Table 4.11: Analysis of Understandability and Usefulness of Financial Statements in Experiment 1

Analysis of Understandability and Usefulness of Financial Statements in Experiment 1

Panel A: Mean Understandability Rating of Financial Statements (Standard Deviation**)**

Understandability Rating[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	
Understandability of balance sheet	**6.6897**	**7.1429**	**4.7407**	**13.2598**
(0 [not at all understandable] - 10 [very	(1.8728)	(1.3801)	(2.1767)	(<0.0000) ***
Understandability of income statement	**6.5172**	**7.4286**	**5.7407**	**5.0467**
	(2.0636)	(1.0690)	(2.5206)	(0.0086) ***
Understandability of statement of changes in	**5.5862**	**6.1786**	**5.2222**	**1.1277**
stockholders' equity	(2.5707)	(2.0915)	(2.4703)	(0.3288)
Understandability of statement of cash flows	**6.3103**	**6.9630**	**5.2963**	**4.5269**
	(2.1231)	(1.5059)	(2.4149)	(0.0137) ***

Panel B: Mean Rating of Usefulness of Financial Statements (Standard Deviation**)**

Usefulness of Financial Statements Rating[c]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	
Linkage of financial statements	**7.3103**	**6.6786**	**5.1538**	**9.3821**
(0 [not clear] - 10 [very clear])	(1.7135)	(1.5167)	(2.3612)	(0.0002) ***
Ability to identify causes of changes in financial	**5.9655**	**6.6071**	**5.2593**	**3.4315**
position and cash flows (0 [no] - 10 [yes])	(2.3066)	(1.5477)	(1.7671)	(0.0371) ***
Overall usefulness of financial statements	**6.8276**	**7.6786**	**5.7778**	**8.7329**
(0 [not at all useful] - 10 [very useful])	(1.6272)	(1.1880)	(2.1364)	(0.0004) ***

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Understandability rating is solicited in 11-point rating scale (0 [not at all understandable] - 10 [very*

[c] *Usefulness rating is solicited in 11-point rating scale.*

4.4. Experiment 2

4.4.1. Performance Evaluation in Experiment 2

4.4.1.1. Analysis of Performance Evaluation Judgments in Experiment 2

The participants are solicited to form judgments related to overall performance evaluation, operating performance evaluation, and investing performance evaluation. Moreover, similar to Experiment 1, they are asked to rate the trend of operating profit, operating growth prospects, and the persistence of net income[47]. Panel A of Table

[47] Similar to Experiment 1, the case materials in Experiment 2 show poorer operating results as compared to those of prior year, while the overall performance is relatively constant. In Experiment 2,

4.12 and Figure 4.3 present an analysis of performance evaluation judgments and mean plots of performance evaluation judgments in Experiment 2. The means of overall performance rating of WFS-NOTES, WFS-NO, and WFS-FACE conditions are 6.1481, 5.5926, and 5.5926, respectively, which is not significantly different (F = 0.6254, p-value = 0.5377). The means of operating performance evaluation is lower than the means of overall performance evaluation in every condition. The operating performance rating is not significantly different across the experimental conditions (F = 1.2458, p-value 0.2934).

The reduction in rating (Overall performance evaluation – Operating performance evaluation) for WFS-NOTES, WFS-NO, and WFS-FACE conditions is 3.1866, 2.5185, and 1.8889, respectively. The rationale of lesser reduction in WFS-FACE condition might be due to the fact that the participants have already incorporate the decreasing trend in the operating profit in their overall evaluation. This is reflected in the lower level of overall rating of the participants in WFS-FACE condition.

Moreover, the participants form similar judgments related to investing performance, operating profit trend, future operating growth prospects, and persistence of net income (F = 0.6886, p-value = 0.5053 for investing performance; F = 0.0911, p-value = 0.9131 for trend of operating profit; F = 2.1910, p-value = 0.1186 for future operating growth prospects; and F = 0.9785, p-value = 0.3804 for persistence of net income.)

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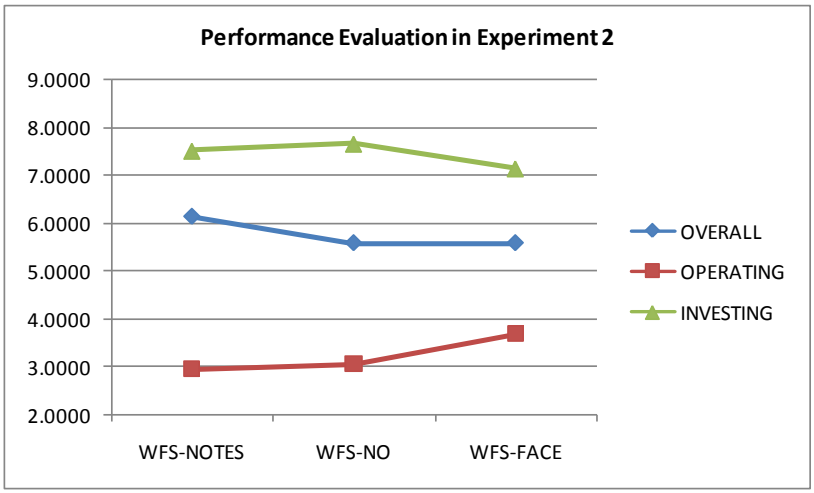
the by-nature information explaining the decomposition of the key expense items may be disclosed in the notes or presented on the face of income statement. This setting allows me to explore the possible benefits and costs of presenting or disclosing the detailed by-nature information. In the evaluation of operating performance, the participants might be overwhelmed by the level of details presented on the financial statements or in the notes. Specifically, given the by-nature presentation on the face of income statement as opposed to disclosing the information or not disclosing the information, if the participants can better spot the decreasing trend or poorer operating performance of the hypothetical firm reflected in lower rating scores, the judgments related to operating performance evaluation is said to be improved by the more detailed information.

