

**Simulation Games and Experiential Learning in Action, Volume 2, 1975**  
EXPERIENTIAL TRAINING METHODOLOGY, TRADITIONAL TRAINING  
METHODOLOGY AND PERCEIVED OPPORTUNITY TO SATISFY HUMAN NEEDS<sup>1</sup>

Samuel C. Certo  
Department of Management-Finance  
School of Business  
Indiana State University

Although recent publications evidence an increasing interest in experiential exercises as training tools (2, 14, 4, 6, 5), little related empirical research has been reported. This study uses Maslow's need theory to compare trainee perception of the opportunity to satisfy human needs in experiential and traditional training situations.

According to Maslow (7, 8, 9, 10) humans have at least five basic goals, or sets of human needs. These needs or goals, arranged in a hierarchy or importance, are: physiological, safety, love, esteem, and self-actualization. For purposes of this study, a traditional training situation contained primarily lectures given by the trainer with trainees being free to ask questions whenever they desired. An experiential training situation contained primarily experiential exercises with related discussions between trainer and trainees. Experiential exercises were various tasks designed with specific circumstances to generate trainee behavior which was observed, discussed, and evaluated against interpersonal theory.<sup>2</sup>

Study hypotheses<sup>3</sup> are:

- H<sub>1</sub> - Perceived opportunity to satisfy human needs will be greater for trainees in experiential training situations than in traditional training situations.
  
- H<sub>2</sub> - Within reason, variations in the size of experiential training groups will have little significant influence on trainee perception of the opportunity to satisfy human needs.

---

<sup>1</sup> This research was partially financed by a research grant from the Indiana State University Research Fund. Also, the author would like to recognize the constructive input of J. Paul Peter.

<sup>2</sup> For two of the experiential exercises used in this study see: S. C. Certo "Using Participative Management," Proceedings of the Eleventh Annual Conference of the Eastern Academy of Management, 1974, and R. H. Dougherty "To the Rescue," Proceedings of the Eleventh Annual Conference of the Eastern Academy of Management, 1974.

<sup>3</sup> Although empirical support for a rationale leading to these hypotheses is lacking, subjective support is available. See S. C. Certo and R. H. Dougherty, "The Teaching Potential of a Structured Experience," Proceedings of National Conference of Business Games and Experiential Learning, 1974.

# Simulation Games and Experiential Learning in Action, Volume 2, 1975

## METHOD

### Sample

Subjects were students at Indiana State University who voluntarily enrolled in one of three designated management courses in the School of Business. Each course enrollment was treated as a separate group: Traditional Methodology Group (N=28), Experiential Methodology Group I (N=16), and Experiential Methodology Group II (N=29). No significant source of experimental bias attributable to sample was discernable.

### Experimental Treatment

Two full-time management faculty participated as experimental trainers. Trainer One designed and taught a traditional semester course for the Traditional Methodology Group. Trainer Two designed and taught two sections of an experiential semester course for Experiential Methodology Group I and Experiential Methodology Group II. The primary difference between traditional and experiential courses was training methodology employed. Students were not aware of their involvement as subjects until after the experiment when each was asked to complete a questionnaire.

### Questionnaire

The questionnaire used in this study is a modification of a questionnaire used in previous experiments (3, 12) to measure perceived satisfaction of Maslow-type needs. This modification involved an adjustment in wording to focus on perceived opportunity to satisfy human needs rather than perceived satisfaction.

Below are the twelve questionnaire items and the specific human need each covers:

1. The opportunity for security this classroom experience gave me in my position as a student (security needs).
2. The opportunity in this classroom experience to give help to other students (social needs).
3. The opportunity in this classroom experience to develop close friends (social needs).
4. The opportunity for the feeling of self-importance gotten from this classroom experience (esteem needs).
5. The opportunity for respect from classmates gotten from this classroom experience (esteem needs).
6. The opportunity for respect related to taking this class gotten from peers not enrolled in it (esteem needs).

