

## INTERNAL-EXTERNAL LOCUS OF CONTROL AND ADJUSTMENT PROBLEMS AMONG JUNIOR HIGH SCHOOL STUDENTS

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To investigate the relationship between locus of control and adjustment problems, 180 junior high school students were given both the Nowicki-Strickland's Locus of Control Scale and Mooney Problem Check List (Junior High School Form). In addition, the subjects scoring higher than one standard deviation above the mean were considered as the external control group (ECG) and those scoring lower than 1SD below the mean were the internal control group (ICG). The students whose scores were between  $\pm .5$  SD, from the mean were assigned to the moderate control group (MCG). The subjects were classified into three groups as mentioned above, each consisting of 60 students (30 boys and 30 girls). The results indicated (1) ECG reported more total problems of concern than ICG and MCG, but no significant sex differences were found, (2) the finding of this study, which indicated that the higher the scores of externality are, the more the problems are among all subjects, is suggestive of a linear rather than U-shaped curvilinear relationship between locus of control and adjustment, (3) there is significant agreement among the ranking of problem areas by three group students, and (4) the major problem areas of concern for junior high school students were "Self-Centered Concerns," "School," and "Money-Work-the Future."

### INTRODUCTION

Internal-external control of reinforcement is a concept that has developed from Rotter's social learning theory. It is a generalized expectancy which is viewed as a continuum of individual differences that cuts across need areas. The internally oriented individual believes that events or reinforcements are contingent upon his own behavior or his own relatively permanent characteristics, while the externally oriented person views reinforcement as being due to such factors as luck, fate, chance, powerful others, and the complexity of the world. Locus of control is a personality variable. It has been proved useful in a variety of predictive areas, including attempts at controlling the environment, social influence, risk-taking, and sociocultural phenomena.

There have been many studies about the relationship between locus of control and various behaviors or other variables. Recent attention has also been devoted to the personal adjustment correlates of internal-external (I-E). Most results of studies have found that the internally oriented individual has better adjustment to his life than the externally oriented individual.

#### Statement of the Problem

The purpose of this study was to compare and analyze the self-perceived and self-

reported adjustment problems of internal, external and moderate control students in junior high school. Specifically the study was:

1. identify the distinctive personal problems of the three group of students;
2. determine the relationship between the problems expressed and the variable of sex, and
3. analyze the patterns of problems of the three groups students.

### **Hypotheses**

The hypotheses tested in this study, stated in the null form, were as follows:

1. There is no significant difference in adjustment problems among internal, external, and moderate locus of control groups.
2. There is no significant difference of adjustment problems among internal, external, and moderate locus of control groups relative to sex.
3. There is no significant difference concerning the rank order of problem areas among internal, external, and moderate locus of control groups.

### **Delimitation and Limitation of the Study**

1. This study was limited to grade 7, 8, and 9 students in Yung-ho Junior High School, Taiwan, Republic of China. 180 students will be selected as the sample.
2. This study was primarily to analyze the nature and frequency of the personal problems which junior high school students were aware of and willing to express on the Mooney Problem Checklist (MPCL). No attempt was made to determine the traits or the degree of adjustment, nor was any attempt be made to explain underlying sources of conflict in adjustment.
3. Because grade 7, 8, and 9 subjects were used in the study, there was a necessary limitation on the generalization of the results to other age groups and other groups of different cultural background.

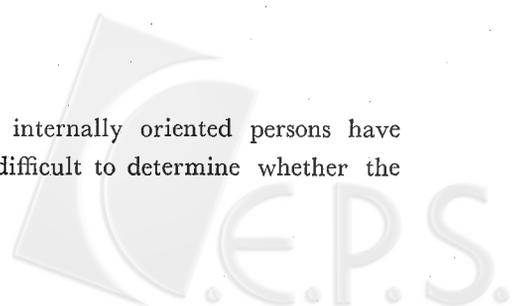
### **Definition of Terms**

1. *Internal locus of control*: This occurs when an individual perceives reward to be contingent upon his own behavior.
2. *External locus of control*: This occurs when an individual perceives reward as being contingent upon the actions of others or due to other "forces" such as fate, luck, or chance.
3. *Adjustment problems*: Personal problems confronting students in their adjustment to life, as operationally determined by MPCL.

**Pattern of Problems**: The relative rank order of the seven problem areas on the MPCL for various groups of participating students.