Figure 4.3 Mean Plots of Performance Evaluation Judgments



4.4.1.2. Analysis of Operating Performance Evaluation Judgments, Future Trend, and Growth Prospects in Experiment 2 and Test of Hypothesis 2

Panel B presents the analysis of operating performance evaluation judgments, future trend, and growth prospects in Experiment 2. In addition, Panel C of Table 4.12 shows the planned comparison to explore the hypotheses. H2a proposed that *the proposed format financial statement with disclosure of by-nature information in the notes to financial statements improves investors' operating performance evaluation judgments when compared to those without by-nature information*. The planned comparisons between the WFS-NOTES and WFS-NO conditions are performed to test H2a. The t-statistics show statistically insignificant results for all performance evaluation variables and operating-related measures. Thus, H2a is not supported. Even though the evidence from debriefing session suggest that the participants acquire the by-nature information presented or disclosed. The participants might not assign any weights the by-nature information when they evaluate the operating performance.

Interestingly, judging from the magnitude of the rating on operating performance evaluation, the participants in the WFS-NOTES condition (Mean of 2.9615) rate lower operating performance when compared to those in the WFS-NO condition (Mean of 3.0741) (t-statistics = -0.2804, p-value = 0.3902).

H2b hypothesized that *the proposed format financial statement with presentation of by-nature information on the face of income statement improves investors' operating performance evaluation judgments when compared to those without by-nature information*. The participants in WFS-FACE condition (Mean of 3.7778 out of 0-10 rating scale) assess significantly lower growth prospects in future operating performance than those in WFS-NO condition (Mean of 4.6667) (t-statistics = -1.9718, p-value = 0.0270). The evidence suggests that the participants in WFS-FACE better spot the decreases in operating performance of the hypothetical firm. Thus, H2b is supported. The by-nature information might provide additional information as to the reasons of the increase in cost of goods sold and decreases in operating profit to the participants when they assess the decline in operating profit. This is consistent with Human Information Processing literature in that the more expanded and more detailed information presented would help investors form better judgments.

H2c proposed that *the proposed format financial statements with presentation of by-nature information on the face of the income statement improves investors' operating performance evaluation judgments when compared to those with disclosure of by-nature information in the notes to financial statements*. The rating of future operating growth prospects of the participants in WFS-NOTES condition (Mean of 4.4815 out of 0-10 rating scale) is slightly higher than those in WFS-FACE condition (Mean of 3.7778) (t-statistics =1.6921, p-value = 0.0483). The results suggest that participants in WFS-FACE who received income statement (with by-nature information presentation on the face of income statement) better spot the decreasing trend in the operating profit when compared to those in WFS-NOTES, which is consistent with H2c. The evidence suggests that the level of data aggregation presented on the income statement in the FACE condition helps rather than hurts the investors assess the operating performance of the firm.

Similar to Experiment 1, I performed analysis of covariance (ANCOVA) to validate the results from the main analysis for hypotheses 2. The average self-rated investment and accounting knowledge scores and the scores from the accounting and finance knowledge test are used as covariates in the analysis. The ANCOVA results (not tabulated) are qualitatively similar to those reported in ANOVA.

Table 4.12: Analysis of Performance Evaluation Judgments, Future Trend, and Growth Prospects in Experiment 2

Analysis of Performance Evaluation Judgments, Future Trend, and Growth Prospects in Experiment 2

Panel A: Mean Performance Evaluation Judgments (Standard Deviation)

Performance Evaluations[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Overall performance evaluation	**6.1481**	**5.5926**	**5.5926**	**0.6254**
(0 [worse] - 10 [better])	(1.8335)	(2.1884)	(2.2746)	(0.5377)
Operating performance evaluation	**2.9615**	**3.0741**	**3.7037**	**1.2458**
(0 [worse] - 10 [better])	(1.5095)	(1.4122)	(2.4466)	(0.2934)
Investing performance evaluation	**7.5185**	**7.6667**	**7.1481**	**0.6886**
(0 [worse] - 10 [better])	(1.5031)	(1.4142)	(2.0325)	(0.5053)

Panel B: Mean Operating Performance Evaluation Judgments and Related Measures (Standard Deviation)

