Do social interest, physical exercise, and financial support increase students' psychological well-being?

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ABSTRACT

A cross-sectional survey was used to collect data from a non-random sample of students at Hawaii Pacific University Spring 2000. The study focused on the relationship between well-being and nine other variables. Only one these variables, feeling control of one's life, was positively correlated with well-being. The other eight variables, social interest, physical exercise, financial support, flow experience in college, smoking, drinking, drug use, and achievement, were not significantly correlated with well-being. Social interest and the relationship between social interest and well-being was also tested against age and sex. The results did not indicate that older students and female students scored different from younger students and male students. Other findings showed that well-being, social interest, and physical exercise were negatively correlated with days missed because of illness.

Key words: Happiness, well-being, social interest, physical exercise, financial support, and flow experience.

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INTRODUCTION

The main purpose for this research was to see if social interest, physical exercise, and financial support increase psychological well-being among college students at Hawaii Pacific University. Further, the relationship between other variables and psychological well-being was also investigated.

Psychological well-being or usual well-being is related to the quality of life or to life satisfaction. In addition, well-being can be related to self-esteem, cognitive function, personality, and mood, including positive affects such as happiness, vigor, and morale, and negative affects such as anxiety and depression (Brown 1992). Since this research is about variables that can increase our well-being, it is relevant to talk about happiness. In addition, the paper starts with an overview of how we can increase the quality of life and experience happiness. Then the paper addresses more specific how different variables are related to well-being, such as social interest, physical exercise, and financial support. A summary of the hypotheses and other variables that will be investigated is presented at the conclusion of this discussion.

Flow and Happiness

"Twenty-three hundred years ago Aristotle concluded that, more than anything else, men and women seek happiness" (Csikszentmihalyi 1990, p. 1). Most people have an understanding of what happiness is. However, it useful to clarify this term. Happiness can be defined as a theoretical summation of all the separate pleasures over pains experienced over whatever period is being considered (Parducci 1995). Similarity, happiness has always been important for human beings. And when other things are equal, we think better of a person who seems happy than of one who seems unhappy (Parducci 1995). In such a case, it is good to know that in Western

Europe and North America, eight out of ten people from all age group considered themselves as "satisfied" or "very satisfied" (Myers 1997). Happy people are, in general, recognized of being in control of their life (Csikszentmihalyi 1990). Further, happiness can occur in a moment or a day. However, Aristotle said that the ultimate goal of happiness is the long-term happiness (Parducci 1995). And the best way to reach this goal is through flow experiences.

Csikszentmihalyi (1990) proposes that flow experiences are the highway to happiness. Flow is a state of joy, creativity, the process of total involvement with life, and optimal experience. Flow experiences increase the quality of life and are, therefore, a source of happiness. As seen in figure 1.1, flow experiences occur when the challenges match our skills.

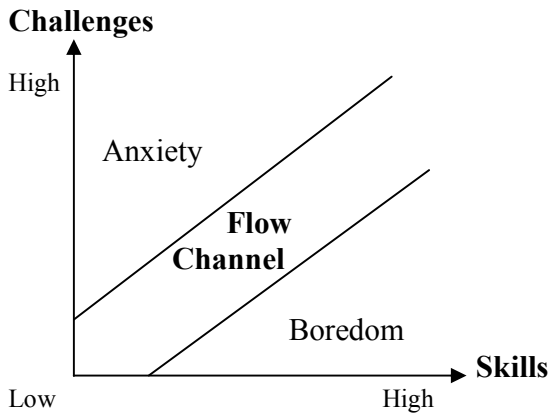

Fig. 1: The Flow Channel (Csikszentmihalyi, M. 1990, p. 74).

One stays in the flow channel when the challenges in a certain situation match one's skills. If a person has low skills, he or she needs low challenges to stay in flow. And people with high skills, need high challenges to stay in flow. When the skills are higher than the challenges, you get bored. And when the challenges if higher than a persons skills, he or she feels anxiety, which is more harmful than boredom (Csikszentmihalyi 1990). Eggen (1999) believed that stress occurs

when people often get challenges they do not have skills to handle. The issue is not what they have to do that make them feel stress, but whether they succeed doing it or not (Eggen 1999). This could be significant to remember for people in leadership or teaching roles if they want to prevent stress among their employees or students.

The concept of the flow channel can easily be transformed to analyze the experiences in college. Obviously, if college is challenging, students need good skills to enjoy it. Alternatively, if college is not that challenging, students with low skills are most likely to enjoy it. Further, if students find college challenging but have low skills, they will most likely experience anxiety again and again. On the other hand, if students do not find college challenging but have good skills, they will find it boring. One possible way to figure out that student's skills and the challenges they meet at college match each other might be to ask them about their grade point, and how challenging they find college. This has been done for the present study. In addition, it can be expected that students who do feel a balance between challenge and skills score higher on well-being.

When we know that flow experiences are the source of happiness, the important question is what we can do to experience flow. Overall, there are four main steps to follow to achieve this purpose (Csikszentmihalyi 1990): 1) A challenging activity that requires skills. 2) Concentrate on what we are doing. 3) Have clear goals and get immediate feedback. 4) Do something we find enjoyable. Activities that involve all or the most of these four steps, Csikszentmihalyi (1990) called "flow activities". Flow activities are play, art, pageantry, rituals, games, and sports. For this research, the most interesting part is that different form of sports and physical activities are a good strategy to flow experiences. In such a case, it can be expected that students who exercise regularly score higher on well-being. Other activities that can prevent flow are mental activities, like memorizing, thinking, learning, and increasing knowledge (Csikszentmihalyi 1990). All

these forms of mental activities are something that students should be doing a lot of in college, and therefore have a good opportunity to flow experiences. Finally, good friendships can give us a lot of enjoyment and flow experiences (Csikszentmihalyi 1990).

Social Interest

Social interest is one of the concepts in Alfred Adler's Individual Psychology. In summary, social interest is:

> "Particularly it means *feeling with the whole, sub specie aeternitatis,* under the aspect of eternity. It means a striving for a form of community which must be thought of as everlasting, as it could be thought of if mankind had reached the goal of perfection" (Ansbacher and Ansbacher 1970, p. 34).

An easier explanation is that it involves an interest in and concern for others (Crandall 1984). Social interest was Adler's criterion for mental health, and Maslow also said that one of the characteristics of people of ideal mental health was *Gemeinschaftsgefühl* (social interest) (Ansbacher and Ansbacher 1970). Further, both Plato and Socrates saw the importance of concern for other people. Plato argued that the men and women who are gentle and good are also happy and the unjust and evil are miserable. Socrates had the same opinion when he said that an evil man can not be happy (Parducci 1995). In addition, Adler described a person with social interests as:

> "They have for human beings in general a deep feeling of identification, sympathy, and affection in spite of occasional anger, impatience, or disgust (...) They have a genuine desire to help the human race. It is as if they were all members of a single family" (Ansbacher and Ansbacher 1970, p. 14).