### **Importance of the Study**

Although most result of studies have found that internally oriented persons have better adjustment to life than externally persons, it is difficult to determine whether the



relationship between locus of control and personal adjustment is linear or U-shaped curvilinear. (i.e. is the degree of externality directly associated with more problems in adjustment and the degree of internality directly associated with less adjustment problems, or are individuals at the extreme ends of the internal-external dimension more maladjusted than the individuals in the middle range.)

Much of the research in this area has been conducted in the United States of America and is available in the western world. However, the study of the relationship between locus of control and adjustment among the secondary school students in Taiwan is still neglected. In order to provide some data in this respect, the present investigation was undertaken. The information obtained from the results of this study can be compared to the results of previous studies thereby facilitating understanding of the relationship between locus of control and adjustment among the junior high school students in Taiwan.

## REVIEW OF RELATED LITERATURE

This review is divided into five parts. The first four parts describe some findings of research about locus of control and the variables related to adjustment. The fifth part is a summary of the literature.

### Locus of Control and Personality Traits

Locus of control is a personality variable (Rotter, 1966; Joe, 1971). Several psychologists have been concerned with the relation of internal-external scores to personality characteristics. Hersch and Scheibe (1967) correlated Rotter's I-E Scale with the CPI (California Psychological Inventory) and the ACL (Adjective Check List) and found that internally oriented individuals were higher than externally oriented individuals on the Dominance, Tolerance, Good Impression, Sociability, Intellectual Efficiency, Achievement via Conformance, and Well-being scales of the CPI. Internally oriented individuals were more likely to describe themselves as assertive, achieving, powerful, independent, effective, and industrious on the ACL.

Some investigators (e.g. Tolor and Reznikoff, 1967, Altroehi, et.al., 1968) reported that external scores were significantly related to repression. Tolor and Reznikoff noticed that internal scores were significantly correlated with scores on a scale measuring insight and that external scores were related to overt death anxiety.

After finding a positive correlation between the I-E scale and Buss-Durkee Hostility Inventory, Williams and Vantres (1969) suggest that externals, having experienced more feelings of powerlessness and more frustration via external forces, are more prone to manifest aggression and hostility on the paper-and-pencil measure. Baron (1968) recorded a nonsignificant relationship between locus of control and authoritarianism.

In other studies, externals were found to be less trustful and more suspicious of other people and more dogmatic than internals (Hamsher, Geller, and Rotter, 1968; Miller and Minton, 1969; Clouser and Hjelle, 1970).

Joe (1971) in a review of research relative to Internal-External Control found that "externals, in contrast to internals, were relatively anxious, aggressive, dogmatic, and less trustful and more suspicious of others, lacking in self-confidence and insight, having low needs for social approval, and having a greater tendency to use sensitizing mode of defenses." (p. 623) Similarly, Ryckman and Sherman (1973), synthesizing earlier investigations, indicated that internals describe themselves as being self-confident, assertive, independent, perserving and insightful, while externals tend to describe themselves unfavorably, as being self-pitying, anxious and inadequate.

### **Locus of Control Anxiety**

The relationship between anxiety and I-E control has generally been low although significant in a number of instances (Potter, 1966). Butlerfield (1964) reported a positive relationship between external control and debilitating anxiety and a negative relationship with facilitating anxiety. Similar or congruent results have been reported by Watson (1967). Watson (1967), for 648 college students, found the correlations of .36 ( $p < .01$ ) between the I-E scale and Manifest Anxiety Scale, .25 ( $p < .01$ ) between external control and debilitating anxiety, and  $-.08$  ( $p < .05$ ) between external control and facilitating anxiety of the Alpert-Haber scale. Also consistent with above findings are two studies (Hountras and Scharf, 1970; Olatt and Eisenman, 1968) showing that externals scored higher on anxiety measure than did internals.

Tolor a Peznikoff (1967) reported that subjects with external expectancies have significantly greater overt death anxiety than subjects with internal expectancies. According to study results, Ray and Katahn (1968) concluded that a feeling of lack of control over the environment and outcome of one's actions is associated with anxiety.

On the other hand, Nelson & Phares (1971) found external control is associated both with greater anxiety and with the discrepancy between need value and expectancy in academic area. Strassberg's study results indicated than a lower expectation of achievement of valued goals is associated with both higher levels of anxiety and greater externality.

Most research supports the conclusion that there is a strong relationship between externality and a variety of measures of anxiety, although a few investigators have failed to verify this conclusion (e.g., Gold, 1968; Berman and Hays, 1973).

### **Locus of Control and Behavior Pathologies**

Cromwell, Rosenthal, Shakow, and Zahn (1961) found that schizophrenics were more external than the normal controls. Similar results were reported by Harrow and Ferrante (1969). Shybut (1968) noted that long-term, severely disturbed patients were significantly more external than short-term, moderately disturbed individuals.

