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WORK VALUES OF SINGAPOREAN ADOLESCENTS

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Introduction

In the context of this study, work values refer to the empirically measured tendency to react favourably or unfavourably to certain generalized conceptions about work and to the outcomes or end states reached through work.

Current literature reveals that research studies on work values often use the bi-polar dimension of intrinsic/extrinsic values as the basis for investigation and measurement (Alvi, 1981; Jepsen, 1982). People with an extrinsic value orientation view work principally in terms of its instrumental character. To them work supposedly possesses very little, if any, value in and of itself, but rather serves as a central means to certain ends. These ends usually include financial security, a comfortable material standard of living, access to leisure activity and social status both at the work place and within the community. In contrast to an extrinsic work orientation, those who invest work primarily with intrinsic meaning do not regard it as a burden to be borne simply for its instrumental utility, but as a central integrating principle of one's individual and social being. As such, the job content is viewed as an important source of enrichment in which individuals may encounter challenge, assume responsibilities, make creative decisions, overcome obstacles and express a wide range of talents and aptitudes. Through work the individual is thought to achieve psychological growth and maturity in a process of self-fulfillment. These fundamental differences in meaning which individuals come to ascribe to work are thought to underlie individual differences in work preferences.

Research has shown that work values of adolescents are closely related to family status and parental values (Goodale & Hall, 1976; Kinnane & Pable, 1962; Krau, 1987; Witjing, Arnold & Conrad, 1977, 1978), that gender differences exist between boys and girls in that girls seem to be more people-oriented, choosing values such as interesting experiences, social services and working conditions while boys tend to be career or extrinsic-reward-oriented, preferring values such as good pay, security and prestige (Adrisani & Miljus, 1977; Beutell, 1986; Perrone, 1973). However, such gender differences appear to diminish with recent years and the breaking down of the barriers between the traditionally "male" or "female" occupations (Beutell & Brenner,

1986; Walker, Tansky and Oliver, 1982). With regard to age differences in work values, some investigators found a shift from idealistic to realistic work values as students progress from early to late adolescence (Gribbons & Lohnes, 1965; Hales & Fenner, 1977). There is also indication that work values appear to have considerable stability over the adolescent years, with strong values growing stronger and weak values growing weaker and finally remaining stable in late adolescence (Hurt & Holen, 1976; Kapes & Strickler, 1975).

To sum up, research has shown 3 common trends in the development of work values in adolescents -

1. There seems to be gender differences in their preference for work values with female students showing a stronger preference for intrinsic values.
2. As they grow older, there appears to be a shift in adolescents' vocational values, in most cases from "idealism" to "realism".
3. With the crystallization of a vocational self-concept, work values begin to stabilize by late adolescence.

This study investigated the development of work values in Singaporean adolescents. The research questions addressed were - what are the predominant work values among Singaporean students? Is there a shift in the work values of adolescents as they proceed from early to late adolescence? Are there gender differences in their work values? Is there any association between work values, school curriculum and school achievement?

The Sample

Using the cross-sectional design and stratified random sampling techniques, a sample of 1380 students was drawn from 14 secondary schools and 3 junior colleges. Stratification was based on geographical location, type of school as well as distribution of the students in terms of age, gender and curriculum. Tables 1 and 2 illustrate the sample distribution by age, gender and curriculum.

Table 1 Distribution of Sample by Grade and Gender

Grade	Male		Female	
	Population	Sample	Population	Sample
Sec.1	11,697	120	11,701	120
Sec.2	12,488	130	12,617	130
Sec.3	11,175	110	11,641	120
Sec.4	11,717	120	12,613	130
J.C.1	5,332	84	5,748	116
J.C.2	4,459	81	5,187	119
Total	56,868	645	60,507	735

Table 2 Distribution of Sample by Curriculum

Course	Population	Sample	%
General	46,494	500	1.1
Science	32,986	340	1.0
Arts	37,950	250	0.7
Technical	18,710	110	0.6
Commerce	15,089	180	1.2

Instrumentation

In this study Super's Work Values Inventory was used to ascertain the work values of secondary school pupils in Singapore. This 45-item instrument yields 15 scales representing fifteen clusters of work values. Scoring is based on a 5-point scale with each item carrying 1 to 5 points. As there are 3 items in each value cluster, each subscore ranges from 3 to 15 points. When administered to Americans, Super found that test-retest reliability of the 15 scales in the inventory ranges from .74 to .88, with the Median being .83. (Super 1970). When administered to Singaporean students, however, the reliability coefficients (cronbach alpha) were found to be lower, ranging from .51 to .85.

