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THE INFLUENCE OF VALUE ORIENTATIONS AND  
DEMOGRAPHICS ON QUALITY-OF-LIFE  
PERCEPTIONS: EVIDENCE FROM A NATIONAL  
SURVEY OF SINGAPOREANS

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**ABSTRACT.** This paper explores the linkages between value orientations, demographics and the quality of life perceptions for Singaporeans based on a nationwide values and lifestyles study conducted in 2001. The quality of life perception is assessed using cognitive evaluations of satisfaction with life in general (subjective personal well-being) and with aspects of living in Singapore (subjective social well-being). Five different value orientations, namely family values, materialism, status consciousness, societal consciousness and traditionalism, are examined for their effects on quality of life. The key demographics used are gender, age, marital status, education and personal income.

**KEY WORDS:** demographics, quality of life, Subjective well-being, value orientations

INTRODUCTION

The island city-state of Singapore has enjoyed a relatively prosperous era of economic, social and political stability over the last 10 years. Despite the Asian financial crisis in 1997 and the economic upheavals caused by the Severe Acute Respiratory Syndrome (SARS) epidemic in 2003, Singapore has managed to weather these storms, showing encouraging economic recovery.

Comparing 1996 and 2001 figures (Kau et al., 2004), Singaporeans' levels of satisfaction with life in general have risen. Interestingly, their levels of satisfaction with specific aspects of living in Singapore appear to have fallen. Past studies have linked demographic variables to individuals' assessment of life

satisfaction (e.g., Glenn and Weaver, 1981; Shichman and Cooper, 1984; Long et al., 1990; La Barbera and Gurhan, 1997; Oswald, 1997; Blanchflower and Oswald, 2000; and Diener et al. 2000). Various studies have also explored the link between life satisfaction and values such as materialism (e.g., Brickman and Campbell, 1971; Campbell, 1976; Belk, 1984, 1985; Richins, 1986; Richins and Dawson, 1992; La Barbera and Gurhan, 1997; Ryan and Dzurawiec, 2001; and Ahuvia, 2002), and religiosity (e.g., Hadaway and Roof, 1978; Heller and Mansbach, 1984; Hunsberger, 1985; Chamberlain and Zika, 1988; Ellison et al., 1989; Long et al., 1990; Poloma and Pendleton, 1990). Thus, in addition to using demographic variables to shed more light on our findings, we also attempt to examine the link between Singaporeans' value orientations and their levels of satisfaction with life in general and with living in Singapore.

This study extends prior research by examining value orientations that extend beyond sacred and secular values such as religiosity and materialism (La Barbera and Gurhan, 1997), and by studying the impact of demographics and value orientations on Singaporeans' cognitive and evaluative judgments of Subjective Well-Being (SWB) in both the personal and social realms.

## CONCEPTUAL FRAMEWORK

### *Quality of Life*

Quality of life (QOL) is a broad theoretical concept that comprises several, often interrelated components. Conventionally, QOL as experienced by members of a particular society may be evaluated using measures of subjective well-being and/or social indicators.

Subjective well-being research focuses on measuring an individual's cognitive and affective reactions to her or his whole life as well as to specific domains of life (Diener, 1984; Myers and Diener, 1995). While affective measures focus on happiness (positive affect) or depression (negative affect or the absence of happiness), other measures emphasize life satisfaction, that is, a more cognitive sense of satisfaction with life (Diener and Suh,

1997). The study of life satisfaction is more than an intellectual exercise, as the empirical information it yields can help assess whether the quality of a society is improving or deteriorating (Diener and Suh, 1997). One common approach in measuring life satisfaction is to divide one's life into separate but different domains such as family, work, study, health and so on. Satisfaction with each of these domains will be assessed individually and cumulatively into an overall feeling of well-being (Kau and Wang, 1995). Campbell (1976) found that certain "domains" of satisfaction were very important for satisfaction with life-as-a whole. The most important domains were family life and marriage, with friendship not far behind.

Social indicators, especially quantitative statistics with regard to per capita income, mortality rates, years of schooling and others (see Diener and Suh (1997) for a comprehensive review) have been used as fairly objective measures of a society's quality of life. For instance, the Cramer et al., (2004) study on quality of life in the city included the effect of population density. In addition, qualitative social indicators with reference to perceived standards of living have also been employed in assessing the quality of life experienced by a society's individuals. For instance, Hellevik's (2003) study on happiness in the Norwegian population looked at five such qualitative indicators, measuring how a person perceives his/her economic or material situation: "satisfaction with income, satisfaction with possessions, feeling that the personal economy has been improving recently, expectations of future improvements, and finally, perceived relative economic situation compared to the population average" (p. 253).

