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JND EDITORIAL POLICY

All submissions will be considered for publication. Ordinarily, manuscripts are submitted to JND by university faculty members on the writers' behalf. Submissions may concern any field of psychology. They may be written in either French or English. Manuscripts must be prepared according to the American Psychological Association format.* The writer's home address must accompany the manuscripts. Manuscripts received after June 1 of any year cannot be considered for publication in that year's issue; however, such material usually will be retained for future assessment. The Editor assumes no responsibility in returning material submitted for publication.

The Publishers reserve the right to edit manuscripts.

* American Psychological Association Council of Editors.
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EDITORIAL COMMENT

Concern for the effects of overcrowding on human behavior has resulted in a variety of research techniques designed to provide insight into the relationship between man and environment (see Stokols, 1972). One line of investigation concerns itself with man's use of "personal space" (Sommer, 1959, 1969) which presumably is associated with the individual's need for privacy (Leibman, 1970).

Sommer (1966) studied the seating preferences of university students to 18 wooden tables (4 by 16 feet), each surrounded by 12 chairs (six to a side), in a library reading room. A pattern of occupation was determined (see Figure 2 of Sommer's study) by an observer who arrived when the reading room first opened. It was found that approximately 80 percent of the ten occupants who arrived alone sat in end chairs at empty tables. If all 18 tables were occupied by at least one person, new arrivals tended to sit at those tables occupied only by one other person. Further, when an end chair at a table was occupied, the second person tended to select the middle or the far end of the table, i.e., a chair of maximum distance away from the first occupant; when a middle chair was occupied, the second person tended to choose a far end chair. Unfortunately, Sommer did not give percentage figures for the frequencies of the two choices made by the second arrivals in sitting at a table already

occupied by one individual.

In the 1966 study, Sommer outlined the premise that

. . . spatial behavior is largely unconscious and un verbalized, a "silent language", to use Hall's phrase (1959). It therefore would be more profitable to observe space usage directly rather than to ask people what sorts of arrangements they prefer (p. 234).

Issue may be taken with the assumptions inherent in Sommer's premise.

(1) So-called spatial behavior may consist of both spatial and social components. If the first arrivals in Sommer's study had known that they would have been the sole occupants of the reading room, their choice in selecting a chair at any of the tables may have been determined primarily by the spatial aspects of the room. But an implicit connotation of reading room is the presence of other people. The first arrivals knew, as the result of previous experience, that other individuals also would be using the room. Consequently, it could be presumed that the first arrivals generally sought privacy beforehand by selecting chairs that would ostensibly keep them apart from others. Thus, a learned social component may have come into play before other students began to enter the room. Further, Goffman's (1963) notion of civil inattention takes into account the tacit rule adopted by North American Society that people engaged in

private activities (e.g. study) should not be disturbed and ordinarily do not expect to be disturbed.

(2) The term unconscious is not defined by Sommer. It will be assumed, therefore, that the term is employed in the usual Freudian sense. According to psychoanalytic theory, the unconscious is the part of psychic life that relates to phenomena of which individuals are unaware (Pervin, 1970). Thus, Sommer appears to imply that we are largely unaware of the determinants of our spatial behavior. This may be so. But neither theoretical support nor empirical evidence is provided by Sommer to justify such a claim. Further, the idea that learned social components may play a role in so-called spatial behavior, as noted above, would seem to place Sommer's assumption in jeopardy.

(3) Sommer's notion that spatial behavior is largely un verbalized follows from his notion that it is also largely unconscious since phenomena out of awareness can be brought into awareness, i.e., verbalized, only under special circumstances, e.g., psychoanalysis. It would be fair to assume that, for the most part, spatial behavior is indeed un verbalized, not because it is unconscious but rather because individuals generally do not make a point of verbally indicating their reasons for certain spatial behaviors such as seating preferences. But this is not to say that individuals would be unable or unwilling to give their reasons for specific behaviors if asked to do so.

