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Introduction

Stress among university students is a hot and interesting topic of research. Stress effects on both physical and mental health. Stress management is the well known method of counseling for students in university counseling centers to cope up with the individual stress and to promote the individual mental health care and to maintain the higher quality of life. Coping is not only to react on the stress but to do something before stress occurs. Greenglass found that the coping has multiple positive functions for health promotion. Proactive coping incorporates a confirmatory and positive approach to dealing with stressors. The importance of positive individual traits and positive institutions for improving quality of life and preventing pathology should be considered. Proactive coping focuses on improving quality of life and in so doing incorporates elements of positive psychology (Greenglass, 1982, 1998, 2000).

It is believed that positive beliefs may predict to higher levels of physical health by promoting better health practices. The individuals who have a positive sense of self worth and believe in their own ability to exert control, may be more likely to practice conscientious health habits (Greenglass & Burke, 2000). Positive emotional states are related to good social relationships (Norcross, DiClemente, & Prochaska, 1986). Self-confident and optimistic individuals may have more social support and they may be more effective in mobilizing it when they experience a lot of stress (Taylor & Brown, 1994). More over, the individuals who have well developed psycho social resources with a sense of personal control, high self-esteem and optimism, are more likely to cope proactively with respect to health which may minimize the effects of stress or anger (Aspinwall & Taylor, 1997; Spielberger, 1988).

Proactive coping is a coping strategy that is multidimensional and forward-looking. Proactive coping integrates processes of personal quality of life management with those of self-regulatory goal attainment (Armstrong-Stassen, 1994). Proactive coping differs from traditional conceptions of coping. Traditional coping forms tend to be reactive coping in that they

deal with stressful events that have already occurred, with the aim of compensating for loss or harm in the past; proactive coping is more future-oriented. Since the stressful events have already taken place, reactive coping efforts are directed toward either compensating for a loss or alleviating harm. Generally, this is the type of coping that has been assessed in much of the research on coping to date. In contrast, proactive coping is oriented more towards the future. It consists of efforts to build up general resources that facilitate promotion of challenging goals and personal growth. The distinction between reactive coping and proactive coping is that reactive coping has been regarded as risk management and proactive coping is goal management (Schwarzer, 1999a). In proactive coping, people have a vision. They see risks, demands, and opportunities in the future, but they do not appraise these as threats, harm, or loss. Rather, they perceive difficult situations as challenges. Proactive coping becomes goal management instead of risk management.

Further, the motivation for proactive coping is more positive than in traditional coping in that it derives from perceiving situations as challenging and stimulating whereas reactive coping emanates from risk appraisal.

Dousa-hou is a Japanese psychological rehabilitation process was found effective to improve the psychological care, and motoric awareness of one's bodily movements for goal management against stress factors (Naruse, 1973, 1985, 1992). Dousa-hou was found effective for the children with cerebral palsy to improve control of their bodily movements and postures, reduce anxiety and depression caused by their disabilities, and socially interact more with others (Ogawa, 1987; Harizuka, 1992; Konno, 1993; Kumar & Harizuka, 2001). Mothers and first-degree relatives of the child with disabilities received more social support through Dousa-hou therapy than usual social interactions during Dousa-hou activities during a one-week camp of psycho-rehabilitation (Kim & Kumar, 2004).

The social mode of interaction comprises physical and verbal strategies and usually is observed as physical comforting, smiling, nonverbal vocalizing, and face-to-face verbal communication (Snow, 1984). Psychological health improvement factors include feeling better, being more comfortable, taking more interest in life, and the like, and awareness of health-tending decisions and interpersonal relationships (Barron, 1963). Through the training process of Dousa-hou, a trainee experiences objective judgment of body movements and develops communication skills for responding to a trainer in attempting a desired body movement task with self-awareness contributing to various factors for stress management (Tokunaga, 2002; Kumar, Harizuka, Imura, Furukawa, Kim et al., 2005). Knowing the above, it can be studied that what are the general states of anxiety and the situations of proactive coping against stress among Japanese university students studying in a particular region. In what way the students are coping with

the different situations of stress within their ranges of social anxiety.