Crandall (1984) used the Social Interest Scale to study if social interest was a moderator of life stress among 74 psychology students in 1979/ 1980. The results showed that students with stronger social interest had fewer stressful life experiences, and that social interest moderated the effects of stress on psychological symptoms. Further, stress was more strongly correlated with anxiety, depression, and hostility among low- than among high-social-interest subjects. In short, social interest worked as a moderator of life stress (Grandall 1984).

Many research studies in later years have showed the positive effects of social interest. Ryckman (1999) summarized some of these studies in his book, "Theories of Personality". He cited a study by Watkins (1994) which showed that individuals high in social interest reported less depression, anxiety, loneliness, narcissism, and hostility towards others. Crandall (1975) also found that social interest was negative correlated with hostility and depression, but that the negative correlation with anxiety was not significant. Ryckman (1999) also cited a study by Watkins and St. John (1994) which showed that college students who are higher in social interest have emotionally closer relationship with friends and relatives than students lower in social interest. According to Erik Erikson, good relationships are beneficial to both the person and the society, and essential to meet the need of intimacy in early adulthood (Ryckman 1999).

Crandall (1980) concluded that a lack of social interest was associated with problems in dealing with one's work, friendships, and family. Such a people also have an increasing feeling of alienation, competition with others, and threat. Lack of interest in things outside the self often led to a narrowed sphere of interest and activities, with a diminished capacity and opportunity for enjoying many of life's potential satisfactions. In general, social interest was positively correlated with well-being. In this case, it is worth mentioning that social interest was more positively correlated with well-being for adults with an average age of 35.30, than for college students. High school students showed a weak negative correlation between social interest and well-being.

Moreover, female college students showed a stronger positive correlation between social interest and well-being than male college students (Crandall 1980).

Several important questions were posed, which were addressed in this study. Do participants who score high on the social interest scale also in general score high on well-being? Will older students and female students score higher on the social interest scale than younger students and male students? Finally, Will older students and female students have a more positive correlation between social interest and well-being than younger students and male students?

Physical Exercise and Well-Being

Today, most people are aware of the importance of health and physical fitness (Csikszentmihalyi 1990). Unfortunately, fewer than half of all Americans exercise regularly, and more Americans are overweight today than in any previous decade (Berger 1998). One advantage from exercising is enhanced cognitive functioning, probably because of improved blood circulation to the brain (Stones, and Kozma 1996, adapted from Berger 1998). Perhaps for this reason, exercise decreases depression and hostility, and makes a person psychologically healthier (Berger 1998).

A self-report study done in Finland among 3403 participants between 25 and 64 years of age showed that regular physical exercise was associated with an overall higher well-being. Individuals who exercised at least two to three times a week experienced significantly less depression, anger, cynical distrust, and stress than those exercising less frequently or not at all. These individuals also reported higher level of sense of coherence and a stronger feeling of social integration than those who exercised less frequently did. Interesting observation was that individuals who exercise daily reported somewhat higher depression (Hassmen, Koivula, and Uutela 2000).

Brown (1992) presented a review of research about physical activity, aging and psychological well-being. He concluded that there is little experimental evidence that physical activity in general was related to well-being among people older than 60 years. Some studies showed a positive correlation between physical activity and well-being among the elderly, while other studies did not support this conclusion. More interesting, there is little evidence that individuals who were athletes in college reported higher well-being 20 years later than individuals who were not athletes at college. And former athletes were not more active than former nonathletes (Brown 1992).

Longitudinal data from 1057 adolescents, between 12 and 17 years, in 19 public school showed that self-assessed health was associated positively with sports and exercise, and psychological well-being. Further, higher level of sports and exercise were associated with fewer physical symptoms, less depressed mood, higher self-esteem, higher levels of achievement at school, and more social activities (Mechanic and Hansell 1987).

In summary, physical exercise appears in overall to be associated with greater well-being, except for people older than 60 years. In addition, the same result was expected for college students in the present research. Further, the study explored whether regular physical exercise correlates positively with achievement at college.

Money and Well-Being

Human beings are not happier now than before, even if our material powers have increased a thousandfold (Csikszentmihalyi 1990). The overall well-being in Europe and US increased a little over the post-war period. However, the raise was so small that it seems like extra income does not contribute dramatically to the quality of people's life. Moreover, some European countries showed a fall in overall life satisfaction (Oswald 1997).

However, there is some evidence that wealthy or rich people are happier. Csikszentmihalyi (1990) cited two studies about this topic. Ed Diener found that very wealthy persons reported being happy on the average 77 % of the time, while persons of average wealth said they were happy only 62 % of the time. Second, Norman Bradburn found that the highest-income group reported being happy about 25 % more often than the lowest-income group (Csikszentmihalyi 1990).

Even if a lot of money can make people happier, it is not the most important step towards happiness. Perhaps material improvement can increase our happiness immediately, but the long-term effect may actually be toward unhappiness (Parducci 1995) In addition, wealth, status, and power have become too powerful symbols of happiness in the western culture. The important step to improve the quality of life is to improve the quality of experience (Csikszentmihalyi 1990). "It need to be stressed again and again that what counts is the quality of experience flow provides, and that this is more important for achieving happiness than riches or fame" (Csikszentmihalyi 1990, p. 17).

Summarizing the findings above, there is little evidence that people in Europe and US are happier now than before, even if we are richer than ever before (Oswald 1997). And even if money can buy some happiness, it is not the most important contribute to an overall and long-term improvement of well-being (Csikszentmihalyi 1990). As a result of these findings, it will not be expected to find a significant correlation, nor positive or negative, between students' financial support and well-being in the present study.

Smoking, Alcohol, and Drugs

It was hard to find much information about how smoking, alcohol, and drugs might be related to well-being. However, smoking is often a routine to fill in the boring gaps of the day

(Csikszentmihalyi 1990), and may therefor not be a good source for well-being. Moreover, it is argued that dependency on alcohol and drugs may result from being unable to make order in one's consciousness. In relation to well-being, this is negative, since control of consciousness determines the quality of life (Csikszentmihalyi 1990).

Parducci (1995) proposed that addictive drugs can produce immediate psychic highs, but their long-term effects are often extremely unhappy. When considering drug use, it is important to distinguish between drug use, drug abuse and drug addiction. Drug use refers to the ingesting of a drug, irrespective of the frequency of use (Berger 1998). Most scientists conclude that selective, moderate drug use is generally harmless and, in some cases, even beneficial. For example, having one drink of alcohol several times a week seems to be in reducing the risk of heart disease during middle adulthood (Manson et al. 1992/ Marmot et al. 1981, cited in Berger 1998). Drug abuse, on the other hand, refers to use of a drug in a quantity or manner that is harmful to one’s physical, cognitive, or psychological well-being. In addition, harmful drug use can open the door to more serious drugs, drug abuse and drug addiction. Drug addiction is the most serious step of drug use. In this case a person need drugs to satisfy a physiological need, like stop shaking, to settle one’s stomach, or to get to sleep, and/ or satisfy a psychological need, like to quite fears or to lift depression (Berger 1998).