### *The Impact of Demographic Variables on Life Satisfaction*

Various studies have been conducted to examine how demographic factors such as age, gender and income might influence the perception of life satisfaction. Generally, the studies have reported weak linkages between measures of happiness and satisfaction and standard demographic variables, with less than 10% of the variance explained (Andrews and Withey, 1974; Davis et al., 1982; Michalos 1985; Veenhoven, 1984).

In terms of gender, women are slightly happier than men but they are also more prone to depression and mental disorders (Nolen-Hoeksema and Rusting, 1999). Researchers have suggested that women tend to and have been socialized to experience both positive and negative emotions more intensely than men (Fujita et al., 1991 Rhodes, Whelan, 1989).

For age, there are variable results with some studies concluding that older people are happier because they have achieved more in life, have more stable incomes and supportive social networks, and enjoy a higher status in life. According to the goal-achievement gap model (Michalos, 1986), satisfaction increases continuously with age. As people become older, their achievements increase and their aspirations decline, until eventually the gap closes (Campbell et al., 1976). They have also had time to adjust to and accept their present conditions in life (Argyle, 1989). Other studies have shown that older people are less happy because they are often in poor health. Some researchers have posited a U-shaped relationship between age and SWB, with younger and older people reporting high levels of happiness while those in the middle years are burdened with many responsibilities and are often too busy or tired to enjoy life (Oswald, 1997; Blanchflower and Oswald, 2000).

With regard to social class, there is usually a small positive relation between income and happiness; a similar effect is noted for other social class indicators such as education and occupational status. Those who are better educated and paid tend to have more interesting jobs, feel they have more control over their lives, and receive more respect from others; thus they are usually happier. In the United States, the standard of living has increased more or less continuously since 1957 but repeated surveys have found a generally falling level of satisfaction (Easterlin, 1974). A similar lack of correlation is found for satisfaction with education, sports facilities, crime prevention and housing (Argyle, 1987). Other researchers have also showed moderate relationships between a country's wealth and levels of subjective well-being (e.g., Cantril, 1967; Gallup, 1976). Diener et al. (1993) found a clear relationship between income and happiness for those with lower incomes, which leveled off for those who are more financially endowed. On the

other hand, there are also poorer people who seemed contented with their lot in life (Olson and Schober, 1993).

For marital status, Veroff et al. (1981) found that the percentages of married men and women who rated themselves as “very happy” were 1.5 to 2.5 times more than those of single or divorced men and women. Diener et al. (2000) also suggested that marriage and its attendant benefits could increase happiness, with both men and women reporting similar levels of subjective well-being. However, the happiness differential between married and never-married individuals appears to be narrowing, with never-married individuals experiencing increasing happiness, and the married experiencing decreasing happiness (Lee et al., 1991). This is consistent with the trend of fewer and later marriages and rising divorce rates.

In our study, we examine the effect of several key demographic variables, namely gender, age, marital status, education and personal income on the perceptions of the quality of life. In the context of Singapore, we propose the following relationships between demographic variables and the quality of life:

- (a) Gender has no significant effect. Men and women are equally likely to be happy or unhappy. This is because extant studies are unable to provide conclusive evidence that one gender is happier than the other.
- (b) Age has a negative effect, that is, older people are less happy. We posit that this unhappiness is due in a large part to the rising costs of living and healthcare in Singapore.
- (c) Marital status has no effect. Married and single people are equally likely to be happy or unhappy. This is in line with the current trend reported that the happiness differential between married and never-married individuals appears to be narrowing.
- (d) Education has a positive effect; those who are more educated are happier. This is because education is highly valued in Singapore, and higher educational levels are closely correlated with higher incomes.
- (e) Personal income has a positive effect; those who have higher personal incomes are happier. This is because they

have more access to resources and are able to enjoy life in Singapore with fewer concerns about the costs of living.

### *The Impact of Value Orientations on Life Satisfaction*

The study of values has long been on the agenda of researchers. In the 1960s and 1970s, Rokeach (1968, 1973) led in this field of values research and was credited with defining and explaining values on an individual basis. Rokeach (1968) believed that the concept of values, more than any other, is the core concept across all social sciences. He further asserted that values are the main dependent variable in the study of culture, society and personality, and the main independent variable in the study of social attitudes and behavior. In a seminal piece of work on the study of lifestyles, Mitchell (1983) defined values as “the whole constellation of a person’s attitudes, beliefs, opinions, hopes, fears, prejudices, needs, desires, and aspirations that, taken together, govern how one behaves.” It is therefore interesting to explore whether we can extend this conclusion to include the impact of people’s value orientations on life satisfaction.