Operating Performance Judgments[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Operating performance evaluation	**2.9615**	**3.0741**	**3.7037**	**1.2458**
(0 [worse] - 10 [better])	(1.5095)	(1.4122)	(2.4466)	(0.2934)
Trend of operating profit	**2.8148**	**2.7037**	**2.9259**	**0.0911**
(0 [decreasing trend] - 10 [increasing trend])	(1.4945)	(2.1089)	(2.0741)	(0.9131)
Future operating growth prospects	**4.4815**	**4.6667**	**3.7778**	**2.1910**
(0 [very poor prospect] - 10 [very good prospect])	(1.6260)	(1.8605)	(1.4233)	(0.1186)
Persistence of net income	**4.4815**	**3.9630**	**3.8889**	**0.9785**
(0 [transitory] - 10 [persistent])	(1.7403)	(1.7427)	(1.6013)	(0.3804)

Panel C: Planned Comparisons	df	T-Statistic	P-Value[a]	
WFS-NOTES VS. WFS-NO (H2a)				
Operating performance evaluation	51	-0.2804	0.3902	
Trend of operating profit	52	0.2234	0.4121	
Future operating growth prospects	52	-0.3894	0.3493	
Persistence of net income	52	1.0940	0.1395	
WFS-FACE VS. WFS-NO (H2b)				
Operating performance evaluation	42	1.1581	0.1267	
Trend of operating profit	52	0.3904	0.3489	
Future operating growth prospects	52	-1.9718	0.0270	**
Persistence of net income	52	-0.1626	0.4357	
WFS-NOTES VS. WFS-FACE (H2c)				
Operating performance evaluation	44	-1.3344	0.0945	*
Trend of operating profit	52	-0.2258	0.4111	
Future operating growth prospects	52	1.6921	0.0483	**
Persistence of net income	52	1.3021	0.0993	*

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Judgments on financial performance is solicited in 11-point rating scale.*

4.4.1.3. Analysis of Judgments Related to Performance Evaluation, Future Trend, and Growth Prospects Performing for the Two Subsamples Partitioned using Knowledge Variables, in Experiment 2

Table 4.13 presents an additional analysis on operating performance evaluation judgments and related measures for high- and low-knowledge subsamples. Also, Figure 4.2 portrays the mean plots of operating performance evaluation and related measures in Experiment 2.

The self-rated business and accounting knowledge and knowledge test score are used to partition the participants into high- and low-knowledge subsamples[48]. The median values of the two knowledge variables are the cut-off points to split the sample[49].

Panel A through Panel C of Table 4.13 portray the planned comparisons of differences in Data Aggregation Level (H2a: NOTES-NO, H2b: FACE-NO, and H2c: NOTES-FACE), respectively. Controlling for level of knowledge, H2a is not supported, which is consistent with the main analysis in prior section. For H2b, the result from the analysis of the two knowledge subsamples is consistent with the prediction. That is, the participants with lower level of knowledge in WFS-FACE condition assess significantly lower future operating growth prospects when compared to those in WFS-NO condition (t-statistics = -1.9550, p-value = 0.0295).

In addition, the experimental result suggests that the participants with the lower knowledge level in WFS-NOTES condition (Mean of 4.8000) rate the future operating growth prospects significantly higher than those in WFS-FACE condition (Mean of 3.5333) (t-statistics = 2.0505, p-value = 0.0498). While the participants in the high-knowledge subsample assess the future operating growth prospects at a lower

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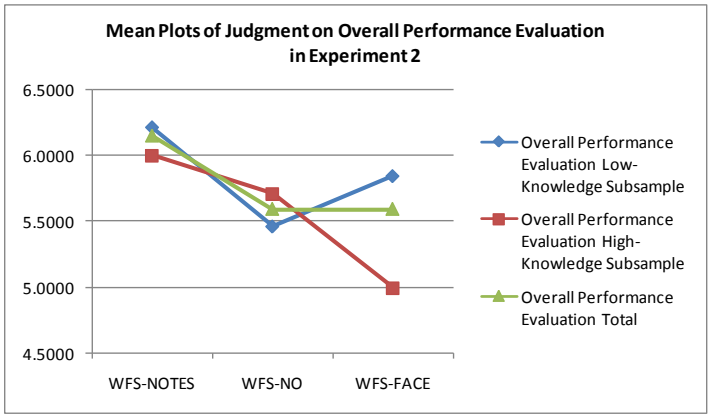
[48] Note that the information content might be lost in the process of discretizing the knowledge variables into "High" and "Low" knowledge subsamples. However, this analysis reduces the measurement errors that might exist when measuring the business, accounting, and investment knowledge of the participants in relatively short period of time.

[49] Similar to Experiment 1, the average self-rated score of 5.75 (median) and the knowledge test score of 11 (median) are used as cut-off points to partition high-low knowledge subsamples. Including observations with the median value in either one of the subsamples or excluding those yield qualitatively similar results.

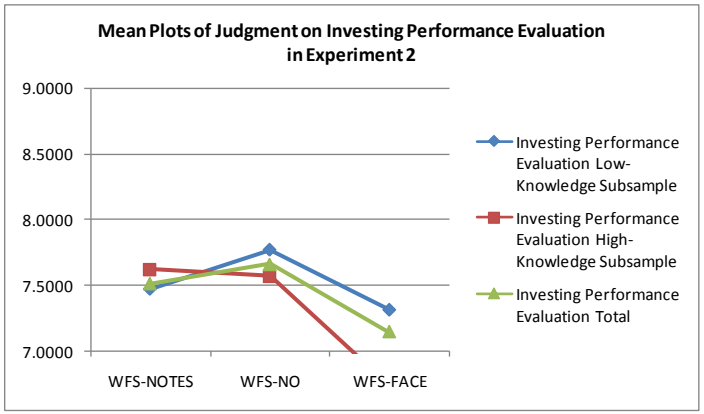
level (4.0833) across the two experimental conditions. This suggests that, especially for financial statement users with lower level of knowledge, presenting information on the face of income statements improves rather than hurts the judgments related to operating performance evaluation.