Fontana, Klein, Lewis, and Levine (1968) found that schizophrenic patients who wished to impress others that they were "healthy" were more internal than those who wanted to convince others that they were "sick".

Process schizophrenia, with their poorer premorbid adjustment patterns and lower history of social inadequacy and failure, are more external than the reactive schizophrenics, whose maladaptive responses had developed more recently (Lottman and DeWolfe, 1972).

Duke and Mullens (1973) found that chronic schizophrenics prefer greater interpersonal distances than normals and that the degree of their withdrawal behavior from other human being is not completely due to their hospitalization.

Abramowitz (1969) found that externals report more feelings of anger and depression. Prociuk, Breen, and Lussier (1976) suggested that hopelessness would be positively related to external laws of control and to depression. Phares (1976) noted that "there ought to be a relationship between externality and depression... Externals surely should be more susceptible to learned helplessness than internals" (p. 126).

Williams and Nickels (1969) reported that externality is related to suicide-proneness. After investigating the relationship of internal-external control and the United States suicide rates, 1966-1973, Boor (1976) concluded:

The I-E scores increased substantially during this time period and were correlated positively with the concomitantly increasing suicide rates among relatively young persons (in and below the 35-44 year age group). However, the suicide rates among older persons generally decreased during this time period and thus were correlated negatively with I-E scores. These results suggest that perceptions of internal-external control did not change among older persons as they did among younger persons, perhaps because older persons might be less susceptible to the cultural influences that affect the perceived control of younger persons.<sup>1</sup> (p. 795)

### **Locus of Control and Other Variables Related to Adjustment**

In a story completion task, internally oriented persons demonstrated a tendency to perceive moral sanctions as directly contingent upon the immoral actions of the central character (Johnson, et. al., 1968). This result suggested that the locus of control variable may directly influence moral judgement and mental health.

Fitch (1970) has reported a low but significant positive rank-order correlation between locus of control and self-esteem. Low self-esteem subjects tended to score as externals. Warehime and Foulds (1971) found a significant relationship between internality and self-actualization among male college students since self-actualization is often construed as an indicator of personal adjustment, those results indicated that internal students had higher self-actualization than external students.

One of the earliest studies on the relationship between locus of control and adjustment was conducted by James (1957). He found a significant correlation between the James-Phares Likert-type scale and the Incomplete Sentences Blank personal adjustment score. The relationship appeared to be curvilinear, extreme internals and extreme externals appearing less adjusted. Rotter (1966), Fontana, et. al. (1968) got similar results. Rotter noticed that individuals at the extreme ends of the internal-external dimension are more maladjusted than individuals in the middle range. In other words, it is a V-shape

relationship. However, Joe (1971) and Phares (1976), synthesizing many study results, argued that most of the research in this area suggest a linear relationship, i.e. more externality is associated with more problems in adjustment.

### Summary

From a review of related literature, it is evident that many investigators have found some differences of personality traits between internals and externals. Generally speaking, externally oriented persons, in contrast to internally oriented persons, are relatively repressive, aggressive, dogmatic, hostile, less trustful and more suspicious of others, lacking in self-confidence and insight, having low needs for social approval, and having a greater tendency to use sensitizing modes of defenses.

Most of the research suggests a significant relationship between locus of control and anxiety. Externals are more anxious than internals.

So far, research has indicated that more extreme pathology is related to greater externality. Externals report more feelings of anger, depression, and helplessness. Externality is also related to suicide-proneness.

There is significant relationship between locus of control and other variables related to adjustment. Low-self-esteem and low-self-actualization subjects tended to score as externally.

In short, most results of studies have found that the internals have better adjustment to their life than the externals. But the point at issue is whether the relationship between locus of control and personal adjustment is linear or U-shaped curvilinear.

### METHOD

This chapter contains the following information pertinent to the study: (a) subjects selected; (b) instruments used; (c) procedures for collecting data; and (d) method of data analysis.

### Subjects

The sample for this study consisted of 180 Junior high school students drawn by stratified sampling on the basis of sex and scores on the I-E scale, from Yung-ho Junior High School, Taiwan, Republic of China. The subjects scoring higher than 1 SD above the mean were considered as the External group and those scoring lower than 1 SD below the mean were the Internal group. The students whose scores were between  $\pm 1.5$  SDs from the mean were assigned to the moderate group. The distributions of these subjects as to the above variables are shown in the Table 1.