Researchers have explored the relationship between materialism and life satisfaction (La Barbera and Gurhan, 1997; Ryan and Dziurawiec, 2001; Ahuvia, 2002). Generally, studies have shown that the outcomes of a lifestyle centered on the acquisition of possessions and material objects are far from desirable. Specifically, materialism has been shown to have a negative impact on life satisfaction and subjective well-being (e.g., Richins and Dawson, 1992; Sirgy, 1998; Kau et al., 2000). Highly materialistic individuals were less satisfied with their “life as a whole” and also with specific domains of life such as family life, standard of living and the amount of fun and enjoyment (Ryan and Dziurawiec, 2001). La Barbera and Gurhan (1997) found that, in addition to materialism, a person’s religiosity also played a part in determining one’s sense of subjective well-being. They posited that religious beliefs and convictions enhance a person’s resolve to live a fulfilling and meaningful life. In other words, the cognitive aspects (i.e., perceived religious importance) and

the behavioral aspects (i.e., religious service attendance) have a positive influence on subjective well-being. Their study also reported a positive main effect between SWB and the demographic variables of income and age.

In a study that examines the influence of the economy and values on happiness in the Norwegian population, Hellevik (2003) derived three distinct dimensions that capture differences in value orientation. One dimension which contrasted people who are positive to technological innovations, gender equality, spontaneity, urban life, are tolerant and like risk taking to who believe in established traditions, religion, authority, conformity, is called Modern-versus-Traditional value orientation (p. 265). Another which distinguishes between people who are more willing to contribute to society and display a higher level of empathy with others from people who give priority to their own needs over others, are less willing to contribute to good causes, or to restrict their own consumption out of concern for the environment, is labeled Materialistic-versus-Idealist value orientation (p. 265). The third dimension relates to preferences for equality and collective/public solutions versus inequality and individual/private solutions.

Hellevik (2003) found that people who are more willing to contribute to society and display a higher level of empathy with others (labeled as Idealists) are happier than people who give priority to their own needs over others, are less willing to contribute to good causes, or to restrict their own consumption out of concern for the environment (labeled as Materialists). Such a relationship has also been found with American data (Hellevik, 2003). The author reasoned that this could be because materialistic goals are harder to attain than other kinds of goals (Hellevik, 2003, p. 268). Hellevik (2003) also found that the second dimension of value orientation – modern-traditional, is weakly related to happiness, with a slightly higher level among individuals with a traditional value orientation (p. 268).

Although personal values are the main driving forces behind our thinking and behavior, we should not overlook family values, which can be defined as the pool of shared values among family members that enhance the well-being of families. In a

2001 nationwide survey of Singaporeans, Kau et al. (2004) found overwhelming agreement for the importance of five core-family values endorsed by the Singapore Government (Love, Care and Concern; Mutual Respect; Filial Responsibility; Commitment; and Communication). A search of the literature did not reveal any studies that examined the impact of family values on subjective well-being. However, this investigation is important since personal values and family values are closely intertwined. This is particularly true in the case of Singapore, where the Government had played a major role in promoting and upholding the importance of family values and ties, through a nation wide Family Values campaign that started in 1994.

Other researchers have examined alternative relationships such as the stage of economic development in a society and its effects on the attendant culture. Ahuvia (2002) suggests that economic development leads to higher levels of national average SWB, not by increasing consumption, but by creating more individualistic cultures that encourage their members to pursue personal happiness over honor and meeting social obligations.

In our study, we used a constellation of five value orientations and examined their influence on quality of life. Two value orientations (family values and societal consciousness) represent more collectivistic value systems that emphasize the importance of contributing to collectivities such as the family and society. Two other value orientations, that of materialism and status consciousness, represent more individualistic tendencies and behaviors focused on enhancing personal self-worth and status. The last value orientation of traditionalism relate to traditional ways of doing things. The effect of traditionalism on quality of life is less clear as traditional ways and beliefs might be embraced and treasured by some as a buffer against uncertainty and change, while others might view tradition as a hindrance to self-expression and progress.

In the context of Singapore, we propose the following relationships between value orientations and the quality of life:

- (a) Family Values has a positive effect; those who are more family-oriented are happier.



- (b) Materialism has a negative effect; materialistic individuals are likely to be unhappy.
- (c) Status Consciousness has a negative effect; status-conscious individuals are likely to be unhappy.
- (d) Societal Consciousness has a positive effect; those who are societal conscious are happier.
- (e) Traditionalism has no effect; both traditionalists and non-traditionalists are equally likely to be happy or unhappy.