(4) In assuming that so-called spatial behavior is largely unconscious and un verbalized, Sommer believes that observation is the best technique for studying seating arrangements. Observation is an acceptable method for gathering empirical data but it fails to provide insight into the causes of the behavior. In addition, Sommer (1966) did not employ the questionnaire or the interview technique in obtaining information about actual seating behavior. How, then, can Sommer declare with any justification that observation is the "more profitable" methodological approach? Sommer (1966, 1969) has attended to the space behaviors of humans as a function of the spatial environment. In so doing, he may well have overlooked other variables pertinent to such behaviors.

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UNDERGRADUATE STUDY OF PSYCHOLOGY

AS VOCATIONAL TRAINING

David Lavers

Acadia University

In the past, newly graduated students from Canadian Universities were surrounded by employers and attractive employment opportunities, almost at the very graduation ceremony itself. The possession of a Bachelor's Degree was the equivalent of an employment guarantee and it was truly a "seller's market." This rosy picture has changed drastically in more recent years and employment opportunities are much scarcer for the new graduate. This marked change is emphasized by the opportunities presently available to holders of a Bachelor's Degree in Psychology, if in fact there ever was a "golden age of Psychologist hiring."

The Department of Manpower and Immigration (1971) published an employers directory which was distributed to potential graduates of Canadian Universities during 1972. This directory was designed, in part, to assist graduating students in job seeking and career planning. The directory included information about Canadian employers - for example, number of employers by discipline and degree level, employer requirements by field of study and degree level, classification of employers by type of principal activity, geographical location of employers, lists of employers hiring holders of

Doctoral degrees, and lists of employers offering summer employment. At face value, this directory had the appearance of a very comprehensive and practical document.

Certain sections seemed encouraging for graduates with a first degree in Psychology. For example, the directory presented tables showing "the distribution, by discipline and degree, of the 588 employers in this publication who will recruit students graduating in 1972" (p. 73). It was indicated that 21.7 percent of the new university graduate employers would be hiring Psychology graduates in 1972. Of these employers, 39.1 percent would be hiring graduates with a first degree.

A section of the directory dealt with employer requirements by field of study and degree level (see page 75). This section presented employer lists of interest to Psychology graduates in three forms: (1) a list of 13 employers who required graduates from all disciplines, (2) a list of 88 employers who require graduates from the Social Sciences, (3) a list of 80 employers who require Psychology graduates. Of the employers listed for Psychology graduates, 48 were described as recruiting graduates at the first degree level. In March, 1972, letters inquiring about the possibility of full time employment for a holder of a Bachelor of Science degree in Psychology (the major qualification) were sent to 43 of the 48 employers.

Most of the employers (90.7 percent) replied to the

inquiries. Nineteen (48.7 percent) of the employers gave no indication of employment possibilities and generally replied that they were not prepared to make a job offer at that present time. Fourteen (35.9 percent) of the employers indicated that there were no opportunities available at present, nor would there be any in the foreseeable future. One of the contacted employers replied that those qualifications met their educational requirements for the position but that there currently were no vacancies. Five (12.8 percent) of the employers noted that a Bachelor of Science degree in Psychology was not a sufficient qualification for employment. Requests for additional information were made by 11 (28.2 percent) of the employers and six (15.4 percent) employers suggested the completion of application forms, three of the six did not send the forms.

It seems that Canadian employment opportunities for graduates with first degrees in Psychology are relatively non-existent. The primary objective of this presentation has not been to discourage interest in Psychology at the undergraduate level. Nor is it designed to cast the shadow of incredibility on The Department of Manpower and Immigration. Rather, the purpose has been to paint a more realistic picture of the undergraduate study of Psychology as vocational training.

Reference

The Department of Manpower and Immigration. Employers of
new university graduates 1971-72 directory.

Ottawa: Information Canada, 1971.

DESTRUCTION AND DISPOSABILITY

Bruce White

The University of British Columbia

Historically, instinctive aggression in man has been a convenient explanation of human violence. The intangibility of animal instincts has allowed this idea to be foisted upon almost every aspect of man-man interaction. However, the roots of modern man's violence may not lie in genetics, but in a state of mentality, reached more and more frequently by the frustrations of adapting to everchanging urban life.

