benefit the members, hoping to give light to the role of the support group with an ultimate aim to foster the development and growth of the group. The questionnaire is anonymous and all the information would be keep confidential while the data would only be used in the academic level.

Members’ participation

1. How long have you been in this support group? (counting from the first time you join the group since its establishment)
2. Usually, how many times per month would you participate in the group’s activities?
3. How many hours per week would you spend in meeting the group members?
4. How many group members whom you could share with?

Members’ sought and received

For item 15 to 14, please rank your sought and received level (from 1 to 7) accordingly:
Sought level: from (1) not even a bit to (7) sought desperately
Received level: from (1) not even a bit to (7) received very sufficiently

<table>
<thead>
<tr>
<th>Sought Level (1 – 7)</th>
<th>Received Level (1 – 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Meet more friends in the same boat.</td>
<td>________</td>
</tr>
<tr>
<td>6. Widen the social circle.</td>
<td>________</td>
</tr>
<tr>
<td>7. Obtain more health care information.</td>
<td>________</td>
</tr>
<tr>
<td>8. Obtain more disease-related information.</td>
<td>________</td>
</tr>
<tr>
<td>9. Receive tangible support from group members.</td>
<td>________</td>
</tr>
<tr>
<td>10. Enjoy more resources, like purchase discount, faster referral services, etc.</td>
<td>________</td>
</tr>
<tr>
<td>11. Receive validation from group members.</td>
<td>________</td>
</tr>
<tr>
<td>12. Receive compliment from group members.</td>
<td>________</td>
</tr>
<tr>
<td>13. Sharing with group members.</td>
<td>________</td>
</tr>
<tr>
<td>14. Understanding from group members.</td>
<td>________</td>
</tr>
</tbody>
</table>
**Self-assessment**

Please rank in the following items (15-41) accordingly by circle the appropriate number (1-7):

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>I don’t know what is wrong with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>I have a lot of questions without answers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>I am unsure if my illness is getting better or worse.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td>It is unclear how bad my pain will be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td>Because of the unpredictability of my illness, I cannot plan for the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td>I don’t know how I should manage my situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21.</td>
<td>It is not clear what is going to happen to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22.</td>
<td>I don’t know what the diagnosis is or will be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23.</td>
<td>Your health situation prevents you from doing things you like to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24.</td>
<td>Your health situation makes you dependent on others in which you feel very uneasy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25.</td>
<td>You have no hope over the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26.</td>
<td>Your health put a lot of stress on you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27.</td>
<td>You feel anxious about the development of your health condition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28.</td>
<td>You anxious about the side effects of medical treatment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29.</td>
<td>You are often afraid of dying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30.</td>
<td>You have trouble relaxing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31.</td>
<td>You are anxious about the process of medical treatment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32.</td>
<td>Your health condition put forth the worry about the prejudice and discrimination from others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33.</td>
<td>Your health condition put forth the worry about the physical appearance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34.</td>
<td>A great deal that happens to me is probably just a matter of chance and uncontrollable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35.</td>
<td>I don’t believe that a person can really be a master of his fate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36.</td>
<td>I have usually found that what is going to happen will happen, regardless of my actions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37.</td>
<td>It isn’t wise to plan too far ahead because most things turn out to be a matter of good or bad fortune anyhow.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38.</td>
<td>I always feel in control of the result.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39.</td>
<td>I belief I could be the master of the fate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40.</td>
<td>Most of the time, you feel that you can change what might happen tomorrow by what you do today.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41.</td>
<td>I think it’s better to be smart than to be lucky.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**Personal Data:**

42. **Sex:**  M/F

43. **Age:**  ______

44. **Education:**  
   - Primary School or below
   - F.1 - F.3
   - F.4 – F.7
   - College or University
   - University or above

45. **Total family income per month (including all kinds of allowance):**  $______

46. **Total number of cohabited family members:**  ______

47. **Status:**  
   - Single
   - Married
   - Divorced
   - Separate
   - Widow

48. **Working status:**  
   - Full-time
   - Part-time
   - Odd Jobs
   - Housewife
   - Retired
   - Students
   - Unemployed

49. **Religion:**  
   - Buddhism
   - Taoism
   - Catholicism
   - Christianity