

DOCUMENT RESUME

ED 069 776

TM 002 231

TITLE Room Clerk (hotel and rest.) 1-07.60--Technical Report on Standardization of the General Aptitude Test Battery.

INSTITUTION Manpower Administration (DOL), Washington, D.C. U.S. Training and Employment Service.

REPORT NO TR-S-332

NOTE 7p.

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS *Aptitude Tests; *Clerical Workers; *Cutting Scores; Evaluation Criteria; Job Applicants; *Job Skills; Norms; Occupational Guidance; *Personnel Evaluation; Test Reliability; Test Validity

IDENTIFIERS GATB; *General Aptitude Test Battery; Room Clerks

ABSTRACT

The United States Training and Employment Service General Aptitude Test Battery (GATB), first published in 1947, has been included in a continuing program of research to validate the tests against success in many different occupations. The GATB consists of 12 tests which measure nine aptitudes: General Learning Ability; Verbal Aptitude; Numerical Aptitude; Spatial Aptitude; Form Perception; Clerical Perception; Motor Coordination; Finger Dexterity; and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, and a standard deviation of 20. Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, when combined, predict job performance. Cutting scores are set only for those aptitudes which aid in predicting the performance of the job duties of the experimental sample. The GATB norms described are appropriate only for jobs with content similar to that shown in the job description presented in this report. A description of the validation sample is included.

(AG)

ED 069776

STANDARDIZATION OF THE GENERAL APTITUDE TEST BATTERY

FOR

ROOM CLERK (hotel and rest.) 1-07.60

B- 612 5-332

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EOU-
CATION POSITION OR POLICY.

Summary

The General Aptitude Test Battery, B-1002B, was administered during the period April through November, 1964 to a final sample of 54 Room Clerks in Indiana, Michigan, New York, Ohio, Pennsylvania, Texas and Wisconsin employed in inns and motels. The criterion consisted of a descriptive rating scale specifically designed for this study. On the basis of mean scores, standard deviations, job analysis data, and their combined selective efficiency, Aptitudes G- Intelligence, N- Numerical Aptitude and Q- Clerical Perception were selected for inclusion in the final norms.

GATB Norms for Room Clerk (hotel and rest.) 1-07.60, B-612.5-332.

B-1001			B-1002		
Aptitude	Tests	Minimum Acceptable Aptitude Score	Aptitude	Tests	Minimum Acceptable Aptitude Score
G	CB-1- H	100	G	Part 3	95
	CB-1- I			Part 4	
	CB-1- J			Part 6	
N	CB-1- D	105	N	Part 2	100
	CB-1- I			Part 6	
Q	CB-1- B	100	Q	Part 1	100

Effectiveness of Norms

The data in Table IV indicate that only 59 percent of the non-test-selected workers used for this study were good workers; if the workers had been test-selected with the above norms, 73 percent would have been good workers. 41 percent of the non-test-selected workers used for this study were poor workers; if the workers had been test-selected with the above norms, only 27 percent would have been poor workers.

T 002 231



TECHNICAL REPORT

I. Purpose

This study was conducted to determine the best combination of aptitudes and minimum scores to be used as norms on the General Aptitude Test Battery for the occupation of Room Clerk 1-07.60.

II. Sample

The General Aptitude Test Battery, B-1002B, was administered during the period from April 14, 1964 through November 18, 1964 to a final sample of 54 Room Clerks 1-07.60, 19 male and 35 female, employed in various inns and motels in the following locations:

<u>Establishment</u>	<u>Location</u>
Holiday Inn	Kokomo, Indiana
Stouffer's Northland Inn	Detroit, Michigan
Holiday Inn-Downtown Detroit	Detroit, Michigan
Holiday Inn	Flint, Michigan
Wayfarer Inn	Poughkeepsie, New York
Holiday Inn	Lima, Ohio
Stouffer's University Inn	Columbus, Ohio
Treadway Inn	St. Davids, Pennsylvania
El Antonio Motor Hotel	San Antonio, Texas
Holiday Inn	Milwaukee, Wisconsin
Holiday Inn	LaCrosse, Wisconsin

The minimum training period required for performance of all job duties is one week. All individuals in the sample had at least one month's experience on the job. Candidates for the position of Room Clerk are selected on the basis of a personal interview. Graduation from high school is desirable, but not mandatory.