### MEASUREMENT

In this study, quality of life is operationalized and measured using cognitive and evaluative judgments of Subjective Well-Being (SWB) in both the personal and social realms. Firstly, in the personal realm, we examined Singaporeans' satisfaction with their jobs, leisure/entertainment and their relationships with parents, partners, children, siblings and friends (Kau and Wang, 1995). These seven aspects closely mirror the key domains of SWB as suggested by Argyle (Argyle and Martin, 1991; Argyle, 1996). We term this measure "Subjective Personal Well-Being" (SPWB). Secondly, in the social realm, we probed into Singaporeans' satisfaction with living in Singapore, in areas which affected their livelihood and which had an impact on their perceived welfare and happiness: public services, transport, education, law enforcement, cost of living, cost of properties, quality of health care, etc. We term this measure "Subjective Social Well-Being" (SSWB). For the statements on SPWB and SSWB (see Tables I and II), respondents were requested to indicate their level of satisfaction using an interval scale with 1 denoting "very dissatisfied" to 6 for "very satisfied".

Drawing upon previous values and lifestyles research (see for example, Kau et al., 1998), we developed statements that measured Singaporeans' attitudes towards family values, materialism, societal consciousness, status consciousness and traditionalism (see Table III).

Respondents were asked to rate the importance of each of the value orientation statements in the survey questionnaire. The Likert-based scale with 1 denoting "not important at all"

TABLE I  
Subjective personal well-being (SPWB)

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Satisfaction with Domains of Life

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Relationships with children  
 Relationships with parents  
 Marriage/Romantic Relationships  
 Relationships with siblings  
 Friends  
 Jobs (if working)  
 Leisure activities/entertainment

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TABLE II  
Subjective social well-being (SSWB)

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Satisfaction with Living in Singapore

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Cleanliness of the country  
 Level of safety and security in country  
 Public Services (e.g. road, water, etc.)  
 Convenience of public transport  
 Quality of law enforcement  
 Way government runs the country  
 Quality of education  
 Quality of health care  
 Availability of health care  
 Amount of freedom  
 Variety of leisure/recreational activities  
 Protection of consumers  
 Range of products and services  
 Quality of consumer services  
 Number of rules and regulations  
 Affordability of health care  
 Availability of career opportunities  
 Affordability of properties  
 Cost of living  
 Affordability of cars

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to 6 for “very important” was adopted for this purpose. The reason for choosing an even numbering interval was to force respondents to avoid taking a neutral position.

TABLE III  
Value orientations

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Value Orientations and Scale Items
<i>Family Values</i>
Family love makes a person feel appreciated and treasured.
Family members should communicate openly and honestly with each other.
Family members should stand by one another through life's ups and downs.
One should honor one's parents and grandparents.
Family members should be prepared to make sacrifices to help each other.
One should support one's parents in their old age.
One should strive to provide the best for one's children.
<i>Materialism</i>
Money is the most important thing to consider in choosing a job.
If I had to choose between having more money or leisure, I would choose money.
Money can solve most people's problems.
Financial security is very important to me.
Some of the most important achievements in life include acquiring wealth and material possessions.
<i>Societal Consciousness</i>
I am willing to volunteer work on a regular basis.
I am interested to know how I can improve the welfare of others in my country.
I often find time to be involved in community or charity work.
I often donate money for charitable causes.
I feel I should do my part to help raise funds for charity.
<i>Status Consciousness</i>
I like to own things that impress people.
I usually look out for well-known brands to reflect my status in life.
I admire people who own expensive homes, cars and clothes.
I feel good if the credit card I used gives the impression of high status with exclusive privileges
My social status is an important part of my life.
<i>Traditionalism</i>
It is wrong to have sex before marriage.
I like to stick to traditional ways of doing things.
I celebrate festivals in the traditional way.
Divorce is unacceptable.
Religion is an important part of my life.

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## DATA COLLECTION

A survey was conducted among 1500 respondents aged 15 years and above in Singapore during the period of September 2001. The data collection for this survey was commissioned to a reputable market research firm in Singapore, who maintained strict adherence to the principle of statistical sample selection. The sample selection and data collection procedures undertaken were as follows:

1. The Household Listing Frame comprising over 2000 Primary Sampling Units (PSUs) or geographical areas was used. A stratified sample of 48 PSUs was selected according to housing type. From the HDB<sup>1</sup> 1–3 room type, 18 PSUs were chosen and 26 PSUs were selected from HDB 4-room and 5-room types. The remaining 6 PSUs were from private housing.
2. A random sample of 1500 households was chosen from the 48 PSUs.
3. From each household, an adult (aged 15 years and above) was identified. The adult selected was based on quota specifications (i.e., gender, age, race, housing type and working status) as indicated in the data of the 2000 Census of Population.
4. All surveys were conducted face-to-face with the respondents at their homes from 8 September to 30 September 2001. A team of 25 interviewers was employed to conduct the fieldwork. Prior to the commencement of fieldwork, the interviewers attended the basic training session and the project briefing session organized by the market research firm.
5. About 10% of the completed interviews were recalled by the Field Supervisor and Executive of the market research firm to ensure data quality.