Toffler (1971) discusses life in the throw-away culture

That man-thing relationships are growing more and more temporary may be illustrated by examining the culture surrounding the little girl who trades in her doll. This child soon learns that Barbie dolls are by no means the only physical objects that pass into and out of her young life at a rapid clip. Her home is a large processing machine through which objects flow, entering and leaving at a faster and faster rate of speed. From birth on, she is inextricably embedded in a throw-away culture.

Here today, gone tomorrow

So, what is the sociological basis of modern man's destructive tendencies? An enveloping sense of transience sweeping modern Western culture has necessitated a new meaning for the word value, in a world that demands instant performance from the tools that create man's world. Value and

rapid efficiency are becoming synonymous, as man finds little concern for objects (people) that have outlived their usefulness. Disposability is the natural consequence of man's limited involvement with the thousands of utensils that fill his life. Cheap ball point pens are a good example of a totally functional utensil highly valued in 1973.

Interestingly, perhaps as a natural backlash against the disposable tendency, cheap quickly replaced items have lost their strict functionality and have gained a character that allows for creativity. The cheap pen for example, can be used, abused, broken and built onto, without fear of consequence. The uses of the 19 cent Bic range from opening tin cans to forming the stem of a quick waterpipe. Being blasted through half an inch of oak from a shotgun is only one possibility for the throw-away Bic. In this way, the disposable age has enhanced creativity but at the same time has enhanced destruction. Something designed to be replaced cheaply was designed to be discarded, for a non-replacable item burdens a transient society.

Art, man's expression of his times, has adopted a fitting theme. Warhol reflects the disposable society, in walls of stacked soup cans, perhaps the most illustrative item for the use-once-throw-away lifestyle. Repetitive pictures of Marilyn Monroe with pink skin and green lips show the garish single-purposeness and disposability of a Hollywood toy. Roy Leitchenstein's giant comic strip

excerpts are indicative of future mass-communications. The essence of Pop Art is everything here-today-gone-tomorrow in our lives.

An intriguing concept is that living in the disposable society has also made the globe dispensable. Although at the present time it is impossible to sprinkle the human population throughout the galaxy, all indications from NASA are that the earth too faces extinction as the product of the throw-away culture.

Modules

Toffler defines modularism as the attempt to lend whole structures greater permanence at the cost of making their substructures less permanent. For example, apartments can consist of pressed-steel modules that are hoisted by crane and plugged into building frames. The frames become the only permanent parts of the structure and the apartment modules are shifted around as needed. For some, marriage has taken on the modular principles of an outer frame into which can be plugged various partners. Monogamy is replaced with heterogamy - the outer frame has become a complex with a number of ligands able to work simultaneously. The American defoliation program in Vietnam is just one example of the destruction born of our society. Seven years of herbicidal operations in Vietnam has turned that country from a rice-exporting country to a rice-importing country. One-fifth of the total forested area has at some time been de-

foliated. In late 1967, Saigon hospitals reported numerous instances of a new kind of birth abnormality. Late 1967 marked the end of the first year of massive spray operations. Finally, the more plausible explanation for the murder of students on American campuses is a general disappearance of value for human life, rather than the National Guard unable to control innate urges to destroy.

It becomes clear that the destructive forces within a modern community are not solely innate. Living in the disposable age has lessened the value, not only of possessions, of plant and animal life, but of human life as well. Destruction has become a way of life, hand in hand with disposability but different than instinctive aggression.

Rock of Ages

One very conspicuous manifestation of the throw-away society and the consequent uprise of destruction has been the flourishing of the rock culture, the survival of which depends upon the massive increases in world communication and advances in electronics.

Peter Townsend describes the smashing of his first guitar on stage as completely accidental. The validity of this is dubious, but the esthetic value of a total demolition of instruments after each Who concert is unquestionable.