People most likely to misuse drugs show temperament that includes attraction to excitement, intolerance of frustration, and vulnerability to depression (Brook et al. 1992/ Kaplan and Johnson 1992, from Berger 1998).

Gustafson (1991) studied whether a moderate dose of alcohol reinforced feelings of pleasure, well-being, happiness, and joy. Thirty male and thirty female college students, mean age 24.4 years, were assigned in equal numbers to an Alcohol group, a Placebo group, or a Control group. The results showed that an alcohol dose of 1.0 ml of 100% alcohol/kg body

weight did not significantly affect feelings of pleasure, well-being, happiness, and joy. Gustafson concluded that this dose of alcohol did not reinforce the emotional state, or significantly reduce unpleasant feelings. These results indicated that emotional effects of alcohol were highly dependent on situational factors, such as social atmosphere (Gustafson 1991).

Summarizing these studies, it is difficult to reach a definite conclusion about the effects smoking, alcohol, and drugs have on well-being. The present study will not separate between drug use, drug abuse, or drug addiction. Moreover, it could be that drinking and use of drugs during college most often are associated with party, friends, nightclubs and fun. However, this research will explore whether there was any relation between these three variables and well-being. The study also looked at whether students who smoked scored lower in social interest than students who did not smoke. The last question was addressed because smoking can also disturb or do harm to people who are surrounding a smoker as a result of second-hand smoke, which is not in accordance with social interest.

Achievement in College and Well-Being

Mechanic and Hansell's (1987) longitudinal study showed that self-assessed health was associated positively with school achievement among adolescents. Moreover, higher levels of achievement were negative correlated with depressed mood and positive correlated with self-esteem. In addition, this study looked at whether achievement at college correlated positively with well-being.

Hypotheses and Investigations

In summarizing, the literature suggests that some variables are associated with higher well-being, and some are not. In general, what determines the quality of life is flow experience, which happens when there is a balance between skills and challenges (Csikszentmihalyi 1990). More specifically, it seems clear that social interest and physical exercise are positive correlated with well-being, and achievement at school may have a positive effect on well-being. Money or income does not have a significant impact on well-being. Further, it is not clear whether different kinds of drugs have a negative or positive effect on well-being among college students, since these also might be associated with social interaction and fun. Thus, three hypotheses were defined for this study. *Hypothesis 1*: Students who score higher in social interest will also score higher on well-being. *Hypothesis 2*: Physical Exercise will have a positive effect on students' well-being. *Hypothesis 3*: A student's financial support will not have any impact on his or her well-being.

Besides this, the research addressed the following questions about the correlation between study variables: 1) How is the correlation between feeling control of one's life and well-being? 2) How does the connection between grade point and how challenging students find college effects well-being? 3) Do older students and female students score higher in social interest, and have a more positive correlation between social interest and well-being than younger students and male students? 4) Do student higher in social interest smoke less than students lower in social interest? 5) Do physical exercise correlate positively with achievement at college? 6) Does smoking, drinking, and/ or use of drugs has an impact on student's well-being? 7) Does achievement at college correlate positively with well-being? 8) Finally, how are the correlation between days missed because of illness and physical exercise, smoking, drinking, social interest, and well-being?

METHOD

This study was a cross-sectional survey using a questionnaire to collect information from a non-random sample of students at Hawaii Pacific University. The questionnaire is included in the appendix. The study addressed three hypotheses and a number of research questions.

Participants

A non-random sample of 93 students at Hawaii Pacific University in the winter 2000 participated in the study. They range from 17 to 51 years, with a mean of 24,4 years (SD = 6,92). Thirty-seven of these students were male and 55 female (n = 92). According to geography, 50 of the participants responded coming from US, 18 from Hawaii, 10 from Europe, 6 from Asia, and 8 from other countries (n = 92). In all respect for all nationalities, the term "other" was used to make a compare group of students from other parts of the world than those mentioned beyond. Further, 58 of the participants had English as first language while 34 had not (n = 92). This is important to remember when discussing validity. The reason for this is that some of the terms in the measures could be hard to understand for student with English as a second language. Which, in turn, could lead to some "wrong" responses.

It is also worth mentioned, that most students found this questionnaire "okay" (30), "like some" (37), or "like" (15) on the question of how well they liked this questionnaire. Only 7 students responded "dislike" or "dislike some". Mean score for this question was 3.64, SD 0.93 (n = 89). This can give an indicator of that most students did not find it too hard to understand and response to the questions in this survey, which in turn may have a positive effect on the validity for this research.

One aspect of the research needs to be discussed with respect to the validity and generality of the study. This is the use of a non-random sample of students. This sample was used because it was the easiest way to collect data and finish a research in 14 weeks. Since this is a study done by a student at Hawaii Pacific University, the most efficient way to collect data is to have students to participant. Then, the researcher has the opportunity to meet the students in and/ or let the instructors turn out the questionnaire in different classes. Further, a non-random was used because the researcher sought to collect data during classes. To do so the author needed to get a promotion from the instructors. This promotion was easiest to get from the instructors in the researcher's own class, and by some instructors why had a repartition of helping student with their research.

Moreover, there are three more reasons for using a non-random sample of students. 1) College students represent a large part of the whole population. 2) College is something a lot of people are going trough. 3) Theoretically, hundreds of students could have been placed in these classes, because most of the courses have more than one class. However, the idea is not to try to tell something about every human being on the earth. The author will draw few, if any, conclusion representing the whole universe.

Measures

Two standardized measures were used in the present study. These were the Social Interest Scale (SIS) (Crandall 1975) and Well-being - The Wellness Inventory (Woods, Laffrey, Duffy, Lentz, Mitchell, Taylor, and Cowan 1988). The Social Interest Scale requires subjects to make a number of choices concerning which of two traits they consider to be most important for them. Each pair includes one trait closely related to social interest and one that is not relevant to social interest. Together, there are fifteen pairs of traits. Score consist of the number of social interest

traits that are chosen and can range from 0 to 15 (Crandall1980). If a person score fifteen on this scale, it means that she or he acts exactly in correspondence with social interest, and opposite.

helpful – quick witted	capable - tolerant	imaginative - helpful
neat - sympathetic	trustworthy - wise	realistic - moral
intelligent - considerate	forgiving - gentle	considerate - wise
respectful - original	efficient – respectful	sympathetic - individualistic
generous - individualistic	alert - cooperative	ambitious - patient

Fig. 2: The Social Interest Scale. Traits closely related to social interest are underlined (Crandall 1975, p. 189).