From the initial pool of 1500 respondents, we used a sample of 987 working adults as job satisfaction is one of the key aspects of SPWB and those who are not working will not be able to respond to this item. The sample was gender-balanced with a good distribution across the various age groups and educational levels. Almost 6 out of 10 respondents surveyed

were married. In terms of ethnicity, Chinese respondents (about 83%) was the largest group interviewed, followed by 9% of Malays, 7% of Indians and the remaining (0.7%) from other ethnic groups.

TABLE IV  
 Demographic profile of respondents

Demographic profile of respondents	Frequency	% of Total
<i>Gender</i>		
Male	560	56.7
Female	427	43.3
<i>Age</i>		
15–24 years	126	12.8
25–34 years	299	30.3
35–44 years	299	30.3
45–54 years	197	20.0
55–64 years	50	5.1
65 and above	16	1.6
<i>Marital Status</i>		
Single	381	38.6
Married	576	58.4
Widowed	11	1.1
Divorced	19	1.9
<i>Ethnic Group</i>		
Chinese	815	82.6
Malay	93	9.4
Indian	72	7.3
Others	7	0.7
<i>Level of Education</i>		
Primary school	136	13.8
Secondary school	377	38.2
Junior college/Polytechnic	333	33.7
University graduate	130	13.2
Postgraduate	11	1.1
<i>Monthly Personal Income</i>		
Less than \$1000	108	11.3
\$1000–\$2000	323	33.8
\$2001–\$3000	295	30.8
\$3001–\$5000	154	16.1
\$5001–\$7500	45	4.7
\$7501–\$10,000	28	2.9
\$10,000 and above	4	0.4

## ANALYSIS

*Reliability of Measures Used*

We first conducted reliability analysis to ascertain that the various scales used in this study were robust and valid. The Cronbach's coefficient alphas for the measures of SPWB, SSWB and value orientations showed reasonable reliability.

- *Subjective Personal Well-Being or SPWB (alpha: 0.820)*  
The seven items in this measure evaluate one's satisfaction with his/her interpersonal relationships (with parents, siblings, marriage/romantic partners, children and friends), job and leisure activities.
- *Subjective Social Well-Being or SSWB (alpha: 0.916)*  
The twenty items in this measure are cognitive evaluations of the standards of living in Singapore. The items cover a diverse range of concerns such as cleanliness, safety and security, to issues of freedom and consumer protection. Other concerns are related to the quality of healthcare and education, and the affordability of cars and properties.
- *Family Values (alpha: 0.877)*  
The eight items in this value orientation are related to the nurturing and upholding of family values.
- *Materialism (alpha: 0.676)*  
The six items measure Singaporeans' attitudes towards having money and possessions, and the importance placed on these entities.
- *Societal Consciousness (alpha: 0.689)*  
The five items in this value orientation represented a conscious desire to improve the society's well being, and relate to looking after the less fortunate members of society.
- *Status Consciousness (alpha: 0.783)*  
Three out of five items reflect Singaporeans' desire to impress others by achieving and/or maintaining a social status, and the remaining two items reflect Singaporeans' preoccupation with status.

TABLE V  
Results of regression analysis (dependent variables: overall satisfaction with life, relationships, job, and leisure)

Independent variables	Overall satisfaction with life (SPWB) <sup>a</sup>			Relationships <sup>b</sup>			Job <sup>c</sup>			Leisure <sup>d</sup>		
	Beta	t	p value	Beta	t	p value	Beta	t	p value	Beta	t	p value
Family values	<b>0.291</b>	<b>8.030</b>	<b>0.000</b>	<b>0.207</b>	<b>5.480</b>	<b>0.000</b>	0.061	1.542	0.123	<b>0.287</b>	<b>8.041</b>	<b>0.000</b>
Materialism	0.059	1.431	0.153	0.033	0.775	0.439	0.069	1.549	0.122	<b>0.089</b>	<b>2.183</b>	<b>0.029</b>
Societal consciousness	<b>0.124</b>	<b>3.418</b>	<b>0.001</b>	<b>0.088</b>	<b>2.304</b>	<b>0.021</b>	0.065	1.642	0.101	<b>0.117</b>	<b>3.263</b>	<b>0.001</b>
Status consciousness	-0.075	-1.879	0.061	<b>-0.142</b>	<b>-3.386</b>	<b>0.001</b>	<b>-0.088</b>	<b>-2.021</b>	<b>0.044</b>	<b>0.089</b>	<b>2.244</b>	<b>0.025</b>
Traditionalism	0.068	1.881	0.060	0.039	1.023	0.307	<b>0.079</b>	<b>1.988</b>	<b>0.047</b>	0.031	0.875	0.382
Age	<b>-0.081</b>	<b>-2.177</b>	<b>0.030</b>	<b>-0.133</b>	<b>-3.399</b>	<b>0.001</b>	-0.063	-1.570	0.117	0.033	0.900	0.369
Education	0.000	0.005	0.996	-0.001	-0.031	0.975	-0.009	-0.236	0.813	0.026	0.742	0.459
Gender	0.046	1.517	0.130	<b>0.076</b>	<b>2.373</b>	<b>0.018</b>	-0.018	-0.529	0.597	0.027	0.906	0.365
Marital status	<b>-0.092</b>	<b>-2.618</b>	<b>0.009</b>	<b>-0.130</b>	<b>-3.542</b>	<b>0.000</b>	-0.039	-1.027	0.305	0.014	0.406	0.685
Personal income	<b>0.072</b>	<b>2.061</b>	<b>0.040</b>	0.048	1.301	0.193	<b>0.131</b>	<b>3.372</b>	<b>0.001</b>	<b>0.073</b>	<b>2.101</b>	<b>0.036</b>

