



SUBWAY Case Study
Presented by: HireLabs, Inc.
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Subway Case Study

Purpose of study:

To give our clients greater insight into the knowledge, skills, and abilities their employees possess through HireLabs™ self-assessments.

Sample:

In total, 17 sandwich artists were recruited to take a 264 item assessment. Out of the 17 assessments given, 10 were taken in English, with the remaining 7 taken in Arabic.

Measures:

Using job analysis data collected from the work site and HireLabs™ occupation database, job appropriate measures were selected by client and consultants. Within this report, a total of 4 assessments were analyzed: Reading Comprehension, Speaking, Mathematics, and Problem Sensitivity. All items were worded to correspond to a 5-point Likert-type agreement scale (1-strongly disagree to 5-strongly agree, with 3- neutral). Please see Appendix for construct and dimensions definitions, along with employee results.

Analysis:

After entering data into statistical software program, data was assessed for entry errors and missing cases by item and employee. All observations appeared to be within acceptable limits, except for oral comprehension. As a result, the test was dropped from analysis. A group means comparison (i.e., independent samples test) between English and Arabic tests was performed. No significant group differences were found between measures. Aggregate means for each participant's test score was created (including dimensions) and compiled for review (see Appendix for results). A reliability analysis was performed on assessments (and dimensions) to evaluate effectiveness of measures. Due to low reliability scores, speech recognition and a portion of the mathematics test was dropped. The remaining measures meet research and industry standards for reliability.

Results:

Given the current limitations of this study (i.e., small sample size, no performance data), no predictive or factual based conclusions can be made. However, being that it is a self-assessment battery of tests, we can make conclusions about employees' reports of their own abilities and self concepts.

For the majority of assessments, employees mainly reported a neutral response: reading comprehension, (M = 3.40; SD = .33), speaking (M = 3.43, SD = .32), math reasoning (M = 3.11; SD = .22), and problem sensitivity (M = 3.36; SD = .26). Respondents appeared to be most confident in their reading comprehension and speaking abilities, while being least confident in their math skills. These findings agree with the occupation demands; success on the job is more dependent on reading and communication skills, as opposed to math skills.

Among respondents, there were above and below average self-assessment ratings within each test, as well as overall. In reading comprehension, Anthony Saluador reported the highest capability (m = 3.93), while Harold Arehamo reported the lowest (m = 2.73). For speaking, Mohammad Ramadan reported the highest competency (m = 3.91), with Harold Arehamo reporting the lowest (m = 2.74). In math reasoning, Anthony Saluador reported the strongest abilities (m = 3.55), while Ramzi Sieny reported the lowest (m = 2.83). Lastly, Ramon, Mohammad Ramadan, and Sherwin Saludares recorded the highest scores for problem sensitivity (m = 3.68; m = 3.67; m = 3.65 respectively), while Sainoden Bangon and Lalu Cheriyan reported the lowest (m = 3.05 for both). Overall, Anthony Saluador (m = 3.61), Sherwin Saludares (m = 3.54), and Angelito Godoy (m = 3.52) reported being most competent in reading comprehension, speaking, math reasoning, and problem sensitivity. In comparison, Harold Arehamo (m = 2.89), Sainoden Bangon (m = 3.05), and Asrap J. Sahibul (m = 3.06) reported being the least competent in these areas.

Discussion:

As a result of this case study, our client is given a greater understanding of employees' reports of their own abilities and self concepts. Data shows that overall, workers are more confident in their reading comprehension and speaking abilities, versus math skills. Data also shows that there are noticeable differences between employees' conceived abilities, and that these discrepancies may represent true differences in abilities on the job.

Given the job analysis data, the employer should continue to focus on selecting individuals with good communication skills (speaking and oral comprehension), attention to detail (problem sensitivity), and basic arithmetic abilities. We also believe it is important for the employer to screen individuals based on their service orientation skills. Service orientation refers to the ability and desire to consciously seek and satisfy the needs of another by being helpful, courteous, responsive, attentive, and outgoing. We would expect individuals high in service orientation would better able to serve the demands of Subway's customers.

As noticed by one of our job analyst, employees rarely follow the training provided through the reading materials onsite. Given the importance of training in the workplace, we would recommend the employer to track each employee's progress through the learning materials by giving tests at the end of each section. Each section would need to be completed by the end of each week until all material is completely covered. Tests would verify that the employees have read the material, as well as to what level they understood the content. Corrected tests would give employees important feedback about the material, further reinforcing learning.