TABLE I

Means (M), Standard Deviations (σ), Ranges, and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education and Experience

N - 54	M	σ	Range	r
Age (years)	35.1	10.6	19-66	.073
Education (years)	12.4	1.3	9-16	.067
Experience (months)	18.9	21.0	1-152	.267

III. Job Description

Job Title: Room Clerk (hotel and rest.) 1-07.60

Job Summary: Checks guests in and out of inn or motel. Keeps records of charges and collects payment from guests. Daily checks cash in and out on NCR cash-register machine. Maintains a running account of number of rooms available at all times. Occasionally relieves telephone switchboard operator and operates teletype machines. Performs other related services such as storing room keys, giving directions and supplying information to guests.

Work Performed: Prepares for daily activities: Obtains working cash from office safe and cashes in on NCR Model 2000 or 4200 cash-register machine. Checks count sheet to ascertain number of rooms presently available for occupancy. Verifies accuracy of housekeeper's report by comparing it with room rack.

Checks guests in: Presents prospective guest with registration card. Instructs guest to fill in name, address, and business firm (when applicable). Prints customer's name, room assignment, rate, and tentative out date on room slip. Hands room key and room slip to customer or bellhop. Completes rack slips by filling in address, firm name (when applicable), and arrival date. Initials rack slip and guest's account. Detaches rack slips from registration card. Transmits second, third, and fourth carbon copies to telephone operator, room rack (to indicate occupancy), and inn manager, respectively. Places guest account in guest account file according to room number. Maintains a running account of number of rooms available at all times by noting additions or vacancies on count sheet as they occur.

Checks guests out: Pulls customer account from registration file and posts charges for all customer services on NCS Model 4200 cash register. Records number of charges for telephone calls from telephone register. Clears register. Inserts guest's account into machine along with first charge slip. Presses buttons on machine to register room number, date, shift, charge, and specific department to which charge is made. Continues check-out procedure until all charges have been individually recorded on guest's account. Totals charges automatically on machine, receives customer payment and makes change, if necessary. Gives customer copy of statement and places vacated room key in key drawer. Notifies housekeeping department that room has been vacated and folds rack slip for vacated room in half to indicate that room is being cleaned. Removes rack slip from room rack card completely when notified by housekeeping department that room is ready for occupancy. Occasionally corrects notations on machine when customer suddenly decides to charge services rather than pay cash.

Cashes out at end of workshift: Presses appropriate buttons on cash register to obtain figure indicating total cash taken in during shift. Operates adding machine to total checks and currency in money drawer. Checks total currency against NCR machine total to determine whether or not these figures agree. Notifies assistant manager if figures do not balance out. Places working cash in hotel safety box and locks box. Gives all other currency to inn manager.

Performs intermittent services: Stores room keys for guests. Gives directions to guests for locating various places in city. Supplies information concerning religious services, inn services, restaurants, future reservations, shopping centers, etc. Sorts incoming mail, takes messages and receives calls for bellman during his absence. Receives charges for various services, such as room service, valet, restaurant, laundry, swimming pool, and telephone; records charges on charge slips and places with guest's account.

Operates 32-cord telephone switchboard to relieve regular telephone operator for lunch and rest breaks. Handles incoming calls. Notes signal light beneath call-carrying cord and places cord in room jack of switchboard. Depresses key to ring telephone in guest's room. Notes when guest is through speaking to outside party by observing red light over room number where cord jack is plugged in. Disconnects call by removing jack. Receives charges from city switchboard operator for all guest calls which are either toll or long distance. Records telephone charges on miscellaneous charge slip and places slip in transfer receptacle for eventual filing in registration-card file.

Occasionally operates teletype machine. Types customer's message on teletype and presses buttons to transmit message to central teletype office for further continuation.

IV. Experimental Battery

All the tests of the GATB, B-1002B, were administered to the sample group.