Note: <sup>a</sup>R<sup>2</sup> = 0.421 (F = 20.34, p < 0.000), <sup>b</sup>R<sup>2</sup> = 0.326 (F = 11.13, p < 0.000), <sup>c</sup>R<sup>2</sup> = 0.224 (F = 4.78, p < 0.000), <sup>d</sup>R<sup>2</sup> = 0.448 (F = 23.81, p < 0.000).

TABLE VI

Results of regression analysis (dependent variable = subjective social well-being (SSWB))

Independent variables	SSWB <sup>a</sup>		
	Beta	<i>t</i>	<i>p</i> value
Family values	<b>0.369</b>	<b>10.516</b>	<b>0.000</b>
Materialism	<b>-0.097</b>	<b>-2.426</b>	<b>0.015</b>
Societal consciousness	<b>0.313</b>	<b>8.905</b>	<b>0.000</b>
Status consciousness	0.048	1.247	0.213
Traditionalism	-0.057	-1.632	0.103
Age	-0.038	-1.067	0.286
Education	-0.050	-1.420	0.156
Gender	0.035	1.191	0.234
Marital status	-0.044	-1.299	0.194
Personal income	0.011	0.323	0.747

Note: <sup>a</sup> $R^2 = 0.477$  ( $F = 27.92$ ,  $p < 0.000$ ).

- *Traditionalism* ( $\alpha: 0.726$ )  
The five items represented traditional values regarding marriage, sex, and religion, as well as the observation of traditional festivals and traditional ways of doing things.

#### *Regression Analysis Using Value Orientations and Demographics*

To determine the impact of Singaporeans' value orientations on their satisfaction with life, we ran multiple regression analyses using Subjective Personal Well-Being (SPWB), the specific components of SPWB such as Satisfaction with Relationships (relationship with parents, children, siblings, and marriage/romantic relationship), Satisfaction with Job, Satisfaction with Leisure Activities, and Subjective Social Well-Being (SSWB) as dependent variables. The independent variables in all these regression analyses are the Value Orientation factors (family values, traditionalism, materialism, societal consciousness, and status consciousness) and the demographic variables (age, education level (years in formal education), marital status



(dummy variable, married = 1, not married = 0), gender (dummy variable, male = 1, female = 0), and personal income). The beta coefficients and associated  $t$  statistics are shown in Tables V and VI.

## RESULTS

### *Subjective Personal Well-Being (SPWB)*

The regression model was found to be significant ( $F = 20.34$ ,  $p < 0.000$ ), accounting for 42% of the variation in the data. The results show that Singaporeans' sense of SPWB was explained significantly by Family Values, Societal Consciousness, Age, Marital Status, and Personal Income. Specifically, having strong Family Values and Societal Consciousness contributed positively towards Singaporeans' satisfaction with the personal aspects of their lives. Age and Marital Status contributed negatively, indicating that married and older Singaporeans were more likely to be less satisfied with their lives in general. Personal income contributed positively towards this satisfaction, indicating that having more personal income helped in creating a greater sense of satisfaction with life.

For Satisfaction with Relationships, the regression model was found to be significant ( $F = 11.13$ ,  $p < 0.000$ ), accounting for 33% of the variation in the data. The results show that Singaporeans' satisfaction with their relationships (with parents, siblings, partners as well as children) was explained significantly by Family Values, Societal Consciousness, Status Consciousness, Age, Gender, and Marital Status. Specifically, Family Values and Societal Consciousness contributed positively while Status Consciousness contributed negatively towards Singaporeans' satisfaction with their various relationships. Age and marital status contributed negatively toward this satisfaction, indicating that older and married Singaporeans are less satisfied with their relationships. However, gender contributed positively towards this kind of satisfaction, indicating that male Singaporeans are more likely to be satisfied with their relationships.