Method

Procedure.— To measure the general state of social anxiety of the subjects, the Social Anxiety Scale – part I & II of 28 items in each was administered among the first year and second year of university students in Fukuoka prefecture of Japan. The items were answered on “yes =1” and “no = 0” anchors.

To measure the proactive coping behavior of the subjects, the Proactive Coping Inventory was also administered among the same subjects on 55 items at 7 sub-scales of proactive coping, reflective coping, strategic coping, preventive coping, instrumental support seeking, emotional support seeking, and avoidance coping. The items were answered on a 4-point scale regarding proactive coping, with anchors of 1 : Not at all true and 4 : Completely true. The correlation between the social anxiety scales part I and part II was also measured.

Participants.— A total of $N = 20$ first and second year university students of (M age = 19.4 yr., $SD = 2.6$) answered the Social Anxiety Scale Part I, Part II, and Proactive Coping Inventory (7 sub-scales) taking 60 minutes. All the subjects gave their informed consent before the scales administration. They filled out the original sample of the three scales individually. The subjects had no specific disabilities.

Statistical analysis.— Factor analysis was applied to examine the trend of proactive coping tendency of the subjects and the intercept among the sub-scales. Percentage of the item responses were also calculated in Social Anxiety Scales and Proactive Coping Inventory. The Pearson correlation between Social Anxiety Scale Part I and Part II was also calculated.

Results-

The analyses showed the following results as in *table 1*. In total, subjects showed their responses slightly better on ‘no’ (56.9%) than ‘yes’ (43.1%) at the items of Social Anxiety Scale Part-I. Mean percentage of the response at the items was like : ‘I feel easy in a situation of interacting with an unknown person’, the yes response was 10%. ‘I do not bother to be with an unknown person’, the yes response was 15%. ‘I always search an excuse to avoid participation in a social event’, the yes response was 25%. ‘I am trying to avoid the public interaction’, the yes response was only 5 %. ‘I do not plan to avoid the meeting to somebody’, the no response was 85%. ‘I will talk without hesitation to a person above in status to me’, the yes response was 90%.

Table 1. Percentage of the “yes” and “no” responses of the subject on the Social Anxiety Scale - Part I ($n = 20, M = 12.05, SD = 4.08$).

	社会的不安尺度 (Social Anxiety Scale - Part I)	はい%	いいえ%
1.	私は見知らぬ人と交わるような状況にあっても、くつろいでいられる。	10	90
2.	私は見知らぬひとと交わる状況を強いられることを避けている。	35	65
3.	私はよく知らない人や見知らぬ人といっても全然気にならない。	15	85
4.	私は人を避けたいという格別な願いはない。	85	15
5.	私はしばしば見知らぬ人と交わる場面で気が動転することがある。	40	60
6.	私はしばしば見知らぬ人と交わる場面でも落ち着いており、心地良く感じる。	30	70
7.	私は普段、異性とも、くつろいで話している。	35	65
8.	私は余りよく知らない人と話すことを避けている。	55	45
9.	新しく人と合う機会があれば、私はいつも参加している。	35	65
10.	男女ともに参加する話し合いでは、私はいつも不安になったり、緊張している。	60	40
11.	私はよく知らない人といると、いつも不安になる。	50	50
12.	私は集団の中にも、いつもくつろいでいられる。	45	55
13.	私はいつも人から離れていることを好む。	25	75
14.	私は通常、知らない人と一緒に住んでいると居心地悪い。	70	30
15.	私はいつも初対面の人と合う時でも落ち着いている。	25	75
16.	私は他人に紹介されると、不安で緊張する。	50	50
17.	知らない人ばかりの部屋の中にも、とにかく私は入るかもしれない。	40	60
18.	私は大勢の人と交わる場面を避けたい。	40	60
19.	私の目上の方が私と話したがっていたら、私は喜んで話をする。	90	10
20.	私は集団の中にも一人ぼっちだと感じる。	30	70
21.	私は人を避ける傾向がある。	45	55
22.	私は社交的な集まりであるパーティで人と話すことは気にならない。	65	35
23.	私は大勢の人の中ではくつろげない。	60	40
24.	私はいつも社会的な行事を避けるために言い訳を考えている。	25	75
25.	私は時々、他の人同士を紹介することがある。	60	40
26.	私は公式な場を避けようと努力している。	5	95
27.	私は普段どのような社会的行事にも出向いている。	30	70
28.	私は他人と一緒にくつろげる。	50	50
	Total	43.1	56.9

Table 2. Percentage of the “yes” and “no” responses of the subject on the Social Anxiety Scale - Part II ($n = 20, M = 13.15, SD = 4.27$).