TABLE 1 DISTRIBUTION OF SUBJECTS BY SEX AND LOCUS OF CONTROL

	Internal	Moderate	External	Total
Boys	30	30	30	90
Girls	30	30	30	90
Total	60	60	60	180

## **Instrumentation**

### *1. The Nowicki-Strickland's Locus of Control Scale*

The Nowicki-Strickland's Locus of Control Scale (I-E Scale, Chinese Revision) is a paper-and-pencil measure consisting of 40 questions that are answered either yes or no by placing a mark next to the question. The items describe reinforcement situations across interpersonal and motivational areas such as affiliation, achievement, and dependency.

The scale is scored by externality, from 0 to 40. The higher the scores, the more external the locus of control is. Controlling for IQ internals performed significantly better than externals on achievement test scores ( $t=3.78$ ,  $df=48$ ). Test-retest reliabilities for a 6-week period are .67 for the 8-11-year-old group ( $N=98$ ) and .75 for those in the 12-15-year-old group ( $N=54$ ). For Chinese Revision, test-retest reliabilities for 3-week period are .72 (boys,  $N=100$ ), .72 (girls,  $N=100$ ), .70 (boys and girls) for the junior high school students group ( $N=200$ ).

### *2. The Mooney Problem Check List*

The Mooney Problem Check List (MPCL, Junior High School Form, Chinese Revision) was used as an instrument to gather data concerning the individual problems and problem areas of junior high school students.

The MPCL is a self-administered, untimed inventory used to help individuals express their personal problems. It includes 210 problems common to students. The items are written in short, simple, and descriptive terms but vague enough in sensitive areas to allow the respondent to check the item and feel that he is not revealing too much. They are grouped in seven broad problem areas with thirty items in each area. The seven problem areas of the MPCL are as follows:

- I. Health and Physical Development (HPD)
- II. School (S)
- III. Home and Family (HF)
- IV. Money-Work-the Future (MWF)
- V. Boy and Girl Relations (BG)
- VI. Relations to People in General (PG)
- VII. Self-Centered Concerns (SC)

Test-retest reliabilities for a 71-day period are .97 for the junior high school students group ( $N=99$ ).

## **Procedures**

The I-E Scale and the MPCL were administered on a group basis. No time limit was used. The instructions for taking the tests were given to each group by one examiner. The subjects were encouraged to respond honestly. The data was collected by Miss Jin-jen Ho, a counselor in the secondary school, and then mailed to the writer.

## **Data Analysis**

The raw scores of I-E Scale and the MPCL were calculated. The subjects were

selected and divided into groups, based on their scores on the I-E Scale, according to the sampling plan.

Procedures for the analysis of data were as follows:

1. Frequency means and standard deviation of each problem area and of the total on the MPCL for each student group were computed.
2. The statistical procedure used to test hypothesis 1 and 2 was a two-way analysis of variance ( $2 \times 3$ ). The factors involved were group (3) and sex (2). The groups factor (Hypothesis 1) indicated whether significant differences existed among the groups relative to problems of adjustment. The Tukey test of multiple comparisons was planned if a significant F was obtained since the groups factors consisted of three levels. The sex factor (Hypothesis 2) indicated whether significant differences in adjustment existed among groups based on sex.
3. To test Hypothesis 3, the rank order of 7 problem areas for each student group was determined on the basis of frequency means. Spearman's Rank Correlation Coefficients were calculated to determine the degree of agreement between the rankings of problem areas for various groups, and the *t* test was used to determine the significance of correlation coefficients obtained.

In the analysis of the data in this study the .05 level of significance was adhered to for all tests made.

## RESULTS

### The Analysis of Variance of Problems

Table 2 presents the frequency means and standard deviations of each problem area and of the total on MPCL for each student group.

Table 3 shows the analysis of variance of total problems which were of concern to the subjects. The F-value for groups was the only one significant at the .001 level, indicating that the difference among the frequency means of total problems report on the MPCL for three group students was statistically significant. The results of the Tukey test finds that there are significant differences between the means of internal group and moderate group, moderate group and external group, and internal group and external group. These findings indicate that moderate control students have more adjustment problems than internal control students, external control students have more adjustment problems than internal control students, external control students have more adjustment problems than moderate control students and external control students. There is no significant differences in sexes and interaction between groups and sexes. Therefore, Hypothesis 1 was rejected and Hypothesis 2 was accepted.