The novelty of this destructive trademark has known no bounds, if it in fact hasn't been one of the key threads

that has woven rock music to rock showmanship. Pete Townsend continues to sacrifice his guitar in concert. Hendrix at Monterey in 1967 doused his guitar with lighter fluid and set it ablaze. The idea of one's instrument being a lifetime friend obviously doesn't belong to the disposable era. The power paranoia that had been cumulating in Woodstock, Monterey, and Newport, came to a peak at the disastrous Altamont festival, in which a fan was stabbed to death by the Hell's Angels Motorcycle Club. Sam Cutler, the Rolling Stones road manager who hired the Frisco Hell's Angels to police the rock festival, embodies the violent mentality that directs rock showmanship.

More modules

The modular principle also can be seen infiltrated in the strings of rock. Following the illustrious career of Eric Clapton, through the Roosters, Yardbirds, Bluesbreakers, Cream, Blind Faith, Delaney and Bonnie and Friends, to Derek and the Dominoes, traces a progression from early powerhouse rock through blues - blues rock to a very loose free-wheeling style of rock and roll band, paralleling a change in group conformation from fairly rigorous group formation into a loose conglomeration of personalities, many drawn from other groups. Delaney and Bonnie and Friends was a production exemplifying the modular concept. Free interchange between groups has made rock music a frame, plugged with various modular personalities.

Groupies, an essential part of the rock-star myth, glamorize disposability, in that groupies, like the ballpoint pen, have only temporary value.

The recklessly destructive pace of the 1960's coupled with the uprise of the drug culture, has developed another facet of modularity - the mind as permanent frame and the body as an expendible module. In this way Hendrix and Joplin have become discards of the throw-away society.

Inevitable death seems even more inevitable for musicians who live by the sword of impermanence. The very foundations of rock rest upon an age group in the very midst of change ... fashions, love affairs, emotions - all very important. The words of rock artist Greg Allman, whose own brother was killed recently, seem to comprehend this inevitability, and also to reflect the limited human contact between members of the transient age

Crossroads seem to come and go
The gypsy flies from coast to coast
Knowing many, loving none ...
Again the morning comes
Again he's on the run ...
No one knows the gypsy's name
Crossroads will you ever let him go?
Will you hide the dead man's ghost?
Will his spirit float away?

Woodstock: Three days of peace and music. Woodstock was in fact the practical part of an entire decade's theorizing that the police were the cause of violence in a

community, and that mismanagement and intolerance from parents resulted in the frustrations of society as well as the condition of America's external affairs.

Paranoia strikes deep

Paranoia was a large factor contributing to the outcome of Woodstock. In his address to the crowd, Max Yasger spoke continuously of how the outside world would see everything working well. He talked repeatedly about proving something to the world. John Sebastian spoke of the outside world as if it was waiting beyond the broken fences, ready to spring in and destroy everything.

Maslow (1968) has explained that "the needs for safety, belongingness, love relations and for respect can be satisfied only by other people, i.e., only from outside the person ..."

At Woodstock, 400,000 people temporarily removed themselves from their various communities and migrated to a 600 acre farm outside New York in order to live for three days, a life they wanted. As Maslow states "the needs for safety, belongingness, love relationships and for respect can be satisfied only by other people, i.e., only from outside the person."

Merely for self-expression, people mix with others of similar temperament. The result is a fragmentation of society into small homogenous sects. Urban life has taken

the course of Darwin's natural selection. Those with limited capacity to adapt to the changing environment have separated from the rest.

Destruction: Son of Urban Man

It would seem wise at this point of socio-development to question the direction in which our super urban life is headed. Massive advances in technology and mass-communications, instead of enriching the community, has robbed it of its cohesiveness and has brought about its fragmentation. Perhaps segregation is a natural defence against overpopulation and resulting overloading of the brain. Perhaps the super-industrial age is truly "suffering the slings and arrows of outrageous fortune."