Test-retest reliability over five weeks was 0.82 (n=213) (Crandall 1975). Internal consistency measures included coefficient alpha, estimated by K-R (Kuder-Richardson) 20 was .73 (n=246), and K-R 21 was .71 (n=1784). So even thought the test is quite short, its reliability appears to be adequate for a research instrument (Nunnally 1979, cited in Crandall 1980).

Crandall (1975 and 1980) validated the Social Interest Scale against a variety of criteria reflecting different aspects of the classical division of psychological processes - cognitive, affective, and behavioral. In short, these data supported the validity of this scale (Crandall 1975 and 1980).

The mean score for 213 psychology students at high school and university was 8.43, SD 3.57. In the same sample, the mean for women was 8.91 (SD = 3.21), and for men 8.00 (SD = 3.83) (Crandall 1975). Another study showed that the mean for 1784 university students was 8.17 (SD = 3.32). The mean for college students nominated for high social interest was 9.48 (SD = 2.87, n = 21), and for college students nominated for low social interest was 7.40 (SD = 3.20, n = 35) (Crandall 1980).

The Wellness Inventory was derived from a qualitative study conducted by Woods and colleagues (1988). A 91 scale instrument was developed and tested, after which it was reduced to a 36-scale instrument used in this research (n = 186) (Woods et al. 1988). The scale asks the subjects to rate 36 statement from one to four to show how they felt last week. The respond choices are as follow: 1 = rarely, none of the time, less than 1 day. 2 = some, a little of the time, 1-2 days. 3 = occasionally, a moderate amount of the time, 3-4 days. 4 = most of the time.

Well-Being Subscale Items

I feel peaceful
I feel wonderful
I feel centered
My life is in balance
I feel spiritually whole
I can cope with stress in my life
I feel I can reach my optimum
I feel energetic
I feel strong
I am able to enjoy being with my family
I like myself
I feel alert

Fitness Subscale Items

I am in good shape
I am at ideal weight for me
I feel good about my body
I am physical fit
I take good care of myself
I look good
My body does what I want it to do
I have a nice appearance

Sense of Purpose Subscale Items

I have a sense of purpose in life
I am aware of my goals for myself
I am self-disciplined
I have a positive attitude about myself
I can attains goals I set for myself
I am proud of myself

Not-Ill Subscale Items

I don't have physical problems
I don't have any pain
I don't have bothersome symptoms

I don't have chronic health problems
I can perform my usual functions

Relationships Subscale Items

I have many friends
I can love and care
I feel affectionate
I feel good about my relationships
I am an interesting person to be with

Fig. 3: The Wellness Inventory (Woods et al. 1988).

The Wellness Inventory measures the meaning of health or well-being (Woods et al. 1988). The 36-item scale includes five subscales, which are well-being, fitness, sense of purpose, feeling not ill, and relationship. Instrument reliabilities of .96 are reported for the overall instrument, .94 for the well-being subscale, .92 for the fitness subscale, .89 for the sense of purpose subscale, .83 for the not-ill subscale, and .80 for the relationships subscale (Hedlund 2000). Moreover, the results from this study showed that the correlation between the five subscales and the overall instrument varied from .627 to .864. Further, the correlation between the five subscales varied from .237 to .682.

Some variables need to be discussed to address the validity in the present study. These variables are physical exercise, smoking, alcohol, and drugs. This study did just involve one question for each of these variables, without any criteria or specific information. The first natural question would be; what do you mean about physical exercise? Some would suggest to definite physical exercise, like activity, time, intensity, breathing rate, or hearth rate. However, this was not done in the present study out of three reasons. First, there is no need to make a research complicated for either the researcher or the participants. Second, the author feel that most people have an understanding of what physical exercise is. Third, it is difficult to measure physical exercise precisely. It requires measurement of the participant's maximum hearth rate, their hearth

rate during activity, time for activity, what sort of activity, and if the subject has any injury or not. This degree of details was not appropriate for this research.

When discussing smoking, alcohol, and drugs, one limitation could have been the amount of these variables. The survey could have asked about how many cigarettes were smoked during a week, how many units of alcohol per week, and how many joints of drugs per week. The survey could also have asked about how many times the responder got drunk or high every week. However, the amount a person drinks is not precisely correlated with getting drunk. In addition, the purpose of the survey was better served by using a more simple approach.

Procedure

A non-random sample of students at Hawaii Pacific University was included in this study. The individuals were drawn from five of the researcher's own classes, and from two other classes. Five of these classes were psychology classes, one was an acting class, and one was a sociology class. Further, all classes were at undergraduate level. The author got permission to have the participants fill out the questionnaire during class in five of the seven classes. For the two remaining classes, the author or an instructor turned out the questionnaire and asked the subjects to bring it back in next class. Further, both the researcher and the instructor asked the students if they wanted to participants and told them that their responses were confidential. The students got none information about the purpose of this question for the reason to stay away from "expected" responses. Finally, all participants got a separate note to fill out their name and address if they wanted to receive a summary of the results of the research (see appendix B).

Data Analysis

The data were analyzed using SPSS 8.0 for Windows, Student Version. Data were entered into the SPSS file and the results were obtained by running statistical tests for the research questions. Well-being was the dependent variable, while social interest, physical exercise, days missed, budget, grade point, smoking, alcohol, drugs, feeling control of one's own life, and how challenging is college were the independent variables. Empty responses were left out except for the Wellness Inventory, where the empty responses were filled out with the average of the remaining responses, unless too many responses were missing. This needed to be done for approximately six surveys, and none of them had more than four missing items. One survey had so many open responses that it was left out from the research. For the Social Interest Scale, open responses were analyzed, as traits not related to social interest. This happened for four surveys, and none of them had more than two missing items. Further, if any participant, for example, responded two to three on a variable, the response was scored as 2,5.

RESULTS

The results from the present study will be presented in the same order as the hypotheses and research questions. Moreover, some other findings will also be presented at the end of the result section. An overview of some of the major results from the Pearson Correlation test is presented in table 1.

Tab. 1: Correlation, means, and standard deviations of a various of studied variables.

	1	2	3	4	5	6	7	8	9	10	11
1. Age		.180	-.210*	-.005	-.156	-.110	.062	.042	-.024	.079	-.152
2. Grade point	-		-.298**	.036	-.193	-.122	.016	-.269*	-.214	-.074	0.21
3. Days missed because of illness	-	-		-.210*	.147	.004	-.107	.053	.069	-.207*	-.267*
4. Exercise	-	-	-		.137	.088	-.128	-.128	-.039	-.004	.117
5. Days I drink alcohol per week	-	-	-	-		.514**	-.112	-.145	.218*	-.140	-.086
6. Days I use drugs per week	-	-	-	-	-		-.019	-.168	.078	-.087	-.143
7. I feel I can control my life	-	-	-	-	-	-		-.038	.177	.093	.489**
8. I find study challenging	-	-	-	-	-	-	-		.316**	.230*	-.160
9. I feel I have too little time to study	-	-	-	-	-	-	-	-		.233*	-.013
10. Social Interest	-	-	-	-	-	-	-	-	-		.137
11. Well-being	-	-	-	-	-	-	-	-	-	-	
Mean	24.4	3.21	2.43	2.69	1.11	-	-	-	-	8.80	107.34
SD	6.92	.52	3.90	2.02	1.46	-	-	-	-	3.34	18.94

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

Social Interest and Well-being

The results from the Social Interest Scale ranged from 2 to 15 (mean = 8.80, SD = 3.34, n = 93). The responds on the Wellness Inventory ranged from 51 to 144 (mean = 107.34, SD = 18.94, n =93). The first hypothesis was that students who scored higher in social interest also would score higher on well-being. The results presented in table 1 indicated a weak positive correlation between social interest and well-being, but it was not significant ($r = .137$, $p = .190$). The first hypothesis was not supported. Further, the universal analysis of variance did not show that older students and female students had a more positive correlation between social interest and well-being than younger students and male students.