Futhermore, the results of two-way ANOVA relative to seven problem areas are reported in Table 4. They are analyzed as follows:

TABLE 2 FREQUENCY MEANS AND STANDARD DEVIATIONS ON MPCL FOR THE SUBJECTS

	Internal				Moderate				External			
	Boys		Girls		Boys		Girls		Boys		Girls	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
HPD	3.77	2.46	3.33	2.86	5.00	3.35	4.67	3.75	7.07	3.50	6.13	4.49
S	5.80	3.47	5.00	2.42	8.03	3.53	6.67	3.56	8.63	4.68	10.30	5.04
HF	2.33	2.43	1.43	1.33	3.10	2.39	2.60	2.43	5.50	4.29	6.23	3.97
MWF	5.87	3.80	4.00	2.75	7.80	3.42	5.80	4.02	9.53	4.49	8.23	4.70
BG	2.73	2.50	1.67	1.11	3.97	2.56	3.93	2.95	6.60	3.03	5.00	3.63
PG	3.57	2.06	2.63	2.18	5.37	3.33	4.50	4.15	7.57	4.46	8.13	5.50
SC	5.48	3.03	4.20	3.43	8.90	4.35	7.10	5.29	10.23	5.97	11.33	7.05
Total	29.23	14.76	23.47	14.32	41.97	16.99	35.10	22.20	54.83	23.97	56.73	29.82

TABLE 3 ANALYSIS OF VARIANCE OF THE TOTAL PROBLEMS OF CONCERN ON THE MPCL FOR THE SUBJECTS

Source	SS	DF	MS	F
Groups (G)	26,246.20	2	13,123.10	28.53***
Sexes (S)	576.00	1	576.00	1.25
G × S	684.40	2	342.20	.74
Error	80,040.60	174	460.00	
Total	107,547.20	179		

\*\*\* P &lt; .001

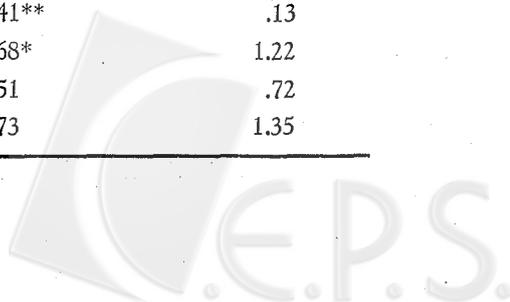
TABLE 4 TWO-WAY ANOVA FOR SEVEN PROBLEMS

Source	F Value		
	Group (G)	Sex (S)	G × S
DF	2	1	174
1. HPD	11.37**	1.17	.13
2. S	15.94***	.08	2.51
3. HF	28.12***	.24	1.18
4. MWF	14.76***	8.41**	.13
5. BG	24.98***	4.68*	1.22
6. PG	22.85***	.51	.72
7. SC	20.13***	.73	1.35

\* P &lt; .05

\*\* P &lt; .01

\*\*\* P &lt; .001



1. *Health and Physical Development (HPD)*: The F of 11.37 for groups was significant beyond the .001 level. It indicates that the significant differences existed among three groups. The results of the Tukey test are graphed below.

internal                      moderate                      external  
 |-----|

For interpretation, means are ordered low to high from left to right. All means not underlined by a common line differ significantly from the others. With respect to health and physical development, external locus of control students have significantly more adjustment problems than internal and moderate locus of control students. There are no significant differences in sexes and in the interaction of group and sex.

2. *School (s)*: The F obtained of 15.94 for groups was significant beyond the .001 level. This indicated that significant differences occurred between the groups and the Tukey multiple comparison test could be calculated. Results of the Tukey reveal significant differences between internal group and moderate group, moderate group and external group and internal group and external group existed. That is: relative to school life, external locus of control students have more adjustment problems than internal and moderate locus of control students, moderate locus of control students have more adjustment problems than internal locus of control students.

There are no significant differences in sexes and in the interaction of group and sex.

3. *Home and Family (HF)*: The F of 28.12 for groups was significant beyond the .001 level. This result indicated that significant differences occurred between groups. Results of Tukey test graphed below indicates which group contributed to those differences.

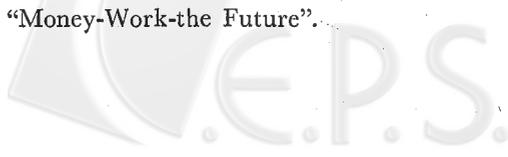
internal                      moderate                      external  
 |-----|

Means are ordered low to high from left to right. All means not underscored by a common line differ significantly from the others. With respect to "home and family" external locus of control students have more adjustment problems than internal and moderate locus of control students.

There are no significant differences between sexes and in the interaction of group and sex.