	社会的不安尺度 (Social Anxiety Scale - Part II)	はい%	いいえ%
1.	私は他人に分別のなさを見つけても、滅多に悩まない。	25	75
2.	私は大した問題がないと分かっているけど、人が自分をどう思うだろうと心配になる。	85	15
3.	私は誰かが私を評価していることを知ると、緊張して神経質になる。	65	35
4.	私は人が自分に対して好ましくない印象を抱いてきたことを知っても、気にしない。	25	75
5.	私は自分が社会的間違いをしたとき、ひどくうろたえる。	65	35
6.	私は自分の大切な人からどう思われているかなど余り気にしない。	15	85
7.	私は自分が馬鹿げて見えたり、馬鹿なことをして物笑いになっていないかいつも恐れている。	30	70
8.	他人が私に同意しなくても、私はほとんど影響を受けない。	60	40
9.	私は他人が私の欠点に気づくことをたびたび恐れている。	20	80
10.	もし他人が私の大切さを見出さなくても、私は構わない。	40	60
11.	もし誰かが私を評価するなら、その人は私が最低であると見なすだろう。	25	75
12.	私は他人が私の言ったことに賛成しないのではないかと恐れている。	40	60
13.	私は人が自分に文句を言うのではと恐れている。	45	55
14.	他人が私のことをどう考えていようと、私は構わない。	40	60
15.	私は自分が誰かを満足させなくても、必ずしもおろおろすることはない。	60	40
16.	私は誰かと話しているとき、相手が私について何を考えるだろうと心配になる。	70	30
17.	我々は時々社会的な過ちを犯さざるを得ない存在なので、そのことを心配しても無駄だと私は思う。	60	40
18.	私がどのような印象を与えているのか、しばしば心配になる。	80	20
19.	私は自分の目上の人から自分のことをどう思っているか、非常に心配だ。	70	30
20.	もしも誰かが私のことを評価していると私が知っても、そのことで私はほとんど影響をされない。	45	55
21.	他人が私のことをつまらないと考えていないか心配になる。	55	45
22.	他人が私のことをどう見なすだろうかなど、私はほとんど気にしない。	40	60
23.	時々私は他の人が自分のことをどう思っているのかを余りにも心配しすぎていると思う。	55	45
24.	私はしばしば自分が何か悪いことを言ったり、やったりするのではないかと心配である。	50	50
25.	人が自分に対してどんな意味を持っているかについて私はしばしば無関心である。	25	75
26.	私にとって大切な人が私のことをあまり考えていないのではと、私はたびたび心配になる。	45	55
27.	私の友達が私についてどう思っているのかと、私はくよくよする。	30	70
28.	私は自分が目上の人から評価されていると知ると、緊張して神経質になる。	60	40
	Total	46.9	53.1

Results of *table 2*, also showed that the response of the subjects was slightly better on 'no' (53.1%) than 'yes' (46.9%). 'I Do not worry about the discrimination the people are doing', the no response was 75%. 'I worried about people's thinking about me for a thing which hardly matters', the yes response was 85%. 'I do not care for what an important person to me is thinking', the no response was 85%. 'I am reluctant about the meaning the people are taking about me', the no response was 75%. 'I am worried about the impression I am leaving on the people', the yes response was 80%. The group effects of both the scales was not significant ($p > .05$). The Pearson correlation between the social anxiety scales part I & II was; $r = .606$ ($p < .001$). It showed that the subjects rated the scales in a reliable way and there was much coherence between the part I and part II of the social anxiety scale.