## **Simulation Games and Experiential Learning in Action, Volume 2, 1975**

7. The opportunity for independent thought and action in this classroom experience (autonomy needs).
8. The opportunity in this classroom experience to possess authority connected with my position as a student (autonomy needs).
9. The opportunity in this classroom experience to participate in setting course goals (autonomy needs).
10. The opportunity in this classroom experience for personal growth and development (self-actualization needs).
11. The opportunity for the feeling of self-fulfillment gotten from this classroom experience (self-actualization needs).
12. The opportunity for the feeling of worthwhile accomplishment gotten from this classroom experience (self-actualization needs).

General directions asked each subject to complete the questionnaire in relation to his/her classroom experience over the entire semester. For each item, subjects circled one number on a 7-point Likert-type scale. Seven (7) represented the maximum amount of opportunity represented by the item while 1 represented the minimum amount.

### Analysis of Data

A two-tailed t-test was used to test for statistically significant group differences in perceived opportunity to satisfy human needs. To test  $H_1$ , individual item scores for the Traditional Methodology Group were first compared to individual item scores for Experiential Methodology Group I and then compared to individual item scores for Experiential Methodology Group II. To test  $H_2$ , individual item scores for Experiential Methodology Group I and Experiential Methodology Group II were compared.

## RESULTS

Tables 1, 2, and 3 present the results of data analysis. Tables 1 and 2 support  $H_1$ , i.e., for the overwhelming majority of questionnaire items, perceived opportunity to satisfy human needs was greater in the experiential training groups than in the traditional training group. In Table 1, only item 6 shows no statistically significant difference. Table 2 has only items 6 and 9 which show no statistically significant difference. However, even these items which do not show statistically significant differences do show differences in the hypothesized direction.

**Simulation Games and Experiential Learning in Action, Volume 2, 1975**

TABLE 1

Mean Scores and t-Ratios for Perceived Opportunity to Satisfy Human Needs  
(Experiential II Group Versus Traditional Group)

ITEMS	MEAN SCORES		t-RATIO
	EXPERIENTIAL I	TRADITIONAL	
1	5.88	3.46	4.58*
2	5.81	2.75	5.60*
3	6.13	3.75	4.05*
4	5.63	2.5	6.78*
5	6.06	4.14	4.13*
6	3.19	2.93	.47
7	6.63	3.79	5.31*
8	4.56	2.46	4.65*
9	4.75	3.32	2.31*
10	6.94	3.5	6.72*
11	6.13	3.43	5~35*
12	6.38	3.79	5.09*

\*significant at .05 as indicated by two-tailed t-test

NOTE: For each table, the higher the score the greater the perceived need satisfaction.

TABLE 2

Mean Scores and t-Ratios for Perceived Opportunity to Satisfy Human Needs (Experiential I Group  
Versus Traditional Group)

ITEMS	MEAN SCORES		t-RATIOS
	EXPERIENTIAL II	TRADITIONAL	
1	5.28	3.46	3.9 *
2	5.62	2.75	5.71*
3	5.55	3.75	3.51*
4	5.0	2.5	5.98*
5	5.52	4.14	3.29*
6	3.58	2.93	1.29
7	5.93	3.79	4.35*
8	4.34	2.46	4.49*
9	3.76	3.32	.8
10	5.90	3.5	5.28*
11	5.52	3.43	3.55*
12	5.59	3.79	3.48*

\*significant at .05 as indicated by two-tailed t-test

## Simulation Games and Experiential Learning in Action, Volume 2, 1975

Table 3 supports H<sub>2</sub>, i.e., for the overwhelming majority of questionnaire items variation in the size of experiential training groups had little statistically significant influence on trainee perception of the opportunity to satisfy human needs. Only item 11 shows such a statistically significant difference of perceived opportunity. For all items but item 6, mean scores indicate greater perceived opportunity for Experiential Methodology Group I (N=16) than Experiential Methodology Group II (N=29).