Figure 4.4: Mean Plots of Judgments on Operating Performance Evaluation and Related Measures in Experiment 2

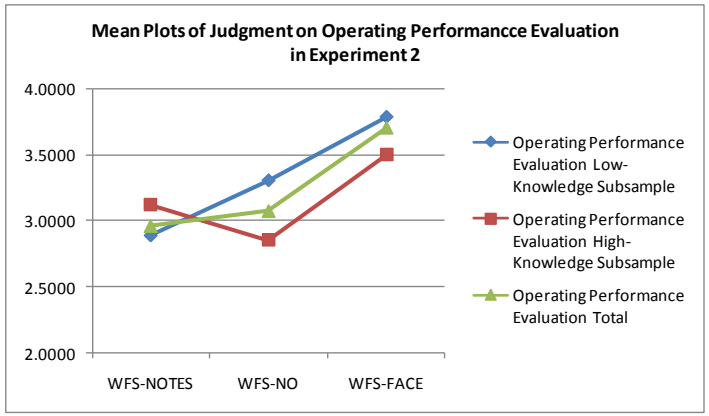
Panel A: Mean Plots of Judgment on Overall Performance Evaluation



Panel B: Mean Plots of Judgment on Investing Performance Evaluation



Panel C: Mean Plots of Judgment on Operating Performance Evaluation



Panel D: Mean Plots of Judgment on Trend of Operating Profit

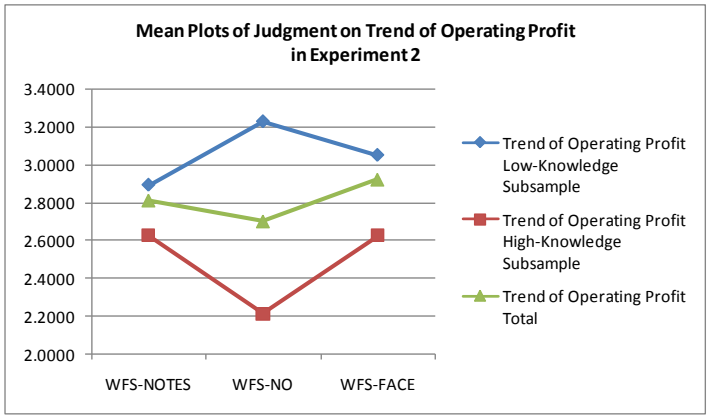
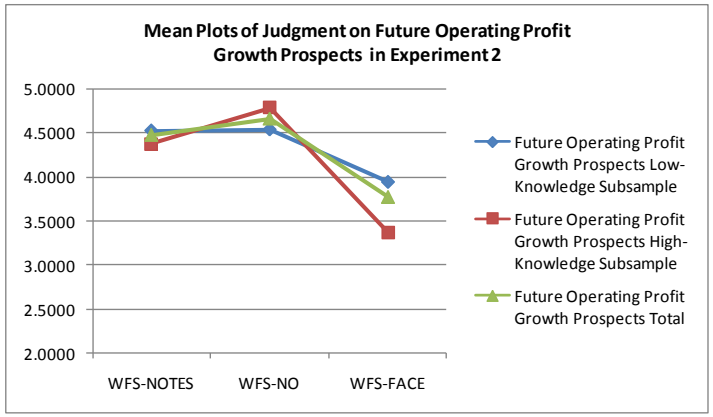


Figure 4.4 (Continued)

Panel E: Mean Plots of Judgment on Future Operating Profit Growth Prospects



Panel F: Mean Plots of Judgment on Persistence of Net Income

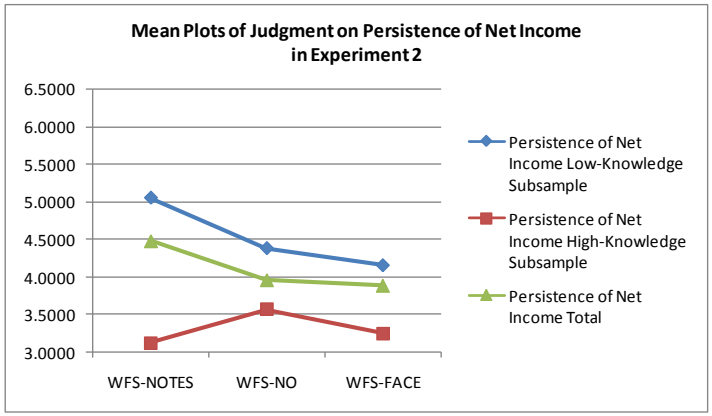


Table 4.13: Additional Analysis for High-Low Knowledge Subsamples in Experiment 2

Additional Analysis for High-Low Knowledge Subsamples in Experiment 2
Mean Judgments on Operating Performance Evaluation and Related Measures (Standard Deviation**)**
Panel A: Planned Comparisons for Differences in Data Aggregation Level (H2a: NOTES VS. NO)