4. *Money-Work-the Future (MWF)*: The F of 14.76 for groups was significant beyond the .001 level, indicated that significant differences occurred between the groups and the Tukey multiple comparison test could be calculated. Results of the Tukey reveal significant differences between internal group and moderate group, moderate group and external group, and internal group and external group existed. That is: relative to "Money-Work-theFuture", external locus of control students have more adjustment problems than internal and external locus of control students, moderate locus of control students have more adjustment problems than internal locus of control students.

The F of 14.76 for sexes was significant beyond the .01 level. This result indicated that significant differences occurred between sexes. That is: boy students have more adjustment problems than girl students with respect to "Money-Work-the Future".



5. *Boy and Girl Relations (BG)*: The F obtained was significant beyond the .001 level, indicating that significant differences occurred between the groups. Results of the Tukey indicated significant differences between internal group and moderate group, moderate group and external group, and internal group and external group existed. That is: with respect to boy and girl relations, external locus of control students have more adjustment problems than internal and moderate locus of control student, moderate locus of control students have more adjustment problems.

The F of 4.68 for sexes was significant beyond the .05 level. This result indicated that significant differences occurred between sexes. In other words, boy students have more adjustment problems than girl students relative to boy and girl relations.

6. *Relations to people in General (PG)*: The F of 22.85 for groups was significant beyond the .001 level. This indicated that significant differences occurred between the groups and the Tukey multiple comparison test could be calculated. Results of the Tukey reveal significant differences between internal group and moderate group, moderate group and external group, and internal group and external group existed. That is: with respect to relation to people in general, external locus of control students have more adjustment problems than internal locus of control students.

There are no significant differences between sexes and in the interaction of group and sex.

7. *Self-centered Concerns (SC)*: The F of 20.13 for groups was significant beyond the .001 level. This indicated that significant differences occurred between the groups and the Tukey multiple comparison test could be calculated. Results of the Tukey reveal significant differences between internal group and moderate group, moderate group and external group, and internal group and external group existed. That is: relative to self-centered concerns, external locus of control students have more adjustment problems than internal and moderate locus of control students, moderate locus of control students have more adjustment problems than internal locus of control students.

No significant differences between sexes and in the interaction of group and sex are found.

### **Comparison of Rank Orders of Problem Areas**

Table 5 presents comparisons of rank orders of problem areas among internal group, moderate group, and external group. Major problem areas of concern were S, MWF, SC, and HPD for internal group; SC, S, MWF, and PG for moderate group and external group.

The correlations were significant between the rankings of problem areas for internal group and moderate group ( $r=.86$ ,  $P .05$ ), moderate group and external group ( $r=.97$ ,  $P .001$ ), and external group and internal group ( $r=.82$ ,  $P .05$ ). So in general, there was significant agreement among the rankings of problem areas by internal, moderate, and external locus of control students.

TABLE 5 COMPARISON OF RANK ORDERS OF PROBLEM AREAS AMONG INTERNAL, MODERATE, EXTERNAL LOCUS OF CONTROL GROUP STUDENTS

Area	Internal			Moderate			External		
	M	SD	Rank	M	SD	Rank	M	SD	Rank
HPD	3.55	2.67	4	4.83	3.56	5	6.60	4.05	5
S	5.40	3.02	1	7.35	3.61	2	9.47	4.94	2
HF	1.88	2.01	7	2.85	2.42	7	5.87	4.15	6
MWF	4.93	3.44	2	6.80	3.86	3	8.88	4.64	3
BG	2.20	2.01	6	3.95	2.77	6	5.80	3.44	7
PG	3.10	2.17	5	4.93	3.79	4	7.85	5.01	4
SC	4.83	3.30	3	8.00	4.93	1	10.78	6.55	1
Total	26.35	14.82		38.53	20.06		55.78	27.07	

Internal—Moderate  $r_s=.86$   $t=3.74^*$   
 Moderate—External  $r_s=.97$   $t=8.82^{***}$   
 External—Internal  $r_s=.82$   $t=3.15^*$

\*  $P < .05$

\*\*\*  $P < .001$

### DISCUSSION

#### Summary

This study has been oriented toward an investigation of junior high school students' adjustment problems in the light of different locus of control, with sex variable being taken into consideration. The purpose of the study was to compare and to analyze the self-perceived and self-reported adjustment problems of internal, external and moderate locus of control students in junior high school.

One hundred-eighty junior high school students were the subjects in this study. The Nowicki-Strickland's Locus of Control Scale and The Mooney Problem Check List (Junior high School Form) were administered to subject in regular class settings.