However, social interest was positively correlated with the Relationships Subscale Items ($r = .287$, $df = 91$, $p = .005$). So, students higher in social interest reported to have better relationships than students lower in social interest.

Physical Exercise and Well-being

The participants were asked how many times they exercised per week. The responses ranged from zero time per week to every day (mean = 2.69, SD = 2.02, n = 92). The second hypothesis was that physical exercise would have a positive effect on students' well-being. As shown in table 1, students who exercised more showed somewhat higher score on well-being, but the correlation between these variables was not significant ($r = .117$, $df = 90$, $p = .267$). Thus, the second hypothesis was not supported.

Though, the results showed a significant positive correlation between physical exercise and the Fitness Subscale Items ($r = .266$, $df = 90$, $p = .010$). That is, students who exercised more frequently reported themselves as more fit than those who exercised less frequently. There was also a significant positive correlation between physical exercise and the Not-Ill Subscale Items (r

= .229, df = 90, p = .028), which means that students who exercised more frequently reported themselves to be less ill than those who exercised less frequently.

Financial Support and Well-Being

Participants were asked to report how much financial support they got per semester in one out of five categorizes. These were 1) less than $8.000 (n = 26), 2) $8.000 to $ 11.000 (n = 17), 3) $11.100 to $14.000 (n = 12), 4) more than $14.000 (n = 15), and 5) I don't know (n = 20). The last hypothesis was that a student's financial support would not have any impact on his or her well-being. The results from ANOVA indicated no significant difference on well-being between those five groups (F = .399, df = 4,85, p = 0.809). Thus, the last hypothesis was supported.

The present study used the Tukey's HSD test to see if there was any difference between these five groups according to social interest. Even if there were no significant significance between these groups, we could see a trend between two of the groups. Students from group three scored in average higher in social interest than students from group two (p = 0.93). The mean score in social interest for group three was 10.58 (SD = 2.23) versus 7.47 (SD = 3.00) for group two.

Feeling Control of One's Life and Well-Being

Participants were asked to report if they felt they could control their life on a scale from one to five. The responses were coded as follow: 1) disagree (n = 3), 2 disagree some (n = 8), 3) disagree/ agree (n = 10), 4) agree some (n = 30), and 5) agree (n = 41). The results presented in table 1 show a positive correlation between feeling control of one's life and well-being (r = .489, df = 90, p = .000). In addition, feeling control of one's life had a positive effect on well-being among students.

Relationship Between Grade Point and How Challenging Students Found College

One question addressed if the relationship between grade point and how challenging students found college effected their well-being. Participants were asked to report or estimate their overall grade point. Then they were asked if they found college challenging on a scale from one to five. These two score were compared for each individual. According to this score, the participants were assigned to either a balance group or a no-balance group. The balance group refers to those individuals who were estimated to have a balance between grade point and how challenging they found college. Opposite, the no-balance group refers to those individuals whose were not estimated to have a balance between grade point and how challenging they found college. According to figure 1, grade point refers to the student's skills, while how challenging they found college refers to challenges. In addition, the balance group was estimated to stay in the flow channel, while the no-balance group was estimated to stay outside the flow channel.

Subjects were assigned to the balance group if they reported one on the question about "I find college challenging" and had a grade point from 1.0 to 2.0. Further, students were assigned to the balance group if they reported two in challenging and a grade point from 1.5 to 2.5, three in challenging and a grade point from 2.1 to 3.0, four in challenge and a grade point from 2.6 to 3.5, and five in challenging and a grade point from 3.1 to 4.0. Students, who did not score as above, were assigned to the no-balance group.

The average score on well-being for the balance group was 111.15 (n = 33) versus 106.32 for the no-balance group (n = 41). The results from the T-Test indicated a difference between the two groups, but it was not statistically significant.

Social Interest and Demographics

The present study also focused on whether older students and female students scored higher in social interest than younger students and/or male students. The study additionally investigated if students higher in social interest smoked less than students lower in social interest. The results presented in table 1 show no significant correlation between age and social interest (n = 91). Thus, older students did not score either higher or lower in social interest than younger students. In regard to sex, female students' average score in social interests was 9.13 (n = 52) versus 8.52 for male students (n = 36). However, the difference between the two groups was not significant. The results from ANOVA indicated that students who reported to smoke regularly had a lower mean in social interest than those who did not smoke at all, 7.62 (n = 16) versus 9.22 (n = 59). The mean for those who reported to smoke sometimes was 8.65 (n = 17). Nevertheless, the difference between these groups was not significant.

Physical Exercise and Achievement in College

One question addressed if physical exercise correlated positively with achievement in college. Achievement in college refers to the students' overall grade point. The results showed no significant correlation between these variables (n = 75), see table 1. Thus, students who exercised more did not achieve more in college than those who exercised less.

Smoking, Drinking, Drug Use, and Their Impact on Well-Being

This research investigated if smoking, drinking, and/ or use of drugs had any impact on students' well-being. The results from table 1 show that there was a negative correlation between drinking and well-being, but it was not significant (n = 92). There was also a negative correlation between drug use and well-being, but it was neither significant (n = 91). ANOVA was used to see

if smoke had any impact on students' well-being. Students reported either to smoke regularly (n = 16), sometimes (n = 17), or not to smoke (n = 59). Students who reported not to smoke scored somewhat higher in well-being than those who smoke regularly and sometimes, but the difference was not significant.

Achievement in College and Well-Being

The present study wanted to see if achievement in college correlated positively with well-being. The results from table 1 show no significant correlation between achievement in college and students' well-being (n = 75). This means that students with good grades did not reported higher well-being than those with less good grades.