Operating Performance Judgments	Self-rated Knowledge Variable[b]						Knowledge Test Variable[b]					
	Low-Knowledge Subsample			High-Knowledge Subsample			Low-Knowledge Subsample			High-Knowledge Subsample		
	Data Aggregation (H2a)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2a)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2a)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2a)		t-statistic (p-value one-tailed)[a]
	NOTES	NO		NOTES	NO		NOTES	NO		NOTES	NO	
Operating performance evaluation	**2.9286**	**3.1500**	**-0.3982**	**3.0000**	**2.8571**	**0.2390**	**2.8889**	**3.3077**	**-0.7082**	**3.1250**	**2.8571**	**0.4887**
(0 [worse] - 10 [better])	(1.5915)	(1.5985)	(0.3466)	(1.4771)	(0.6901)	(0.4070)	(1.4096)	(1.8879)	(0.2422)	(1.8077)	(0.7703)	(0.3152)
Trend of operating profit	**2.6667**	**3.0500**	**-0.6791**	**3.0000**	**1.7143**	**1.5249**	**2.8947**	**3.2308**	**-0.4918**	**2.6250**	**2.2143**	**0.5431**
(0 [decreasing] - 10 [increasing])	(0.9759)	(2.2589)	(0.2514)	(2.0000)	(1.2536)	(0.0728) *	(1.4489)	(2.4205)	(0.3132)	(1.6850)	(1.7177)	(0.2965)
Future operating growth prospects	**4.8000**	**4.6500**	**0.2417**	**4.0833**	**4.7143**	**-0.8035**	**4.5263**	**4.5385**	**-0.0197**	**4.3750**	**4.7857**	**-0.4945**
(0 [very poor] - 10 [very good])	(1.8593)	(1.7852)	(0.4053)	(1.2401)	(2.2147)	(0.2164)	(1.7438)	(1.6641)	(0.4922)	(1.4079)	(2.0821)	(0.3132)
Persistence of net income	**4.2000**	**3.9500**	**0.4352**	**4.8333**	**4.0000**	**0.9200**	**5.0526**	**4.3846**	**1.1659**	**3.1250**	**3.5714**	**-0.6003**
(0 [transitory] - 10 [persistent])	(1.4736)	(1.8202)	(0.3331)	(2.0375)	(1.6330)	(0.1852)	(1.5447)	(1.6602)	(0.1264)	(1.4577)	(1.7852)	(0.2775)

Panel B: Planned Comparisons for Differences in Data Aggregation Level (H2b: FACE VS. NO)

Operating Performance Judgments	Self-rated Knowledge Variable[b]						Knowledge Test Variable[b]					
	Low-Knowledge Subsample			High-Knowledge Subsample			Low-Knowledge Subsample			High-Knowledge Subsample		
	Data Aggregation (H2b)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2b)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2b)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2b)		t-statistic (p-value one-tailed)[a]
	FACE	NO		FACE	NO		FACE	NO		FACE	NO	
Operating performance evaluation	**3.7333**	**3.1500**	**0.9836**	**3.6667**	**2.8571**	**0.8724**	**3.7895**	**3.3077**	**0.6586**	**3.5000**	**2.8571**	**0.5505**
(0 [worse] - 10 [better])	(1.9074)	(1.5985)	(0.1662)	(3.0847)	(0.6901)	(0.1995)	(2.1234)	(1.8879)	(0.2576)	(3.2514)	(0.7703)	(0.2991)
Trend of operating profit	**3.3333**	**3.0500**	**0.3861**	**2.4167**	**1.7143**	**0.7839**	**3.0526**	**3.2308**	**-0.2281**	**2.6250**	**2.2143**	**0.4686**
(0 [decreasing] - 10 [increasing])	(1.9881)	(2.2589)	(0.3509)	(2.1515)	(1.2536)	(0.2220)	(1.9853)	(2.4205)	(0.4106)	(2.3867)	(1.7177)	(0.3222)
Future operating growth prospects	**3.5333**	**4.6500**	**-1.9550**	**4.0833**	**4.7143**	**-0.7867**	**3.9474**	**4.5385**	**-1.1057**	**3.3750**	**4.7857**	**-1.6522**
(0 [very poor] - 10 [very good])	(1.5055)	(1.7852)	(0.0295) **	(1.3114)	(2.2147)	(0.2211)	(1.3529)	(1.6641)	(0.1388)	(1.5980)	(2.0821)	(0.0571) *
Persistence of net income	**4.3333**	**3.9500**	**0.6503**	**3.3333**	**4.0000**	**-0.9063**	**4.1579**	**4.3846**	**-0.3729**	**3.2500**	**3.5714**	**-0.4545**
(0 [transitory] - 10 [persistent])	(1.5887)	(1.8202)	(0.2600)	(1.4975)	(1.6330)	(0.1887)	(1.7083)	(1.6602)	(0.3559)	(1.1650)	(1.7852)	(0.3272)

Panel C: Planned Comparisons for Differences in Data Aggregation Level (H2c: NOTES VS. FACE)