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ATTITUDE SCALE DEVELOPMENT: CANADIAN INDIANS

S. Snider, D. Cucheron
K. McKeen and J. Williamson

The University of British Columbia

Fifty-nine students at The University of British Columbia sorted 127 preselected items expressing attitudes towards Canadian Indians. A factor analysis was performed on the data of 83 items. Ten factors emerged. These ten were chosen because of their high factor-loadings (correlations of .33 and above).

The purpose of this paper is twofold. It attempts to (1) outline a new, and it is hoped, more precise method of data quantification, and (2) exploit this new method in the development of an attitude scale towards Canadian Indians.

Methodological procedures of attitude measurement have attempted to follow scientific plans of data quantification to arrive at an interval or ratio scaling of subjective data. That such a precise objectification of the subjective nature of attitudes is not possible with existing methods is no argument for a proposition that such attitudes cannot be measured. Rather, it is evidence that new and more precise methodologies must be developed to permit more accurate measurement.

Researchers in the area of attitude scale development (e.g. Guttman, 1950; Likert, 1932; Osgood, Suci, & Tannenbaum, 1957; Stephenson, 1953; Thurstone, 1967) have been

concerned with the value of nonmetric data. This has resulted in the evolution of techniques to make such data metric. For example, common procedures for data quantification include the Q-sort (Stephenson, 1953), own-categories method (see Fishbein, 1967), and scaling techniques (e.g. Guttman, 1950).

The development of an attitude scale towards Canadian Indians provides an opportunity for the utilization and further study of an own-versus prescribed-categories procedural approach. The present data will provide material for the development of the scale.

Method

Subjects

One hundred and thirty-five students enrolled in introductory psychology classes at The University of British Columbia were chosen to participate in the sorting of 127 preselected statements or items expressing attitudes towards Canadian Indians. The data of only 59 Ss were retained for analysis (see below).

Procedure

To achieve relatively high item validity and thus reduce the number of items required for the sorting task, items were chosen from existing attitude scales (see Shaw & Wright, 1967) and modified for use in the development of the present scale.

The following questions were raised with regard to the items:

1. What qualities of Indians do they actually describe?
2. How many such qualities are there?
3. How do the kind and number of categories evolve as the subjects begin the sorting process?
4. How do the nature and identity of the categories change if the subject is instructed to sort the items into seven piles (as opposed to his own number of piles)?
5. How does each subject name his categories?
6. How does a subject rank the items within each category along the dimensions by which he established the category?
7. How will he rank the categories themselves in terms of the degree to which each accounts for the most important quality of the total items pool (item variance accounted for by each category)?

A procedure conceived by Collins (1968) was employed to answer these questions. The collected data were (1) given correlation rankings, (2) factor analyzed via a principle components solution for ten factors, and (3) rotated for varimax orthogonality.

The initial 127 items had been preselected from Shaw & Wright (1967). The final data were derived from the following 83 items:

1. No person with a trace of Indian blood should be classed as white.
2. An Indian is not socially equal to the most common white.

3. Indians shouldn't be allowed with whites at all.
4. Indians wouldn't be allowed to mingle with whites at all.
5. Whites must be kept pure at all costs, even to the point of killing Indians.
6. Indians and whites should be kept apart at all social affairs.
7. I place the Indian on the same social basis as I would a mule.
8. Indians will remain a little higher than the animals.
9. No Indian has the right to resent the killing of one of his own race.
10. Indians should be treated as servants of white men.
11. Indians have a tendency to fight.
12. Indians are disorderly in conduct.
13. Indians are sluggish in action.
14. Indians are slow and unimaginative.
15. Indians do nothing and depend on the community.
16. Indians are discourteous.
17. Indians would like to stay on welfare forever.
18. An Indian will take all he can get.
19. Indians are eager to escape hard work and like the soft life.
20. Indians prefer welfare to work.
21. By nature, the Indian and white man are equal.
22. Inherently, the Indian and white man are equal.
23. I believe Indians are entitled to the same privileges as whites.
24. There is no reason to believe that the Indian is less honest than anyone else.