With regard to Satisfaction with Job, the regression model was found to be significant ( $F = 4.78$ ,  $p < 0.000$ ), accounting

for 22% of the variation in the data. The results show that Singaporeans' satisfaction with their job was explained significantly by Status Consciousness, Traditionalism, and Personal Income. Specifically, the more status conscious a Singaporean was, the less satisfied he/she was with his/her job. However, the more traditional a Singaporean was, the more satisfied he/she was with his/her job. The more personal income a Singaporean earned, the more satisfied he/she was with his/her job.

For Satisfaction with Leisure, the regression model was found to be significant ( $F = 23.81, p < 0.000$ ), accounting for 45% of the variation in the data. The results show that Singaporeans' satisfaction with their leisure activities was explained significantly by Family Values, Materialism, Societal Consciousness, and Status Consciousness. Specifically, Family Values, Materialism, Societal Consciousness, and Status Consciousness all contributed positively towards Singaporeans' satisfaction with their leisure activities. Personal Income is the only demographic variable that contributed significantly and positively to Singaporeans' satisfaction with leisure.

#### *Subjective Social Well-Being (SSWB)*

The regression model was found to be significant ( $F = 27.92, p < 0.000$ ), accounting for 48% of the variation in the data. The results show that Singaporeans' sense of SSWB was explained significantly by Family Values, Materialism, and Societal Consciousness. Specifically, Family Values and Societal Consciousness contributed positively while Materialism contributed negatively towards Singaporeans' satisfaction with aspects of living in Singapore. No demographic variable contributed significantly towards the respondents' sense of SSWB.

## DISCUSSION

In this section, we discuss the effects of the five different value orientations and five demographic variables on satisfaction with life. The domains of satisfaction (the dependent variables) are Subjective Personal Well-Being (with three dimensions

comprising Satisfaction with Relationships, Satisfaction with Job and Satisfaction with Leisure) and Subjective Social Well-Being.

### *Value Orientations and Subjective Personal Well-Being*

Our results show that only 2 out of 5 value orientations have an impact on Singaporeans' Subjective Personal Well-Being (SPWB), namely, Family Values and Societal Consciousness. However, when SPWB is decomposed into three specific components, the impact of other value orientations becomes more evident.

Family Values and Societal Consciousness continue to have positive impact on Satisfaction with Relationships and Satisfaction with Leisure. This implies that being family-oriented and grounded in values that nurture strong family bonds made Singaporeans happier about their lives. Similarly, being socially aware and involved in helping others also engendered feelings of well-being among these Singaporeans. Status Consciousness has a negative impact on Satisfaction with Relationships and Satisfaction with Job, but a positive impact on Satisfaction with Leisure. This means that Singaporeans who are very status conscious are more satisfied about their leisure life perhaps because these leisure activities are occasions whereby they could express their status and impress others. However, being status conscious also made these Singaporeans less happy about their interpersonal relationships and jobs, as they need to manage these two aspects of personal well-being in their pursuit of better social status. Materialism had an effect (positive) only on satisfaction with leisure. This means that Singaporeans who placed a high importance on material possessions are happier about their leisure activities as such activities are occasions for them to enjoy their fruits of labor. Traditionalism had an effect (positive) only on satisfaction with job. Thus Singaporeans who held on to traditional beliefs and ways of doing things were happier with their jobs. Being averse to trying out new ways of doing things or new ideas, these Singaporeans may be contented with their job's status quo. They may not make that many comparisons about their job

versus other jobs, and certainly the idea of looking for greener pastures would never cross their mind.

### *Value Orientations and Subjective Social Well-Being*

Three main value orientations have significant impact on Singaporeans' Subjective Social Well-Being: Family Values, Materialism, and Societal Consciousness. The results show the positive effect of family values on Singaporeans' satisfaction with living in Singapore. Being societally conscious also has a positive effect on Singaporeans' subjective social well-being, while materialism has a negative impact. Thus, family bonding and caring for each others, including the less fortunate people helped make living in Singapore a satisfactory experience for these Singaporeans. However, concerns about material possession, perhaps due to the increasing costs and stress of living in the city-state, made Singaporeans less satisfied with their social well-being. In the 2001 survey, affordability of health care, number of rules and regulations, availability of career opportunities, cost of living, affordability of properties, and affordability of cars are areas which had only between 28 and 45% of Singaporeans who are satisfied with these aspects of living in Singapore (Kau et al., 2004).