Statistical analysis of the data provided the basis for rejection of the hypothesis comparing internal, moderate, and external locus of control students but acceptance of the hypothesis comparing boy students and girl students in total adjustment problems. This is indicative that external locus of control students have more adjustment problems than internal and moderate locus of control students, but there is no significant differences between boy students and girl students.

The analysis of seven problem areas resulted in the rejection of all hypotheses comparing three group students in different locus of control. The Tukey multiple comparison test indicated a significant and consistent tendency that external locus of control students have more adjustment problems than internal and moderate locus of control students in

all problem areas. Moderate locus of control students have more adjustment problems than internal locus of control students in S, MWF, BG, PG, and SC. There are no significant differences between internal and moderate locus of control students in HPD and HF. Boy students have more adjustment problems than girl students in MWF and BG.

There was significant agreement among the ranking of problem areas by three group students.

### Conclusions

1. The results of this study indicate that external locus of control students, have more adjustment problems than internal and moderate locus of control students, moderate locus of control students have more adjustment problems than internal locus of control. Therefore, it can be tentatively concluded that the relationship between locus of control and personal adjustment is linear. In other words, the degree of externality directly associated with more problems in adjustment and the degree of internality associated with less adjustment problems.

2. In junior high school, there is no significant differences between boy students and girl students in adjustment problems.

3. The major problem area of concern for junior high school students were "Self-Centered Concerns", "School", and "Money-Work-the Future".

### Recommendations

1. It is found that the relationship between locus of control and personal adjustment is linear. Therefore, it is recommended that the Nowick-Strickland Locus of Control Scale can be an available diagnostic instrument of adjustment problems used in the counseling services of junior high school.

2. It is recommended that similar studies be conducted in other educational levels, so as to provide more information on the relationship between locus of control and adjustment.

### REFERENCES

- Abramowitz, S.I. Locus of control and self-reported depression among college students. *Psychological Reports*, 1969, **25**, 149-150.
- Altrocchi, J., Palmer, J., Hellman, R., & Davis, H. The Marlowe-Crowne, repressor-sensitizer, and internal-external scales and attribution of unconscious hostile intent. *Psychological Reports*, 1968, **23**, 1229-1230.
- Baron, R.A. Authoritarianism, locus of control and risktaking. *Journal of Psychology*, 1968, **68**, 141-143.
- Berman, A.L., & Hays, J.E. Relation between death anxiety, belief in afterlife, and locus of control. *Journal of Consulting and Clinical Psychology*, 1973, **41**, 320.
- Boor, M. Relationship of internal-external control and United States suicide rates, 1966-1973. *Journal of Clinical Psychology*, 1976, **32**, 795-797.

- Butterfield, E.C. Locus of control, test anxiety, reaction to frustration, and achievement attitudes. *Journal of Personality*, 1964, **32**, 298-311.
- Clouser, R.A., & Hjelle, L.A. Relationship between locus of control and dogmatism. *Psychological Reports*, 1970, **26**, 1006.
- Duke, M.P. & Mullens, M.C. Preferred interpersonal distance as a function of locus of control orientation in chronic schizophrenics, nonschizophrenic patients, and normals. *Journal of Consulting and Clinical Psychology*, 1973, **41**, 230-234.
- Feather, N.T. Some personality correlates of external control. *Australian Journal of Psychology*, 1967, **19**, 253-260.
- Fitch, G. Effects of self-esteem, perceived performance, and choice on causal attributions. *Journal of Personality and Social Psychology*, 1970, **16**, 311-315.
- Fontana, A.F., Klein, E.B., Lewis, E., & Levine, L. Presentation of self in mental illness. *Journal of Consulting and Clinical Psychology*, 1968, **32**, 110-119.
- Gold D. Some correlation coefficients: Relationship among I-E scores and other personality variables. *Psychological Reports*, 1968, **22**, 983-984.
- Hamsher, J.H., Geller, J.D., & Rotter, J.B. Interpersonal trust, internal-external control, and the Warren Commission Report. *Journal of Personality and Social Psychology*, 1968, **9**, 210-215.
- Harrow, M., & Ferrante, A. Locus of control in psychiatric patients. *Journal of Consulting and Clinical Psychology*, 1969, **33**, 582-589.
- Hersch, L.A., & Scheibe, K.E. On the reliability and validity of internal-external control as a personality dimension. *Journal of Consulting Psychology*, 1967, **31**, 609-614.
- Hovntras, P.T., & Scharf, M.C. Manifest anxiety and locus of control of low-achieving college males. *Journal of Psychology*, 1970, **74**, 95-100.
- James, W.H. *Internal versus external control control of reinforcement as a basic variable in learning theory*. Unpublished doctoral dissertation, Ohio State University, 1957.
- Joe, V.C. Review of the internal-external control construct as a personality variable. *Psychological Reports*, 1971, **28**, 619-640.
- Johnson, R.C., Ackerman, J.M., Frank, H., & Fionda, A.J. Resistance to temptation, guilt following yielding, and psychopathology. *Journal of Consulting and Clinical Psychology*, 1968, **32**, 169-175.
- Lefcourt, H.M. Internal versus external control of reinforcement: A review. *Psychological Bulletin*, 1966, **65**, 206-220.
- Liberty, P.G., Jr., Burnstein, E., & Moulton, R.W. Concern with mastery and occupational attraction. *Journal of Personality*, 1966, **34**, 105-117.
- Lottmon, T.J., & DeWolfe, A.S. Internal versus external control in reactive and process schizophrenia. *Journal of Consulting and Clinical Psychology*, 1972, **39**, 344.
- Miller, A.G. & Minton, H.L. Machiavellianism, internal-external control, and the violation of experimental instructions. *Psychological Record*, 1969, **19**, 369-380.
- Nelson, P.C. & Phares, E.J. Anxiety, discrepancy between need value and expectancy, and internal-external control. *Psychological Reports*, 1971, **28**, 663-668.
- Phares, E.J. *Locus of control in personality*, N.J.: General Learning Press, 1976.
- Platt, J.J., & Eisenman, R. Internal-external control of reinforcement, time perspective, adjustment, and anxiety. *Journal of General Psychology*, 1968, **79**, 121-128.