25. Indians should be given the same educational advantages as whites.
26. I believe that Indians deserve the same privileges as whites.
27. Indians are different but are not inferior.
28. I would be willing to accept Indians as equals into my club.
29. Indians should be considered equal to whites and have the same advantages.
30. Indians should give up separate customs and become typical citizens.
31. In efforts to help Indians, whites should not be blind to differences.
32. If an Indian is in public office, social pressure would prevent his doing a good job.
33. Indians must undergo years of white education before they can reach the social level of whites.
34. The Indian problem will settle itself without whites worrying about it.
35. Indians shouldn't be given education they won't use.
36. Canada might be a better country if there were fewer Indians.
37. I live nearer than most people to an Indian reservation.
38. I know more Indians than most people.
39. I have as realistic a conception of Indians as most people.
40. I have as much knowledge of Indians as most people.
41. I have a better knowledge of Indians than most people.
42. Most people have closer associations with Indians than I.
43. I would like to know more Indians.

44. I have no sympathy for Indians.
45. I would grant travel privileges only to some Indians.
46. Some Indian traits are admirable but I don't like them.
47. I suppose that Indians are all right but I don't like them.
48. Although I respect some of their qualities, I could never consider an Indian as a friend.
49. Indians should have freedom but should not be treated as equal to whites.
50. I don't see how anyone could ever like Indians.
51. I dislike Indians more as time passes.
52. I have no particular love or hate for Indians.
53. No matter how kindly they treat Indians, whites don't like them.
54. After you have educated an Indian, there still will be a split between the Indian and a white man.
55. Manual labor and unskilled jobs suit Indian mentality and ability.
56. Indians belong to a low level of society.
57. Within fifty years, the Indians behavior will astonish you.
58. Indian people are no better or worse than others.
59. An Indian believes that the world owes him a living.
60. The more I know about Indians, the more I like them.
61. Indians are honest.
62. Indians are sympathetic towards others.
63. Indians are sincere in their actions.
64. Indians believe in earning their living by hard work.
65. Indians are considerate of others.

66. Indians have a great sense of honor.
67. Indians are sociable.
68. Indians are stable and honest workers.
69. Indians who have a family to support are never lazy.
70. Indians tend to set a lower living standard for their neighbours.
71. Indians are too radical.
72. Indians are envious of others.
73. I would date an Indian, providing he or she met my standards of behavior.
74. No Indian should hold an office of trust.
75. Indians are set in their ways; they don't want to change.
76. Indians cause many of their own problems.
77. Indians can't gain social equality and live more decently.
78. The inability of Indians to develop leaders results in their low societal level.
79. When many Indians get money, they spend it on alcohol.
80. Indians will allow the government to feed them if they can't find work.
81. Indians have many undesirable traits.
82. If they were not lazy and irresponsible, Indians would solve many of their problems.
83. Indians don't mix well with others.

The final data were stored on keypunch cards before being processed by computer. Only the data of 59 Ss which fell into seven-pile categories were used for analysis.

Results and Discussion

Ten factors accounted for 64 percent of the total variance. Table 1 shows the names given to the factors and the percentage of variance accounted for. Rotated factor loadings and communalities for representative items appear in Table 2.

The factors were analyzed in terms of (1) ranking by category acceptability to S and (2) ranking within categories. The ten factors were chosen on the basis of high factor-loadings (correlations of .33 and above).

The rotated factor loadings and communalities do not identify attitudes but rather outline attitude dimensions, i.e., which items do measure attitudes.

In administering the final attitude scale, it is proposed that the same method be used. A ranking procedure should be employed since it has been shown that this method yields significant results.