Operating Performance Judgments	Self-rated Knowledge Variable[b]						Knowledge Test Variable[b]					
	Low-Knowledge Subsample			High-Knowledge Subsample			Low-Knowledge Subsample			High-Knowledge Subsample		
	Data Aggregation (H2c)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2c)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2c)		t-statistic (p-value one-tailed)[a]	Data Aggregation (H2c)		t-statistic (p-value one-tailed)[a]
	NOTES	FACE		NOTES	FACE		NOTES	FACE		NOTES	FACE	
Operating performance evaluation	**2.9286**	**3.7333**	**-1.2288**	**3.0000**	**3.6667**	**-0.6752**	**2.8889**	**3.7895**	**-1.5109**	**3.1250**	**3.5000**	**-0.2851**
(0 [worse] - 10 [better])	(1.5915)	(1.9074)	(0.1149)	(1.4771)	(3.0847)	(0.2546)	(1.4096)	(2.1234)	(0.0699)	(1.8077)	(3.2514)	(0.3899)
Trend of operating profit	**2.6667**	**3.3333**	**-1.1659**	**3.0000**	**2.4167**	**0.6879**	**2.8947**	**3.0526**	**-0.2800**	**2.6250**	**2.6250**	**0.0000**
(0 [decreasing] - 10 [increasing])	(0.9759)	(1.9881)	(0.1268)	(2.0000)	(2.1515)	(0.2493)	(1.4489)	(1.9853)	(0.3905)	(1.6850)	(2.3867)	(0.5000)
Future operating growth prospects	**4.8000**	**3.5333**	**2.0505**	**4.0833**	**4.0833**	**0.0000**	**4.5263**	**3.9474**	**1.1434**	**4.3750**	**3.3750**	**1.3281**
(0 [very poor] - 10 [very good])	(1.8593)	(1.5055)	(0.0249) **	(1.2401)	(1.3114)	(0.5000)	(1.7438)	(1.3529)	(0.1302)	(1.4079)	(1.5980)	(0.1027)
Persistence of net income	**4.2000**	**4.3333**	**-0.2383**	**4.8333**	**3.3333**	**2.0549**	**5.0526**	**4.1579**	**1.6934**	**3.1250**	**3.2500**	**-0.1895**
(0 [transitory] - 10 [persistent])	(1.4736)	(1.5887)	(0.4067)	(2.0375)	(1.4975)	(0.0260) **	(1.5447)	(1.7083)	(0.0495) **	(1.4577)	(1.1650)	(0.4262)

Note [a] **** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *The average self-rated score of 5.75 (median) and the knowledge test score of 11 (median) are used as cut-off points to partition high-low knowledge subsamples. Including observations with the median value in either one of the subsamples or excluding those yield qualitatively similar results.*

4.4.2. Information Extraction and Ratio Analysis in Experiment 2

Panel A of Table 4.14 presents an analysis of information extraction from income statement. The participants are asked to extract the operating income and investing income from income statement. The errors in determinations of operating income [Error = |OI specified - True OI|/True OI] and in investing income [Error = |II specified - True II|/True II] are analyzed.

The error in operating income calculation is slightly lower in WFS-NO condition when compared to that of the other two experimental conditions (F = 2.5975, p-value = 0.0809). However, the associated difficulty ratings are not significantly different from each other (F = 0.5807, p-value = 0.5619). The error in investing income calculation is not significantly different from each other (F = 2.3501, p-value = 0.1021). However, the associated confidence level of the participants in WFS-NOTES is slightly higher than the others (F = 2.9006, p-value = 0.0610).

Panel B of Table 4.14 shows an analysis of information extraction from balance sheet. The means of error in determining total assets [Error = |A specified - True A|/True A] of WFS-NOTES, WFS-NO, and WFS-FACE are 0.1130, 0.1150, and 0.1266, respectively, which are not significantly different from each other (F = 0.0583, p-value = 0.9434). The means of error in determining total liabilities [Error = |L specified - True L|/True L] of WFS-NOTES, WFS-NO, and WFS-FACE are 0.1744, 0.1662, and 0.1231, respectively, which are not significantly different from each other (F = 0.6194, p-value = 0.5409). Surprisingly, the means of errors in determining the total stockholders' equity are significantly different across experimental conditions in experiment 2; that is, the participants in WFS-FACE condition have higher level of calculation errors when compared to the other two conditions (F = 3.2136, p-value = 0.0456). Moreover, the associated difficulty rating is slightly higher in WFS-NO condition (Mean of 5.8269) when compared to WFS-NOTES (Mean of 4.3077) and WFS-FACE conditions (Mean of 4.4231) (F = 2.8860, p-value = 0.0620).

The means of error in determining operating assets and operating liabilities are not significantly different across experimental conditions (F = 0.6746, p-value = 0.5123 for operating assets calculation and F = 0.0986, p-value = 0.9064 for operating liabilities calculation). This seems sensible because the balance sheet presentation provided in all the experimental conditions in Experiment 2 is identical. The participants in all conditions moderately rate the difficulty level associated with the extraction of operating assets and liabilities.

Panel C of Table 4.14 portrays an analysis of ratio analysis performed by the participants. The participants in all experimental conditions equally performed when they are asked to calculate return on assets, return on operating assets, and debt-to-equity ratio (F = 0.5264, p-value = 0.5929 for ROA calculation; F = 1.6134, p-value = 0.2060 for ROOA calculation; and F = 1.9060, p-value = 0.1558 for DE calculation). Moreover, the related confidence ratings associated with the ratio calculation are not significantly different across experimental conditions.