Days Missed Because of Illness, Physical Exercise, Drinking, Smoking, Social Interest, and Well-Being

The present study also focused the possible correlation between days missed because of illness and physical exercise, smoking, drinking, social interest and well-being. Table 1 shows that the there was a significant negative correlation between days missed because of illness and physical exercise ($r = -.210$, $df = 90$, $p = .045$). A significant negative correlation between days missed because of illness and social interest was also found ($r = -.207$, $df = 90$, $p = .047$). Further, there was also a significant negative correlation between days missed because of illness and well-being ($r = -.267$, $df = 90$, $p = .010$). Hence, students who exercised more frequently and scored higher in social interest and on well-being missed fewer days because of illness than those who scored lower on these variables. According to drinking, there was a positive correlation between this variable and days missed because of illness, but it was not significant. Result from ANOVA showed that students who smoked regularly and sometimes missed more days because of illness

than those who did not smoke. The mean score on this variable was 3.63 (n = 16) for those who smoked regularly, 3.41 (n = 17) for those who smoked sometimes, and 1.83 (n = 59) for those who did not smoke. However, the difference between these groups was not statistically significant.

Other Findings

The present study found some significant results between other variables than those designed for this research. These results will be presented here, but will not be discussed in the next section. Table 1 shows some interesting correlation between different variables. Days missed because of illness was negatively correlated with both age ($r = -.210$, $df = 89$, $p = .046$) and grade point ($r = -.298$, $df = 73$, $p = .009$). Number of days students reported to drink alcohol per week was positively correlated with feeling of having too little time to study ($r = .218$, $df = 89$, $p = .038$). Further, the results indicated a negatively trend between drinking and grade point ($r = -.193$, $df = 73$, $p = .098$). Social interest was positively correlated with feeling of having too little time to study ($r = .233$, $df = 90$, $p = .025$). Thus, students higher in social interest reported to have less time to study than those lower in social interest.

The subjects were asked to report which country the came from. According to these responses, they were assigned into five groups, US (n = 44), Hawaii (n = 10), Europe (n = 7), Asia (n = 6), and "Other" (n = 8). Tukey's HSD test was used to see if there were any differences on some variables between these five groups. The results showed no significant differences between these groups in social interest. According to well-being, the Asia group reported significant higher well-being than the European group ($p = .043$).

The results from the ANOVA indicated no significant differences in the frequencies of smoking and age. Consequently, older and younger students' smoking habits were the same.

According to sex, results from T-Test showed a significant difference or a trend between female and male students on the following variables: Male students scored higher on the Fitness Subscale Items ($t = 2.103$, $df = 90$, $p = .038$). Male students exercised more than female students did ($t = 3.760$, $df = 90$, $p = .000$). Male students reported fewer days missed because of illness than female students ($t = -1.712$, $df = 90$, $p = .090$).

DISCUSSION

The main purpose for this study was to evaluate the relationship between well-being and a number of variables from a non-random sample of college students at Hawaii Pacific University. The primary results showed that there were few variables that were related to students' well-being. However, before the study starts to examine each set of results in turns, the use of a non-random sample needs to be discussed. A non-random sample might lead to systematic errors. It could have been that the sample in this study did not represent a typical sample of students at Hawaii Pacific University, and for that reason influenced the results. This is true for all the variables in the present research, and will therefore not be discussed further. However, as discussed in the method section, the use of a non-random sample was supported.

As a consequence of the findings presented in the introduction, it was expected to find a significant positive correlation between social interest and well-being. In contrast to these findings, there was no correlation between social interest and well-being in the present study. Crandall (1975 and 1980) concluded that social interest was negatively correlated with depression and positively correlated with well-being. Other studies also saw the positive effects of social interest on well-being (Ryckman 1999). Why did the results not support previous findings? It could be argued that the lack of correlation between social interest and well-being in

the present study was related to age. Crandall (1980) said that social interest was more positively correlated with well-being for adults at an average age of 35.30, than for college students. However, the results did not indicate that older students had a more positive correlation between social interest and well-being than younger students did.

Further, it could be that the score in well-being was high overall, and therefore minimized the effect of social interest on well-being. This could also be true for other variables. According to Csikszentmihalyi (1990), students should be able to have a lot of flow experiences during college, which in turn would have an important positive effect on their well-being. However, results from Hedlund and colleagues (1999) showed a high level of depression overall among female students at Hawaii Pacific University during fall 1997.

Another reason could be related to the western culture. United States and several other western cultures are highly individualistic and place heavy emphasis on inculcating the traits of independence, self-reliance, ambition, determination, aggression, competition, and the achievement of personal success (Ryckman 1999). Many of these traits are not related to social interest. In addition, people in the western culture are more likely to be successful and in good health if they maintain these individualistic traits (Ryckman 1999). Further, as pointed out earlier, eight out of ten people from all age groups in North America and Western Europe considered themselves as “satisfied” or “very satisfied” (Myers 1997). Consequently, a combination between an individualistic culture and overall high well-being could explain why the results did not show any significant positive correlation between social interest and well-being. One question arises from this explanation. Since the results did not support Alfred Adler’s concept about social interest, could it be that we move towards a more individualistic and narcissistic society. May pointed out that this could be true, and he also said that many students are overwhelmingly materialistic, cynical, and competitive (Ryckman 1999). This could lead to an expectation that

the average score in social interest would be lower for this research than earlier studies. Yet, compared to studies among students by Crandall (1975 and 1980), the mean score in social interest in this study was a bit higher. According to the relationship between social interest and well-being, future research are needed to see if there may be a shift towards a more individualistic society where individualistic traits are more valued. In order, validation of individualistic traits may in a longer perspective develop more individualistic individuals whose social interest do not develop fully. Such a trend would be extremely negative taken in accord that people who have committed one or more crimes are always individuals low in social interest (Ansbacher and Ansbacher 1970). However, social interest was positively correlated with the Relationships Subscale Items. These results corroborated previous findings (e.g. Ryckman 1999 and Crandall 1980). So, students higher in social interest reported having better relationships with friends than students lower in social interest. It can also be mentioned that students higher in social interest missed fewer days because of illness than students lower in social interest. The last result could indicate that social interest has an impact on students' physical health.

The second hypothesis predicted that physical exercise would have a positive effect on students' well-being. Even if there were a positive correlation between these two variables, it was not significant. This result was somewhat unexpected. Berger (1998), Hassmen and colleagues (2000), and Mechanic and Hansell (1987) concluded that physical exercise had a positive effect on well-being. Clearly, the interpretation of the present result most takes into the account the fact that students only did a self-report of how often they exercised every week. It could be that the quality and type of physical exercise you do are more important for your well-being than the frequency. Accordingly, perhaps future studies instead should measure the relationship between physical shape and well-being. Moreover, the participants were not asked how long they have been doing physical exercise. Neither were they asked if they had been previous athletes or if

they exercised more in the past. Given the cross-sectional design, the result presented to relate well-being to physical exercise may not necessarily reflecting causal relationships. In this case, longitudinal studies may conclude with greater certainty that physical exercise is related to better well-being or not.