TABLE 3

Mean Scores and t-Ratios for Perceived Opportunity to Satisfy Human Needs  
(Experiential I Group Versus Experiential II Group)

ITEMS	MEAN SCORES		t-RATIO
	EXPERIENTIAL I	EXPERIENTIAL II	
1	5.88	5.28	1.47
2	5.81	5.62	.41
3	6.13	5.55	1.19
4	5.63	5.0	1.36
5	6.06	5.52	1.41
6	3.19	3.58	-.65
7	6.63	5.93	1.64
8	4.56	4.34	.46
9	4.75	3.76	1.55
10	6.94	5.90	1.81
11	6.13	5.17	2.05*
12	6.38	5.59	1.05

\*significant at .05 level as indicated by two-tailed t-test

## DISCUSSION

The results of this study support the notions that trainees in experiential training situations perceive greater opportunities to satisfy human needs than trainees in traditional training situations and that differences in the size of experiential training groups may not significantly alter this perception. Results do show, however, a tendency toward slightly higher perceived opportunity scores for trainees in smaller experiential groups than larger experiential groups.

Implications based on these results include using experiential exercises in training programs to increase the opportunity, as perceived by trainees, to satisfy human needs. Assuming that trainees take advantage of these added opportunities to satisfy their needs, the writings of Argyris (1), McGregor (11),

## **Simulation Games and Experiential Learning in Action, Volume 2, 1975**

and Shein (13), seem to project a resulting relatively high trainee motivation level with expected accompanying increases in related trainee productivity, i.e., learning.

Factors such as two experimental trainers, the usage of convenient samples, and relatively small sample sizes caution quick generalizability of the results of this study. Areas for further related investigation include the relationship between human need satisfaction in an experiential training situation and the amount of trainee learning, learning retention in experiential and traditional training situations, and replication of the present study. Clearly, much needed empirical research relative to experiential learning is undone.

### REFERENCES

1. Argyris, C., Integrating the Individual and the Organization, (New York: Wiley, 1964).
2. Certo, S. C. and R. H. Dougherty, Organizational Leadership: Skills Through Theory and Experience, (Des Moines: Kendall! Hunt, in Press).
3. Ivancevich, J. M., "Perceived Need Satisfaction of Domestic Versus Overseas Managers", Journal of Applied Psychology, Vol. 53, No. 4, (August, 1969), pp. 274-278.
4. Johnson, K. G., J. J. Senatore, M. C. Liebig, and G. Minor, Nothing Never Happens (Beverly Hills: Glencoe Press, 1974).
5. Knudson, H. R., R. T. Woodworth, and C. H. Bell, Management: An Experiential Approach, (New York: McGraw-Hill Book Company, 1973).
6. Kolb, D. A., I. M. Rubin, and J. M. McIntyre, Organizational Psychology: An Experiential Approach, Second Edition, Englewood Cliffs: Prentice-Hall, 1974).
7. Maslow, A. H., "A Theory of Human Motivation", Psychological Review, 1943, 50, 370-396.
8. Maslow, A. H., Motivation and Personality, (New York: Harper, 1954).
9. Maslow, A. H., Toward A Psychology of Being, (New York: Van Nostrand Reinhold, 1968).
10. Maslow, A. H., Motivation and Personality, (New York: Harper and Row, 1970).
11. McGregor D., The Human Side of Enterprise, (New York: McGraw- Hill, 1960).

**Simulation Games and Experiential Learning in Action, Volume 2, 1975**

12. Porter, L. W., "Job Attitudes in Management: IV. Perceived Deficiencies in Need Fulfillment as a Function of Size of Company", Journal of Applied Psychology, 1963, 47, 386-397.
13. Schein, E. H., Organizational Psychology (Englewood Cliffs: Prentice-Hall, 1965).
14. Vaughn, J. A. and S. A. Deep, Program of Exercises for Management and Organizational Behavior (Beverly Hills: Glencoe Press, 1975).