In most of the cases, the participants in all the experimental conditions in Experiment 2 equally performed when they are asked to extract the information from a given set of financial statements and when they compounded the information and calculated the financial ratios.

Table 4.14: Analysis of Information Extraction in Experiment 2

Analysis of Information Extraction and Difficulty & Confidence Levels in Experiment 2
Mean Error of Extracted Information and Difficulty & Confidence Levels (Standard Deviation**)**

Panel A: Information Extracted from Income Statement

Information Extraction and Associated Difficulty Level[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Error in operating income calculation	**0.0394**	**0.0000**	**0.0626**	**2.5975**
[Error = |OI specified - True OI|/True OI]	(0.1061)	(0.0000)	(0.1413)	(0.0809) *
Difficulty level associated with operating income	**2.7407**	**2.2222**	**2.1852**	**0.5807**
calculation	(2.1943)	(2.0064)	(2.1490)	(0.5619)
Error in investing income calculation	**0.1125**	**0.0038**	**0.0692**	**2.3501**
[Error = |II specified - True II|/True II]	(0.2611)	(0.0196)	(0.1865)	(0.1021)
Difficulty level associated with investing income	**3.6667**	**2.4074**	**2.3077**	**2.9006**
calculation	(2.6458)	(2.0430)	(2.1683)	(0.0610) *

Panel B: Information Extracted from Balance Sheet

Information Extraction and Associated Difficulty Level[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Error in total assets calculation	**0.1130**	**0.1150**	**0.1266**	**0.0583**
[Error = |A specified - True A|/True A]	(0.1150)	(0.1574)	(0.1918)	(0.9434)
Error in total liabilities calculation	**0.1744**	**0.1662**	**0.1231**	**0.6194**
[Error = |L specified - True L|/True L]	(0.1355)	(0.2492)	(0.1373)	(0.5409)
Error in total equity calculation	**0.0006**	**0.0155**	**0.1063**	**3.2136**
[Error = |E specified - True E|/True E]	(0.0032)	(0.0804)	(0.2759)	(0.0456) **
Difficulty level associated with total assets, total	**4.3077**	**5.8269**	**4.4231**	**2.8860**
liabilities, and total equity calculation	(2.6041)	(2.5727)	(2.4359)	(0.0620) *
Error in operating assets calculation	**0.1680**	**0.1942**	**0.2329**	**0.6746**
[Error = |OA specified - True OA|/True OA]	(0.2344)	(0.1758)	(0.2051)	(0.5123)
Error in operating liabilities calculation	**0.3638**	**0.4396**	**0.4353**	**0.0984**
[Error = |OL specified - True OL|/True OL]	(0.5784)	(0.7869)	(0.7330)	(0.9064)
Difficulty level associated with operating assets	**5.2308**	**5.0370**	**4.5926**	**0.4691**
and liabilities calculation	(2.4382)	(2.6089)	(2.3413)	(0.6274)

Panel C: Ratio Calculation

Ratio Calculation and Associated Confidence Level[c]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Error in return on assets calculation	**0.2996**	**0.4387**	**0.2897**	**0.5264**
[Error = |ROA specified - True ROA|/True ROA]	(0.3955)	(0.8268)	(0.4324)	(0.5929)
Confidence level associated with ROA calculation	**5.9583**	**6.3846**	**5.5000**	**0.7067**
	(2.8663)	(2.4832)	(2.7019)	(0.4966)
Error in return on operating assets calculation	**0.3704**	**0.4577**	**0.7156**	**1.6134**
[Error = |ROOA specified - True ROOA|/True ROOA]	(0.4583)	(0.7699)	(0.8684)	(0.2060)
Confidence level associated with ROOA calculation	**5.4167**	**5.8800**	**4.6957**	**1.6576**
	(2.3015)	(2.3331)	(2.1413)	(0.1981)
Error in debt-to-equity ratio calculation	**8.3577**	**18.4208**	**6.2863**	**1.9060**
[Error = |DE specified - True DE|/True DE]	(21.7156)	(30.5449)	(17.8799)	(0.1558)
Confidence level associated with DE calculation	**6.1429**	**5.5600**	**5.2857**	**0.5842**
	(2.2866)	(2.8589)	(2.6673)	(0.5605)

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Difficulty level is solicited in 11-point rating scale (0 [not at all difficult] - 10 [very difficult]).*

[c] *Confidence level is solicited in 11-point rating scale (0 [not at all confident] - 10 [very confident]).*

4.4.3. EPS Forecasts in Experiment 2

In the experimental questionnaire of second experiment, the participants are asked to provide the best estimates of the 2009 (1 year ahead) earnings per share (EPS_{YR+1}) and 2010 (2 years ahead) earnings per share (EPS_{YR+2}). The participants also rate how confident they are when they make earnings per share projection regarding their accuracy.