The Findings

Rank Ordering of Work Values

Table 3 presents the rank ordering, the mean scores and standard deviation of the 15 work values computed from the students' responses. Looking at the pattern that emerges, it is obvious that our teenaged students place great emphasis on interpersonal relationships at work. To them getting along with one's supervisor and colleagues is of the utmost importance. Achievement as a work goal also ranks high in their preference, reflecting the value of our achievement-oriented society. Whether they are well-paid or not does not seem to be a crucial factor as this work value is only ranked ninth in position but being able to keep one's preferred life style and enjoying pleasant work environment are considered important. At the other end of the scale, Aesthetics as a work value is given the lowest priority by the majority of the students. To be in charge of people is something they do not look for in a job, neither do they care about obtaining prestige or being independent at work.

Table 3 Ranking of Work Values

Rank Order	Value	Mean	S.D.
1	Associates	12.98	2.44
2	Supervisory Relations	12.89	2.61
3	Achievement	12.65	2.27
4	Way of Life	12.34	2.46
5	Surroundings	11.96	2.33
6	Security	11.81	2.41
7	Creativity	11.73	2.52
8	Altruism	11.67	2.43
9	Economic Returns	11.51	2.57
10	Intellectual Stimulation	11.47	2.24
11	Independence	11.02	2.38
12	Prestige	10.45	2.42
13	Variety	10.09	2.38
14	Management	9.98	2.43
15	Esthetics	9.55	2.65

Age Differences in Work Values

Several researchers have reported age differences in work values among adolescents. (Gribbons & Lohns, 1965; Hales & Fenner, 1972; Perorone, 1973; Pryor, 1980, 1981). This study supports their findings as the results revealed some age differences in the work values of Singaporean adolescents in terms of a shift from "idealism" in the lower grades to "realism" in the upper grades.

Table 4 Ranking of Work Values
Comparison by Age

Ranking	Grade Level					
	Sec.1	Sec.2	Sec.3	Sec.4	JC.1	JC.2
1	SR	AS	AS	AS	AS	WL
2	AS	SR	SR	SR	SR	AC
3	AC	AC	AC	AC	WL	AS
4	AL	CR	WL	WL	AC	SR
5	WL	SU	SU	SU	SU	ER
6	SU	WL	SE	SE	SE	SU
7	SE	AL	CR	CR	ER	IN
8	CR	SE	AL	ER	AL	SE
9	IS	IS	ER	AL	CR	CR
10	ER	ER	IS	IS	IS	IS
11	IN	IN	IN	IN	IN	AL
12	PR	PR	PR	PR	VA	VA
13	ES	VA	MA	MA	PR	PR
14	MA	ES	VA	VA	MA	MA
15	VA	MA	ES	ES	ES	ES

Work Values :

AS = Associates	AC = Achievement
AL = Altruism	CR = Creativity
ER = Economic Returns	ES = Esthetics
IS = Intellectual Stimulation	IN = Independence
MA = Management	PR = Prestige
SR = Supervisory Relations	SE = Security
SU = Surroundings	VA = Variety
WL = Way of Life	

Table 4 shows that "Altruism", an idealistic value, decreases in importance with advancing age, having dropped from fourth position in secondary 1 to the eleventh position by the end of junior college. On the other hand, practical and materialistic work values such as "Way of Life" gradually increases in importance so much so that by the time the students reach junior college, this value replaces both "Associates" and "Supervisory Relations" as being number one in importance. Likewise "Economic Returns" increases in importance with advancing age, being upgraded from the tenth position in Secondary 1 to the fifth position by the end of junior college.

Studying age differences in the development of work values, Kapes and Strickler (1975) found that work values increased in intensity over the years with strong values becoming stronger and weak values getting weaker. Such a trend too, can be observed in the Singaporean sample. As can be seen in Table 4, "Achievement", a work value that is considered by all age groups as being important becomes even more so with the older students. Similarly, the work value "Way of Life" which is considered fairly important by the younger students becomes the most important work value by year 2 in the junior college. In Australia, Pryor (1980) observed that the work values labeled "Independence" and "Surroundings" decreased in importance by the end of high school. The findings of the Singapore study, however, do not bear out these observations at all. In fact, Table 4 shows that "Independence" increases in importance while "Surroundings" remains fairly important throughout.

To investigate further age differences in the ranking of work values among Singaporean students, analysis of variance was performed using ANOVA procedures which showed that among the 15 work values, "Independence", "Economic Returns", "Variety" and "Way of Life" increase in importance with advancing age while "Altruism", "Esthetics" and "Supervisory Relations" decrease in importance with the older students.

Gender Differences in Work Values

A number of American studies have reported gender differences in the work values of adolescents (Perrone, 1973; Wijting et al., 1977; 1978). To investigate the situation in Singapore, pairwise comparisons of the data were performed using t-test procedures. The results revealed significant differences in six of the fifteen work values.