Further, physical exercise could have been a result of the body ideal in today's society. Perhaps students exercise because they feel they have to live up to this body ideal. In this case, exercise might be associated with pressure and negative experiences. Moreover, students who did exercise more frequently might look at themselves as less attractive and successful than those who chose not to exercise. Thus, this might effect their overall well-being. However, the positive correlation between the Fitness Subscale Item and well-being indicated that students who exercised more frequently looked at themselves as more fit and attractive than those who exercised less. Finally, the results showed a positive correlation between physical exercise and the Not-Ill Subscale Item. Similarly, the results indicated that physical exercise was negatively correlated with days missed because of illness. This can reflect that physical exercise was associated with better physical health among the subjects, but not associated with better psychological health. The last result supported previous findings by Mechanic and Hansell (1987).

Higher levels of physical exercise was neither associated with higher achievement in college. Mechanic and Hansell (1987) concluded that a higher level of sports and exercise was associated with higher levels of achievement in high school. As discussed above, the interpretation of the results most takes into account that the results are based on self-report. However, the result cannot argue that physical exercise will have a positive effect on achievement in college. In addition, more studies are needed before we can conclude with greater certainty that physical exercise is related to higher achievement in college or not.

The results did not show any relationship between students' financial support and well-being. Thus, the last hypothesis was supported. Earlier studies also demonstrated that money has not contributed to an overall improvement of well-being (e.g. Csikszentmihalyi 1990, Oswald 1997, and Parducci 1995). One must take into concern that this research design did not evaluate students with a radically high financial support. In addition, a further categorizing of students' financial support than those measured in this design might give different results. Further, small sample sizes for each group could have an influence on the results. This is because studies with smaller samples have to have larger test statistics than studies with larger samples in order to be significant. Things have to be more extremely different or correlated when the samples are small. However, it seems clear that money is not strongly related to an overall well-being; even though, making money is the highest goal for many people in our culture (Ryckman 1999). Though, instead of worrying about how to make a million dollars, it seems more beneficial to find out how everyday life can be made more harmonious and satisfying (Csikszentmihalyi 1990).

The only variable that had a significant, positive effect on well-being in the present study was feeling of control of one's life. The results showed that students who reported to be in control of their life also reported an overall higher well-being. This result supports previous findings. People, who are in control of their life, are more likely to experience flow and happiness (Csikszentmihalyi 1990). Furthermore, people with an internal control of reinforcement were psychological healthier than those with an external control of reinforcement (Ryckman 1999). Internal oriented people tend to believe that reinforcements are subject to their own control, while externals see little or no connection between their behavior and various reinforcements (Ryckman 1999). Thus, it seems clear that feeling in control of one' life is an important contribution to well-being among students.

Students who were estimated to stay in the flow channel during college reported somewhat higher well-being than those who were estimated not to stay in the flow channel, but the difference was not significant. According to Csikszentmihalyi (1990), it should be expected that students who were estimated to experience flow during college would report an overall higher well-being. Why this is not true for the present study can mainly be a result of three factors. First, as mentioned above, a small sample size for the two groups could explain why the difference did not turn out to be significant. Second, flow experiences from college is perhaps not a significant attribute to the overall flow experiences for students. This is, the flow students experienced from schoolwork might not represent a large number of flow experiences compared to other areas of students' life. Indeed, some students take only one or two classes, and have a part time or full time job beside college. In such a case, college will perhaps just provide a small part of students' life. As a result, college does not have much impact on their well-being, even if they experienced flow or not. For this reason, it would be interesting if future research could focus on students who take five or six courses each semester. Such a design might lead to other results and support Csikszentmihalyi's theory.

The last reason could have been that the present study did not measure if students stayed in the flow channel or not. Perhaps students who were estimated to stay in the flow channel actually did not experience flow, or vice versa. One reason for this could be that the present research addressed the wrong question. Instead of asking "I find college challenging", a better question might have been "how challenging do you find college on a scale from one to five". Further, the assignment of students who were estimated to stay in the flow channel might be wrong. The procedure used here could have assigned students to a wrong group. As a result, students who were estimated to experience flow in college should perhaps instead be estimated

not to experience flow in college, or the other way around. However, as seen in the introduction section, this design should have certain validity.

Older students did not score either higher or lower in social interest than younger students. According to this result, it could be argued that social interest is developed before people start at college. Further, female students scored higher in social interest than male students, but the difference between sexes was not significant. These results corroborated earlier findings by Crandall (1975). It could have been expected to be a stronger difference between the two sexes, since a typical feminine characteristic is to show a greater concern for other people (Berger 1998). However, the result did not indicate that female students showed more interest in or concern for others. Moreover, the results did not indicate that older students and female students had a more positive correlation between social interest than younger students and male students. The last result did not support previous findings by Crandall (1980).

The mean in social interest was higher for students who did not smoke than for students who smoked, but it was not significant. Again, the result could be effected by the small sample size. However, compared to Crandall (1980) students who smoked almost met the criteria to be nominated for low social interest, while students who did not smoke almost met the criteria to be nominated for high social interest. Again, the result could have been influenced by the small sample size.

Smoking, drinking, and drug use was negative correlated with well-being, but the correlation was not significant. It was not expected that these three variables would have any impact on students' well-being or not. As discussed in the introduction, there were some arguments that these variables could be negatively related to well-being (e.g. Csikszentmihalyi 1990, Parducci 1995, and Berger 1998). On the other hand, it was argued that these variables also often were associated with social interaction and fun, which in turn might have a positive effect

on well-being. However, as Parducci (1995) mentioned, it could be that the long-term effects of drugs might be negative. Another explanation to these results could be that the subjects chose not to response if they used drugs since it is illegal. In addition, only eight participants reported using drugs, which makes it hard to draw any conclusion. According to alcohol, some participants might drink one or two classes of wine for dinner several times a week. When analyzing the data, it will look like these students drank a lot, even if they just drank four units per week. Consequently, future studies should take the amount of smoking, drinking, and drug use into account when discussing their effect on well-being.

The last variable tested against well-being, was achievement in college. The results did not illustrate that achievement in college was associated with higher well-being. In other words, students with better academic results did not report to score higher in well-being than their opposites. This result did not collaborate with previous findings by Mechanic and Hansell (1987), who concluded that achievement in High school was positively correlated with self-assessed health. Alternatively, a study of a hundred women students at Hawaii Pacific University showed that there was no significant correlation between grade point and depression (Hedlund, Turniski, Nogueria, and Lin Ang 1999). One possible explanation for the result in the present research could be that the average grade point was high and concentrated. A mean score for grade point of 3.21 (SD = .52, n = 75) might give an indication that this is right.

Finally, higher well-being among students was associated with fewer days missed because of illness. Similarly, physical exercise was also associated with fewer days missed because of illness. These results can indicate that both physical and psychological health works as a buffer against illness. These results could be valid for employers who want to reduce absence among their employees. Alternatively, Hedlund and colleagues (1999) did not find any significant correlation between days missed for illness and depression.