Table 3 (i). Percentage of the subjects Proactive Coping Inventory's subscale, The Proactive Coping Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

PROACTIVE COPING SCALE		1	2	3	4
1	I am a "take charge" person.	35	25	25	15
2	I try to let things work out on their own. (-)	5	25	35	35
3	After attaining a goal, I look for another, more challenging one.	10	40	35	15
4	I like challenges and beating the odds.	10	30	40	20
5	I visualise my dreams and try to achieve them.	5	25	55	15
6	Despite numerous setbacks, I usually succeed in getting what I want.	30	30	35	5
7	I try to pinpoint what I need to succeed.	10	25	50	15
8	I always try to find a way to work around obstacles; nothing really stops me.	0	55	35	10
9	I often see myself failing so I don't get my hopes up too high. (-)	10	45	35	10
10	When I apply for a position, I imagine myself filling it.	15	5	35	45
11	I turn obstacles into positive experiences.	5	25	60	10
12	If someone tells me I can't do something, you can be sure I will do it.	15	45	25	45
13	When I experience a problem, I take the initiative in resolving it.	10	55	25	10
14	When I have a problem, I usually see myself in a no-win situation. (-)	20	45	25	10

Table 3 (ii). Percentage of the subjects Proactive Coping Inventory's subscale, Reflective Coping Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

REFLECTIVE COPING		1	2	3	4
1	I imagine myself solving difficult problems.	15	40	25	20

2	Rather than acting impulsively, I usually think of various ways to solve a problem.	5	30	60	5
3	In my mind I go through many different scenarios in order to prepare myself for different outcomes.	5	35	40	20
4	I tackle a problem by thinking about realistic alternatives.	0	25	60	15
5	When I have a problem with my co-workers, friends, or family, I imagine beforehand how I will deal with them successfully.	5	30	55	10
6	Before tackling a difficult task I imagine success scenarios.	0	30	50	20
7	I take action only after thinking carefully about a problem.	5	45	40	10
8	I imagine myself solving a difficult problem before I actually have to face it.	15	45	25	15
9	I address a problem from various angles until I find the appropriate action.	10	50	35	5
10	When there are serious misunderstandings with co-workers, family members or friends, I practice before how I will deal with them.	15	25	35	25
11	I think about every possible outcome to a problem before tackling it.	10	35	40	15

Table 3 (iii). Percentage of the subjects Proactive Coping Inventory's subscale, The Strategic Planning Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

STRATEGIC PLANNING SCALE		1	2	3	4
1	I often find ways to break down difficult problems into manageable components.	25	40	30	5
2	I make a plan and follow it.	20	40	40	0
3	I break down a problem into smaller parts and do one part at a time.	10	45	30	15
4	I make lists and try to focus on the most important things first.	20	20	50	10

Table 3 (iv). Percentage of the subjects Proactive Coping Inventory's subscale, The Preventive Coping Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

PREVENTIVE COPING SCALE		1	2	3	4
1	I plan for future eventualities.	5	40	45	10
2	Rather than spending every cent I make, I like to save for a rainy day.	0	15	50	35
3	I prepare for adverse events.	25	55	20	0
4	Before disaster strikes I am well-prepared for its consequences.	35	55	10	0
5	I plan my strategies to change a situation before I act.	15	35	50	0

6	I develop my job skills to protect myself against unemployment.	0	20	65	15
7	I make sure my family is well taken care of to protect them from adversity in the future.	25	60	15	0
8	I think ahead to avoid dangerous situations.	10	40	40	10
9	I plan strategies for what I hope will be the best possible outcome.	0	35	50	15
10	I try to manage my money well in order to avoid being destitute in old age.	10	40	30	20

Table 3 (v). Percentage of the subjects Proactive Coping Inventory's subscale, The Instrumental Support Seeking Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

	INSTRUMENTAL SUPPORT SEEKING SCALE	1	2	3	4
1	When solving my own problems other people's advice can be helpful.	0	0	40	60
2	I try to talk and explain my stress in order to get feedback from my friends.	0	20	50	30
3	Information I get from others has often helped me deal with my problems.	0	20	40	40
4	I can usually identify people who can help me develop my own solutions to problems.	0	30	55	15
5	I ask others what they would do in my situation.	10	35	40	15
6	Talking to others can be really useful because it provides another perspective on the problem.	0	15	60	25
7	Before getting messed up with a problem I'll call a friend to talk about it.	15	60	10	15
8	When I am in trouble I can usually work out something with the help of others.	20	30	35	15