Table 5 Significant Gender Differences in Work Values

Work Value	Mean Scores		t Value
	Boys	Girls	
Achievement	12.34	12.92	-4.75**
Management	10.17	9.81	2.75*
Surrounding	11.64	12.25	-4.84**
Supervisory Relations	12.68	13.07	-4.84*
Variety	9.88	10.27	-3.03*
Way of Life	12.13	13.52	-2.91*

* $p < .01$

** $p < .001$

It is interesting to note from the results presented in Table 5 that although American researchers found that girls were more intrinsic-oriented in their work values, findings of the Singapore study have been inconclusive. On one hand, the girls place greater emphasis on "Achievement" than their male counterparts, on the other hand they also show a stronger preference for practical values such as "Surroundings", and "Way of Life". While more boys aspire to leadership positions (Management), girls prefer to be followers and look forward to having impartial and understanding bosses (Supervisory Relations). They also place much premium on variety at work.

The Relationship Between Work Values and Curriculum

There has been little research effort to examine the relationship between work values and curriculum (Gade & Peterson, 1977). To determine if there are significant differences in between the curricular groups in the Singapore sample, analysis of variance was performed using ANOVA procedures. The results show significant association between curriculum and work values in nine of the fifteen variables.

Table 6 Analysis of Variance of Work Values Inventory

Main Effects for Course

Source of Variation	Sum of Square	Mean Square	F Value
Esthetics	223.02	55.76	8.09*
Altruism	210.02	52.50	9.11*
Independence	101.07	25.27	4.52*
Achievement	95.51	23.88	4.67**
Prestige	116.35	29.09	5.02**
Economic Returns	137.69	34.42	5.28**
Surrounding	88.26	22.06	4.08*
Variety	321.54	80.39	14.71**
Way of Life	185.81	46.45	7.83**

SAS GLM/ANOVA df = 4, 1374 * p < .01 ** p < .001

To probe further, multiple comparisons were computed using Scheffe's test and the results showed that students from the General course and the Arts course give high preference to intrinsic values such as "Altruism" and "Aesthetics" while Commerce students prefer "Prestige", "Surroundings", and "Variety". On the other hand, Science students consider "Independence", "Variety" and "Way of Life" rather important.

The Relationship Between Work Values and School Achievement

To investigate the association between work values and school achievement, the mean scores of students from "high-achieving" schools were compared with the mean scores of those from "low-achieving" schools. Results of the pairwise comparison using t-test revealed that among the fifteen work values, significant differences were obtained for only two values, namely, "Altruism" (M of High Group = 12.15, M of Low Group = 11.61, $t = -3.09$, $p < .01$) and "Variety" (M of High Group = 10.09, M of Low Group = 9.48, $t = -3.44$, $p < .001$) in favor of students from the "high-achieving" group. This seem to indicate that high-achieving students have stronger preference for altruistic work values. They also appear to be more adventurous.

Summary of Findings

Regardless of age, gender, and curriculum, secondary school students in Singapore show a preoccupation with the importance of interpersonal relationships at work. To them having a good and impartial supervisor and getting along with colleagues are of utmost importance, followed by "achievement" at work.

Contrary to expectations, only slight age differences can be observed in that the younger students place more emphasis on "Altruism", "Esthetics" "Supervisory Relations" and "Associates" while the older students are more concerned with practical values such as "Way of Life" and "Economic Returns". They also want more "Independence" and "Variety".

On the whole, results of this study do not bear out the observations made by American researchers that girls are more intrinsic-oriented or people-oriented while boys are more reward-oriented.

There are interesting differences in between curricular groups in that students from Arts and General course show a greater preference for intrinsic values such as "Altruism" and "Aesthetics" while Commerce students favour "Prestige", "Surroundings", "Variety" and "Way of Life".

Lastly, some association can be observed between school achievement and work values. High achievers in the sample seem to place more emphasis on "Altruism" and "Variety" when compared to low achievers.

Implications for Career Guidance in Schools

To be effective, career guidance programmes need to keep in line with the pupils' status of career development. Research has shown that work values develop early but reach a peak in late adolescence. The Singapore study has also confirmed this trend. This means that in the career guidance programme, the discussion and examination of work values should be a developmental process in school. Serious self-examination of work values, however, should be introduced at secondary level when the students are intellectually and emotionally mature enough to appreciate and benefit from such discussions.

To be effective, career guidance programmes should also cater to the needs of the pupils, addressing specific issues and improving weak areas. Where work values are concerned, Singaporean adolescents seem to place much emphasis on the importance of supervisory and interpersonal relationships as well as achievement at work. Such are practical values reflecting a pragmatic, achievement-oriented society. Nevertheless, the students are so engrossed with the practical and material aspects

of work that they seem to have overlooked finer things in life such as altruism, creativity, and aesthetics which are intrinsic values important for job satisfaction. Teachers need to keep these findings in mind when planning career guidance programmes in schools. It is important to help the students appreciate both extrinsic and intrinsic values.

This study has confirmed the observation made by others that work values stabilize in late adolescence with the strong values growing stronger and weak values becoming weaker. In order to help the students develop positive, wholesome work values, therefore, intervention in this aspect of the students' career development should start early in their school career and continue throughout the high school years.

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