Conclusion

The present study looked at the relationship between nine variables and well-being. Only one of these variables, feeling in control of one's life was significantly correlated with well-being. The other eight variables; social interest, physical exercise, financial support, flow experience in college, smoking, drinking, drug use, and achievement, were neither positively nor negatively correlated with well-being. According to other studies, these results were somewhat surprising; especially that social interest, physical exercise, and flow experiences in college were nor associated with higher well-being. As discussed, a number of reasons could explain these results.

Other findings showed that students who exercised more frequently and scored higher in social interest missed fewer days because of illness than those who scored lower on these variables. Moreover, there were no difference in social interest, or the correlation between social interest and well-being according to sex and age. Finally, physical exercise was not related to higher achievement in college.

The results may give an idea that well-being is a complex variable, and that it is difficult to talk about factors that in general can have an effect on a person’s well-being. In addition, further studies about this topic are needed.

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APPENDIX

A. The Whole Questionnaire
B. Report Note
C. Some of the Major Results

A SURVEY OF COLLEGE STUDENTS

Thank you for participating

This research is being done by Kristian Holm Carlsen, a psychology student at Hawaii Pacific University, in collaboration with Dr. Nancy Hedlund, Professor of Psychology at HPU.

There are several questions for you to complete. I want you to answer every question as best and honest as you can, without thinking too much about it. If you are in doubt or there is some words you do not understand etc., please try your best and make the best choice you can. Further, if there are something you would prefer not to answer, you are allowed to leave it blank. Do what you feel is best for you. However, I will be extremely thankful if you answer as much as possible. Your response will be kept completely confidential and no information from any student will be reported individually. All the results will be tabulated and presented in summary form for all participants in the study. If you would like to receive a summary of the result of the research, please provide your name and address on the separate sheet of paper so we can mail or send this to you early next semester.

If you have any questions following your participation in this research, please contact Dr. Nancy Hedlund at HPU, MP 442, 544-1104.

Please return this survey in next class or in the attached HPU "campus mail" envelope, and send to DR. Nancy Hedlund, Campus Mail, MP 442.

Thank you for participating!

BACKGROUND QUESTIONS

(Please choose only one statement per question)

Sex: □male □female

Age: _____

Which country are you from? _____

Is English your first language? □yes □no

What is your year in school? 1st (freshman) ___ 3rd (junior)___ Graduate ___
2nd (sophomore) ___ 4th (senior)___

What is your grade point (estimate, overall)? _____

How many days of school have you missed in the past 6 months because of illness?

About_____days

How many times do you exercise every week? _____

Do you smoke? □regularly □some times □no

How many days per week do you drink alcohol? _____

How many days per week do you use drugs? _____

What is your budget per semester (Include tuition, rent, insurance, food, books, pocket money, etc.)?

□less than $8.000 □$8.000-11.000 □$11.100-14.000 □more than $14.000
□I don't know

PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT BELOW TO SHOW HOW YOU FELT LAST WEEK:

Belief about myself...	***How frequently this is true*** (circle one)			
	1=less than one day	**2**=some, 1-2 day(s)	**3**=moderate, 3-4days	**4**=most of the time
I feel peaceful	**1**	**2**	**3**	**4**
I feel wonderful	**1**	**2**	**3**	**4**
I feel centered	**1**	**2**	**3**	**4**
My life is in balance	**1**	**2**	**3**	**4**
I feel spiritually whole	**1**	**2**	**3**	**4**
I can cope with stress in my life	**1**	**2**	**3**	**4**
I feel I can reach my optimum	**1**	**2**	**3**	**4**
I feel energetic	**1**	**2**	**3**	**4**
I feel strong	**1**	**2**	**3**	**4**
I am able to enjoy being with my family	**1**	**2**	**3**	**4**
I like myself	**1**	**2**	**3**	**4**
I feel alert	**1**	**2**	**3**	**4**
I am in good shape	**1**	**2**	**3**	**4**
I am at ideal weight for me	**1**	**2**	**3**	**4**
I feel good about my body	**1**	**2**	**3**	**4**
I am physical fit	**1**	**2**	**3**	**4**
I take good care of myself	**1**	**2**	**3**	**4**
I look good	**1**	**2**	**3**	**4**
My body does what I want it to do	**1**	**2**	**3**	**4**
I have a nice appearance	**1**	**2**	**3**	**4**
I have a sense of purpose in life	**1**	**2**	**3**	**4**
I am aware of my goals for myself	**1**	**2**	**3**	**4**
I am self-disciplined	**1**	**2**	**3**	**4**
I have a positive attitude about myself	**1**	**2**	**3**	**4**
I can attains goals I set for myself	**1**	**2**	**3**	**4**
I am proud of myself	**1**	**2**	**3**	**4**

	1= less than one day	**2**=some, 1-2 day(s)	**3**=moderate, 3-4 days	**4**=most of the time
I don't have physical problems	**1**	**2**	**3**	**4**
I don't have any pain	**1**	**2**	**3**	**4**
I don't have bothersome symptoms	**1**	**2**	**3**	**4**
I don't have chronic health problems	**1**	**2**	**3**	**4**
I can perform my usual functions	**1**	**2**	**3**	**4**
I have many friends	**1**	**2**	**3**	**4**
I can love and care	**1**	**2**	**3**	**4**
I feel affectionate	**1**	**2**	**3**	**4**
I feel good about my relationships	**1**	**2**	**3**	**4**
I am an interesting person to be with	**1**	**2**	**3**	**4**

PERSONAL TRAITS

Below are a number of pairs of personal characteristics or traits. For each pair underline the trait which you value more highly. For example, the first pair is "helpful – quick witted". If you feel "helpful" is one of your characteristics, please underline "helpful". If "quick witted" is one of your characteristics, please underline "quick witted". If you have to make a choice, choose which one you would rather be, but always underline just *one* trait for each pair. Some of the traits will appear twice, but always in combination with a different trait.

helpful – quick witted
neat – sympathetic
intelligent – considerate
respectful – original
generous – individualistic
capable – tolerant
trustworthy – wise
forgiving – gentle
efficient – respectful
alert – cooperative
imaginative – helpful
realistic – moral
considerate – wise
sympathetic – individualistic
ambitious - patient

SOME MORE QUESTIONS

(Please circle one)

I feel I can control my life.	Disagree				Agree
	1	2	3	4	5
I find college challenging?	Disagree				Agree
	1	2	3	4	5
I feel I have too little time to study?	Disagree				Agree
	1	2	3	4	5

On a scale from 1 to 5, where 5 is the best. How well did you like this questionnaire? _____

THANK YOU FOR YOUR PARTICIPATION! Would you like to receive a report of the results of this project? If yes, write your mane, address and e-mail on the separate piece of paper and return it in next class or to Dr. Nancy Hedlund, Campus Mail, MP 442. Your responses will remain totally confidential.

I would like to receive a report of the results of this research, done by Kristian Holm Carlsen, in collaboration with Dr. Nancy Hedlund.

Name _____

Address _____

_____

E-mail _____