Lastly, to improve employee and organizational performance, we would recommend implementing a performance management system. It serves both a strategic and operational purpose by establishing standards and goals, monitoring performance, providing information for employment decisions, and actively improving and developing talent (Cascio & Aguinis, 2005; U.S. Office of Personnel Management, 2001). Also, data collected from performance management systems can be used to validate selection tools. Selection instruments can enhance objectivity, increase hiring process efficiency, reduce workforce needed for hiring, and improve the quality of hires for a company. However, without data available to correlate test scores with performance, these instruments cannot be used (Cascio & Aguinis, 2005)

Individual Test Means and Overall Mean Scores

Employees	Reading				Overall
	Comprehension*	Speaking**	Math Reasoning***	Problem Sensitivity****	
Ramzi Beghaini Ahmad Sieny	3.27	3.29	2.83	3.13	3.13
Faisal Kamal Al-Tanji	3.32	3.24	2.90	3.23	3.17
Sherwin William Saludaes	3.60	3.74	3.17	3.65	3.54
Angelito Godoy	3.57	3.48	3.48	3.55	3.52
Mohammad Talat Jannah	3.57	3.61	3.34	3.30	3.45
Sainoden Benito Bangon	3.07	3.09	3.00	3.05	3.05
Winston Tapahgan	3.37	3.17	2.86	3.10	3.12
Lalu Cheriyan	3.23	3.12	3.00	3.05	3.10
Harold Arehamo	2.73	2.74	2.89	3.20	2.89
Mohammad Jameel Ramadan	3.17	3.91	2.90	3.67	3.41
Ramon	3.43	3.58	3.21	3.68	3.47
Anthony Saluador	3.93	3.73	3.55	3.23	3.61
Arvy Bantog	3.33	3.50	3.10	3.13	3.27
Asrap J. Sahibul	2.97	3.03	3.00	3.23	3.06
	3.40	3.43	3.11	3.36	3.33
	SD = .33	SD = .32	SD = .22	SD = .26	

***Reading Comprehension** – individual has a broad vocabulary, strong grammatical understanding, can integrate concepts and ideas, comprehend significance of material, and draw conclusions.

****Speaking** – the ability to confidently create, articulate, and deliver a clear, comprehensible message.

*****Mathematics** – the ability to understand, reason, and apply mathematical concepts in theory and practice.

******Problem Sensitivity** – being conscientious of the work environment and quality control, identifying problems or potential problems, and reporting them.

Dimension Scores: Speaking

Employees	Physical Ability*	Mental Capacity**	Emotional Ability***
Ramzi Beghaini Ahmad Sieny	3.20	3.31	3.38
Faisal Kamal Al-Tanji	3.00	3.25	3.50
Sherwin William Saludaes	3.90	3.66	3.69
Angelito Godoy	3.38	3.48	3.63
Mohammad Talat Jannah	3.52	3.72	3.50
Sainoden Benito Bangon	3.05	3.07	3.19
Winston Tapahgan	3.33	3.14	3.00
Lalu Cheriyan	3.00	3.21	3.13
Harold Arehamo	2.67	2.96	2.44
Mohammad Jameel Ramadan	3.90	4.07	3.63
Ramon	3.62	3.62	3.44
Anthony Saluador	3.81	4.07	3.00
Arvy Bantog	3.86	3.59	2.88
Asrap J. Sahibul	3.00	3.07	3.00
	3.37	3.53	3.33
	SD = .37	SD = .38	SD = .39

***Physical ability** – the ability to speak with an adequate voice, use good pronunciation, gestures, and other physical abilities used to convey meaning.

****Mental capacity** – the ability to create and articulate speech by using correct grammar, vocabulary, and structure. The individual is also able to be flexible in their communication (e.g., accommodate others, use appropriate language, etc.).

*****Emotional ability** – an individual who shows confidence in their speech; being free from fear, anxiety, and self-doubt in speaking in front of others.

Dimension Scores: Mathematics

Employees	Math Calculation Skills		
	8th grade level	12th grade level	Math Reasoning**
Ramzi Beghaini Ahmad Sieny	3.11	2.78	2.83
Faisal Kamal Al-Tanji	2.67	2.89	2.90
Sherwin William Saludaes	3.11	3.00	3.17
Angelito Godoy	2.33	2.67	3.48
Mohammad Talat Jannah	3.78	3.44	3.34
Sainoden Benito Bangon	3.11	3.11	3.00
Winston Tapahgan	2.33	2.22	2.86
Lalu Cheriyan	2.56	2.56	3.00
Harold Arehamo	3.78	2.56	2.89
Mohammad Jameel Ramadan	3.22	2.11	2.90
Ramon	3.22	3.56	3.21
Anthony Saluador	4.75	3.33	3.55
Arvy Bantog	3.00	2.89	3.10
Asrap J. Sahibul	3.00	3.00	3.00
	3.18	2.88	3.11
	SD = .58	SD = .39	SD = .22

**Math Reasoning – the ability to use mathematical reasoning and creativity, visual-spatial-motor ability, and quick processing to solve practical and theoretical problems.