V. Criterion

During the period April through November 1964, supervisory ratings and reratings based on a descriptive rating scale designed for this study, were prepared by the managers of the various inns and motels. The rating scale consisted of seven items covering different aspects of job performance, with five alternatives for six items and four alternatives for one item. The alternatives were assigned weights of 1 through 5, and 1 through 4, respectively, indicating the degree of job proficiency attained. A correlation coefficient of .893 was obtained between the two sets of ratings for 52 individuals of the sample. Therefore, the two ratings were combined. Since the Pennsylvania sample of two had only one rating each, their rating scores were doubled. The possible range of criterion scores was 14-68. The actual range of criterion scores was 37-68, with a mean of 54.1 and a standard deviation of 9.2.

VI. Qualitative and Quantitative Analyses

A. Qualitative Analysis

On the basis of the job analysis data, the following aptitudes were rated "important" for success in this occupation:

Intelligence (G) - required to learn the procedures of checking guests in and out of inn or motel; to learn to operate cash register, switchboard and teletype. Required to acquire pertinent information about surrounding area.

Verbal Aptitude (V) - required to communicate with guests, to give directions and to operate switchboard.

Numerical Aptitude (N) - required in handling money, posting charges, totaling bills, balancing receipts and obtaining cash-register total.

Clerical Perception (Q) - required to verify accuracy of housekeeper's report by comparing it with room rack, to check registration cards and receipts and to post charges.

Manual Dexterity (M) - required to operate various office equipment and telephone switchboard.

B. Quantitative Analysis:

TABLE II

Means (M), Standard Deviations (σ), and Pearson Product-Moment Correlations with the Criterion (r) for the Aptitudes of the GATB; N = 54

Aptitudes	M	σ	r
G-Intelligence	108.1	14.0	.174
V-Verbal Aptitude	111.6	15.9	.032
N-Numerical Aptitude	105.1	14.3	.203
S-Spatial Aptitude	103.1	16.2	-.078
P-Form Perception	108.5	16.0	-.153
Q-Clerical Perception	113.0	13.2	.127
K-Motor Coordination	111.6	17.3	-.288*
F-Finger Dexterity	108.5	21.1	-.206
M-Manual Dexterity	103.6	17.4	-.051

*Significant at the .05 level

C. Selection of Test Norms

TABLE III

Summary of Qualitative and Quantitative Data

Type of Evidence	Aptitudes								
	G	V	N	S	P	Q	K	F	M
Job Analysis Data									
Important	X	X	X			X			X
Irrelevant									
Relatively High Mean		X				X	X		
Relatively Low Sigma	X		X			X			
Significant Correlation With Criterion									
Aptitudes to be Considered for Trial Norms	G	V	N			Q			

Trial norms consisting of various combinations of Aptitudes G, V, N and Q with appropriate cutting scores were evaluated against the criterion by means of the Phi Coefficient technique. A comparison of the results showed that B-1002 norms consisting of G-95, N-100 and Q-100 had the best selective efficiency.

VII. Validity of Norms

The validity of the norms was determined by computing a Phi Coefficient between the test norms and the criterion and applying the Chi Square test. The criterion was dichotomized by placing 41 percent of the sample in the low criterion group because this percent was considered to be the unsatisfactory or marginal workers.

Table IV shows the relationship between test norms consisting of Aptitudes G, N and Q with critical scores of 95, 100 and 100, respectively, and the dichotomized criterion for Room Clerk 1-07.60. Workers in the high criterion group have been designated as "good workers" and those in the low criterion group as "poor workers."

TABLE IV

Validity of Test Norms for
Room Clerk 1-07.60
(G-95, N-100, Q-100)

N = 54	Non-Qualifying Test Scores	Qualifying Test Scores	Total
Good Workers	10	22	32
Poor Workers	14	8	22
Total	24	30	54

Phi Coefficient = .320
 $X^2 = 5.530$
 $P/2 < .01$

The data in the above table indicate a significant relationship between the test norms and the criterion for the sample.

VIII. Conclusions

On the basis of the results of this study, Aptitudes G, N and Q with minimum scores of 95, 100 and 100, respectively, have been established as B-1002 norms for Room Clerk 1-07.60. The equivalent B-1001 norms consist of G-100, N-105 and Q-100.

IX. Determination of Occupational Aptitude Pattern

The data for this study did not meet the requirements for incorporating the occupation studied into any of the 36 OAP's included in Section II of the Guide to the Use of the General Aptitude Test Battery, January 1962. The data for this sample will be considered for future groupings of occupations in the development of new occupational aptitude patterns.