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TABLE 1
PERCENTAGE OF VARIANCE
ACCOUNTED FOR

Factor	Name	Percentage Variance
I	Apartheid	22.73
II	Habitual conduct	15.46
III	Same privileges	15.84
IV	Distinguishing characteristics	6.34
V	Personal opinions about own attitudes	7.71
VI	Differing in opinion	7.96
VII	Poor treatment of Indians - low social level	4.54
VIII	Individuality and scruples	8.86
IX	Radical and distrusting views	3.69
X	Self-provoked problems	6.87

TABLE 2. ROTATED FACTOR LOADINGS AND COMMUNALITIES

ITEM	FACTOR LOADINGS WITH A VARIMAX ROTATION										MEAN	COMMUNALITY
	Factor											
	I	II	III	IV	V	VI	VII	VIII	IX	X		
1	.89	-.05	.05	.08	.03	.01	-.06	.02	-.05	-.12	72.06	.83
2	.87	.05	.12	.05	.05	.01	-.07	.19	-.09	.09	62.65	.84
3	.86	.03	.23	.14	.22	.09	.04	.12	-.06	-.04	66.33	.89
11	-.02	-.76	-.02	-.16	-.18	.11	-.08	-.05	-.23	.14	69.86	.75
12	-.04	-.76	.30	-.04	.16	.07	-.02	.08	.00	-.03	65.41	.72
13	.02	-.75	.20	-.18	.10	.08	.09	.04	-.08	-.08	66.10	.69
21	-.16	.13	-.82	.03	.11	.20	.05	.33	-.11	-.03	49.35	.79
22	-.26	.25	-.81	.07	.03	.22	-.00	-.09	-.10	-.05	48.98	.88
23	-.23	.31	-.77	-.18	-.09	.14	.00	-.10	.10	-.15	44.14	.85
30	.16	-.03	.06	.68	-.04	-.05	.02	.12	.07	.20	67.63	.57
31	-.22	.17	-.30	.66	.05	.03	.25	.09	-.12	-.04	59.02	.71
32	-.35	-.03	.07	.62	.02	-.01	-.17	.04	.02	-.10	73.73	.57
37	-.08	.24	-.02	.07	-.79	-.12	.00	.00	.10	-.07	63.65	.72
38	-.14	.19	-.00	.02	-.74	-.18	-.04	-.13	.11	-.16	62.94	.70
39	-.25	.13	-.02	.05	-.73	.11	-.11	.13	-.15	.10	54.63	.71
45	-.07	.13	.14	-.04	-.05	-.79	.04	.05	-.01	.18	65.74	.72
46	-.00	-.03	.23	.18	-.06	-.78	.11	.14	-.01	-.02	66.04	.74
47	-.01	.04	.10	.06	-.06	-.76	-.12	.01	.14	-.01	70.62	.64
53	-.14	.17	.01	.04	.10	-.06	.54	.04	.06	.09	68.60	.37
54	-.10	.30	-.17	.30	.14	-.30	.43	.07	-.24	.11	66.67	.61
55	-.20	-.21	.22	.13	-.01	.11	.43	-.04	-.06	.31	65.18	.46
61	-.47	.08	-.09	-.16	-.01	.10	-.09	-.76	.06	-.07	60.00	.88
62	-.48	.01	-.21	-.18	.09	.06	.21	-.70	-.14	-.03	64.46	.89
63	-.46	.01	-.10	.06	.16	.31	-.07	-.68	.09	-.16	57.83	.87
71	-.03	-.36	.11	.05	.13	.03	-.03	-.04	-.47	.05	67.98	.40
72	.03	-.06	-.02	-.13	.00	.09	.09	.33	-.45	-.00	63.12	.72
75	-.31	-.21	-.35	-.06	-.48	-.10	-.03	.06	-.37	-.13	53.92	.69
76	.04	-.36	-.23	-.18	.05	-.04	.22	-.07	-.08	.71	64.80	.79
77	-.15	-.05	-.00	.27	.08	-.12	-.14	.05	-.06	.70	62.94	.65
77	-.17	.03	.01	.28	.23	.02	.15	-.19	.37	.60	67.98	.72

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NOTES

General 1. The first five minutes of the
session (0-5) is devoted to the
presentation of the subject matter.

The next five minutes (5-10) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (10-15) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (15-20) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (20-25) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (25-30) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (30-35) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (35-40) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (40-45) are
devoted to the presentation of the
subject matter of the lesson.

The next five minutes (45-50) are
devoted to the presentation of the
subject matter of the lesson.