Table 3 (vi). Percentage of the subjects Proactive Coping Inventory's subscale, The Emotional Support Seeking Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

	EMOTIONAL SUPPORT SEEKING SCALE	1	2	3	4
1	If I am depressed I know who I can call to help me feel better.	5	20	45	30
2	Others help me feel cared for.	10	20	35	35
3	I know who can be counted on when the chips are down.	0	40	25	35
4	When I'm depressed I get out and talk to others.	15	45	20	20
5	I confide my feelings in others to build up and maintain close relationships.	5	30	30	35

Table 3 (vii). Percentage of the subjects Proactive Coping Inventory's subscale, The Avoidance Coping Scale items against four alternatives. Scoring : 1 is assigned to "not at all true, 2 to "barely true", 3 to "somewhat true" and 4 to "completely true"

AVOIDANCE COPING SCALE		1	2	3	4
1	I think at the problem after one sleep.	10	35	25	30
2	If I come to know that problem is difficult, I let the problem untouched until I prepared to act on.	5	15	65	15
3	At facing the problem, generally I do nothing for some time.	20	25	50	5

Table 4. Total Percentage of four alternatives of Proactive Coping Scale.

No.	Alternatives	Percentage
1.	Not at all true	10.55
2.	Barely true	33.45
3.	Somewhat true	38.64
4.	Completely true	17.36

Table 5. Intercept of between-subjects effect (F), Means, and Standard deviations of the Proactive Coping Sub-scales (N= 20).

No.	Sub-Scales	M	SD	F (1, 19)
1.	Proactive Coping	46.45	8.42	608.7**
2.	Reflective Coping	29.0	4.38	877.97**
3.	Strategic Planning	9.35	2.72	236.36**
4.	Preventive Coping	24.6	3.65	909.65**
5.	Instrumental Support Seeking	23.3	4.16	628.57**
6.	Emotional Support Seeking	14.3	3.23	392.07**
7.	Avoidance Coping	8.05	1.93	347.07**

*p<.05 **p<.01

Analyses of Proactive Coping Inventory reflected that between-subject effect of the total sub-scales was significant $F(1, 19) = 241.37$ ($p < .001$). Table 4 showed that the subjects responded well on 'somewhat true' alternate followed by 'barely true', 'completely true', and 'not at all true' against the items. Table 5 showed that the response was most on proactive coping ($M = 46.45$), and least on avoidance coping ($M = 8.05$) sub-scale. The intercept between-subjects effect was significant among the sub-scales (see table 5).

Discussion

The aim of the study was to measure the state of social anxiety among the university students. It was found that most of the students bother much to move with an unknown person, care about the relations with close people, do not avoid the social event participations, somehow try to avoid the meeting with people, worried about the attitude of the people for them, and what type of impression they are leaving on others. They responded better against the items, and it showed that some anxiety is there to react on emotional exhaustion.

The results of proactive coping inventory suggested that the students actively react to cope with the stress using proactive coping ($M = 46.45$). Reflective coping strategy was also used much to cope with the daily life stress for health care and stress management ($M = 29.0$). Students seemed not using much the strategic planning for stress management ($M = 9.35$), meanwhile they were found to use the preventive coping strategies ($M = 24.6$) to cope up the stress and manage the goal in a better way predicting well the coming stress. Instrumental support seeking strategy ($M = 23.3$) was also used frequently, better than the emotional support seeking ($M = 14.3$). It was also predicted that the students used least the avoidance coping strategy ($M = 8.05$) for stress to goal management of the daily life for health maintenance and health promotion. Over all, it can be concluded that the students' proactive coping strategies are found effective to react on future states and to manage in different kinds of stress in different daily life situations such as emotional exhaustion, life satisfaction, professional efficacy, depression, state anger etc. and these results are in the direction of Greenglass, Fiksenbaum, & Burke (1996). To explore exactly and intensively the proactive coping effects in other areas such as classroom learning-teaching, social interaction, peer relationship, human relationship, parental relationship, a further study is required.

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