- Prociuk, T.J., Breen, L.J., & Lussier, R.J. Hopelessness, internal-external locus of control and depression. *Journal of Clinical Psychology*, 1976, **32**, 299-300.
- Ray, W.J., & Katahn, M. Relation of anxiety to locus of control. *Psychological Reports*, 1968, **23**, 1196.
- Rotter, J.B. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 1966, **80**, (1, Whole No. 609).
- Ryckman, R.M., & Sherman, M.F. Relationship between self-esteem and internal-external control for men and Women. *Psychological Report*, 1973, **32**, 1106.
- Shybut, J. Time perspective, internal versus external control, and severity of psychological disturbance. *Journal of Clinical Psychology*, 1968, **24**, 312-315.
- Strassberg, D.S. Relationships among locus of control, anxiety, and valued-goal expectations. *Journal of Consulting and Clinical Psychology*, 1973, **41**, 319.
- Tolor, A., & Reznikoff, M. Relation between insight, repression-sensitizations, internal-external control and death anxiety. *Journal of Abnormal Psychology*, 1967, **72**, 426-430.
- Warehime, R.G. and Foulds, M.F. Perceived locus of control and personal adjustment. *Journal of Consulting and Clinical Psychology*, 1971, **37**, 250-252.
- Watson, D. Relationship between locus of control and anxiety. *Journal of Personality and Social Psychology*, 1967, **6**, 91-92.
- Williams, C.B., & Nickels, J.B. Internal-external control dimension as related to accident and suicide proneness. *Journal of Consulting and Clinical Psychology*, 1969, **33**, 485-494.
- Williams, C.B., & Vantress, F.E. Relation between internal-external control and aggression. *Journal of Psychology*, 1969, **71**, 59-61.



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## 國中學生內外制握與適應問題的關係

洪 有 義

### 摘 要

本研究在探討內外制握與國中學生適應問題的關係。研究對象為我國國中學生331名，根據在諾史氏制握量表得分，凡受試得分超過平均數一個標準差者，為外在制握組；低於一個標準差者為內在制握組；介於 $\pm .50$ 標準差者為適中制握組，共選出180名，每組60名（男生30名、女生30名）。本研究之主要發現為：(1)就適應困擾問題總數而言，外制組的一般困擾問題多於內制組及適中制握組；適中制握組的一般困擾問題多於內制組。男女性別之間則無顯著差異；(2)根據結果分析，發現內外制握與適應的關係，成直線相關的趨勢，即愈偏外制，愈有不良適應現象；(3)適應困擾問題的類別，因制握組別，性別而有差異；(4)三組的困擾問題類別之等級次序有顯著的一致性；(5)在「自我關懷」、「學校生活」與「金錢、工作與前途」三方面，目前我國國中學生感到適應困擾的問題較多。