### *Demographics and Subjective Well-Being*

Generally, the effects of demographic variables on Singaporeans' subjective personal well-being are mixed. This is similar to findings from previous studies. However, among the various demographic variables examined, Personal Income emerged as having a positive impact on at least three aspects of satisfaction, namely one's SPWB, and satisfaction with one's job and leisure. Since higher personal income has the potential to affect happiness by altering feelings of success, self-esteem, and ability to care for self and family (La Barbera and Gurhan, 1997), it is not surprising that Singaporeans with higher personal income are happier about their personal well-being, their job, and leisure.

Age and marital status had a negative impact on two aspects of satisfaction: SPWB and satisfaction with one's relationships.

Older and married respondents were unhappy with these two aspects of their lives. Traditional Chinese society is based on a clearly defined societal structure whereby authority and respect are accorded to age (Lu, 1995). However, even though three-quarters of Singaporeans are of Chinese origins, modernization and westernization in Singapore has weakened this traditional societal structure. Hence, it is not surprising to find that older Singaporeans were unhappy, and married Singaporeans are like their western counterparts who face decreasing happiness (Lee et al., 1991).

Gender had a singular effect on satisfaction with one's relationships, with male Singaporeans being happier about their interpersonal relationships. In a study on the relationship between subjective well-being and psychosocial variables in Taiwan, Lu (1995) found that women tend to report more psychological symptoms than men did, hence this could be a reason why female Singaporeans are not as happy as their male counterparts about their interpersonal relationships.

Unlike the case of subjective personal well-being, no demographic variables had a significant influence on the respondents' SSWB, that is, their overall satisfaction with living in Singapore.

## CONCLUSION

This study shows that it is meaningful to examine subjective well-being in two separate dimensions: personal and social. In this study, we developed a subjective social well-being indicator which comprises an individual's perception of his/her satisfaction with various aspects of societal life. This subjective social well-being indicator could be a complement to the extant social indicators, which Diener and Suh (1997) had critiqued as having several weaknesses. Two weaknesses which they highlighted and which our subjective social well-being scale could avoid are: variables have been selected in an ad hoc manner and the difficulty of determining the optimum between too much and too little spending on social welfare and national security (p. 196). As shown in Table VI, our subjective social well-being

scale includes items that cover all aspects of living in a society and are applicable to all societies, whether developed or developing. By using subjective evaluation, this avoids the issue of determining an optimum for items such as security and welfare.

We also found that within subjective personal well-being, it is more meaningful to examine three specific dimensions: relationships, job and leisure. We found that besides value orientations like Family Values and Societal Consciousness, the impact of other values such as materialism, status consciousness, and traditionalism could be determined only if we look into specific aspects of subjective personal well-being.

Diener et al. (1995) showed that cultural factors such as individualism could affect subjective well-being. La Barbera and Gurhan (1997) showed that sacred values (religiosity) and secular values (materialism) do affect subjective well-being. Our study contributed to this pool of findings by providing evidence of influence of other value orientations such as family values, societal consciousness, status consciousness and traditionalism.

The mixed findings about the influence of demographic variables on subjective personal well-being and the non-influence of such variables on subjective social well-being show that variations in satisfaction with quality of life or happiness may not be easily detected through examining demographical differences alone. This is especially for demographics like age and gender, which this study found to be culturally dependent.

The present study needs to be read with certain limitations in mind. The survey uses a stratified random sample based on types of housing that reflects the demographics of the population according to the 2000 Singapore Census and may not be completely random. The measures of subjective well-being were developed or adapted for this study and need to be further examined for their reliability and validity as measures of community satisfaction. For example, the SPWB is a domain-based satisfaction measure, and may yield differing results from global measures such as Diener et al.'s (1985) Satisfaction with Life Scale. The measures relating to Relationships, Job and Leisure are taken from the SPWB measure; and the single-item measures for Job and Leisure need to be subjected to test-retest

reliability evaluation. In future, these measures should be supplemented with an overall community satisfaction scale which has been proven robust by previous studies. Similarly, the measures for Value Orientations also need to be further studied for their reliability and validity as measures of values. Further replication of this study can be done using established scales such as Diener et al.'s (1985) SWL scale and Huprich and Frisch's (2004) QOL Index, and taking into account effect sizes and the percentage of variance explained for the variables examined. Longitudinal studies could also be carried out to examine the correlation between happiness exhibited by our subjective social well-being indicator and that of social indicators. Last but not least, cross-cultural replication of this study could be undertaken, for instance comparing Singapore with other Asian and non-Asian societies, since subjective well-being is a value that varies across individuals and nations (Diener and Suh, 1997).

#### NOTES

<sup>1</sup> Close to 85% of Singaporean citizens and permanent residents live in apartments built by the Housing and Development Board (HDB), a government agency that was set up in 1960 to provide affordable, high-quality homes in integrated townships. The HDB provides a range of apartments for varying family sizes, ranging from 3-room, 4 room or 5-room apartments to executive condominiums with facilities such as swimming pools and gyms.

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