Panel A of Table 4.15 summarizes an analysis of EPS forecasts and associated confidence level. The participants in all the three experimental conditions in the second experiment indicate low level of confidence associated with their EPS forecasts (with a range of 2.0370 – 3.7308 out of 0-10 scale). The results indicate that the participants are aware that there are some other factors influencing the future performance. However, the mean responses of the participants are not significantly different across the experimental conditions (F = 0.5104, p-value = 0.6023 for confidence level associated with 1-year ahead EPS forecast; F = 1.8476, p-value = 0.1646 for confidence level associated with 2-year ahead EPS forecast). The EPSs reported for year 0 and year -1 are 32.78, and 30.02 respectively. The overall mean EPS forecasts are, in fact, higher than the given level of EPSs. This indicates that, in forecasting future EPS level, the participants rely mostly on the historical EPS measures, without taking into account the decreasing trend observed in the operating income. That is to say, the participants employed rule of thumb or heuristic approach when assessing the measures associated with high level of uncertainty.

Panel B of Table 4.15 portrays rate of change, trend analysis, and growth rate in the EPS forecasts. The mean of rate of change of EPS_{YR+1} relative to EPS_{YR0} of participants in WFS-FACE condition is negative (-0.15%) and the mean of rate of change of EPS_{YR+2} relative to EPS_{YR+1} of participants in WFS-NO condition is also negative (-2.14%). Similarly, the EPS forecasts of the participants in WFS-NO and WFS-FACE conditions show lower growth rate. However, the ANOVA analysis is not statistically significant (F = 1.2573, p-value = 0.2903 for rate of change of EPS_{YR+1} relative to EPS_{YR0}; F = 3.0472, p-value = 0.0534 for rate of change of EPS_{YR+2} relative to EPS_{YR+1}; F = 1.2573, p-value = 0.2903 for trend analysis of EPS_{YR+1} using EPS_{YR-1} as base year; F = 0.887, p-value = 0.9152 for trend analysis of

EPS_{YR+2} using EPS_{YR-1} as base year; F = 0.3478, p-value = 0.7074 for growth in EPS forecasts).

Panel C of Table 4.15 shows the cross tabulation analysis of the trend of EPS forecasts. The trends of EPS_{YR+1} and EPS_{YR+2} forecasts is grouped into four categories; i.e., increasing trend [(+,+), (0,+), (+,0)], decreasing trend [(-,-), (0,-), (-,0)], mixed trend [(+,-), (-,+)], and steady trend [(0,0)]. Note that, in a coordinate (a,b), "a" represents the trend of EPS_{YR+1} relative to EPS_{YR0} and "b" represents the trend of EPS_{YR+2} relative to EPS_{YR+1}. The number of participants predict the increasing, decreasing, mixed, and steady trends in each of the experimental condition is not statistically different from each other ($\chi 2$ = 5.7838, p-value = 0.2240).

Table 4.15: Analysis of Earnings Per Share Forecasts in Experiment 2

Analysis of Earnings Per Share Forecasts in Experiment 2

Panel A: Mean Earnings Per Share Forecasts and Related Measures (Standard Deviation**)**

EPS Forecasts and Associated Confidence Level[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Estimation of 1-yr ahead EPS (EPS_{YR+1})	**33.7337**	**40.1971**	**32.7296**	**1.2573**
	(3.4775)	(32.0800)	(4.2282)	(0.2903)
Confidence level associated with 1-yr ahead EPS forecast	**3.7308**	**3.1200**	**3.3333**	**0.5104**
	(1.9299)	(2.3861)	(2.2532)	(0.6023)
Estimation of 2-yr ahead EPS (EPS_{YR+2})	**35.7741**	**36.2783**	**34.6770**	**0.0887**
	(5.2335)	(24.0308)	(5.0127)	(0.9152)
Confidence level associated with 2-yr ahead EPS forecast	**3.0741**	**2.5200**	**2.0370**	**1.8476**
	(1.9986)	(2.0640)	(1.8909)	(0.1646)

Panel B: Mean Additional Analysis on Earnings Per Share Forecasts (Standard Deviation**)**

EPS Forecasts and Related Measures	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Rate of Change of EPS_{YR+1} relative to EPS_{YR0}	**0.0291**	**0.2263**	**-0.0015**	**1.2573**
	(0.1061)	(0.9786)	(0.1290)	(0.2903)
Rate of Change of EPS_{YR+2} relative to EPS_{YR+1}	**0.0556**	**-0.0214**	**0.0609**	**3.0472**
	(0.0612)	(0.2076)	(0.0907)	(0.0534) *
Trend Analysis of EPS_{YR+1} using EPS_{YR-1} as base year	**1.1237**	**1.3390**	**1.0903**	**1.2573**
	(0.1158)	(1.0686)	(0.1408)	(0.2903)
Trend Analysis of EPS_{YR+2} using EPS_{YR-1} as base year	**1.1917**	**1.2085**	**1.1551**	**0.0887**
	(0.1743)	(0.8005)	(0.1670)	(0.9152)
Growth in EPS Forecasts	**0.0425**	**0.0245**	**0.0345**	**0.3478**
	(0.0420)	(0.1242)	(0.0405)	(0.7074)

Table 4.15 (Continued)

Panel C: Cross Tabulation Analysis of Trend of Earnings Per Share Forecasts

EPS Trends	Responses[c]	Experimental Conditions			Total
		Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Trend of EPS_{YR+1} and EPS_{YR+2} forecasts	Increasing trend [(+,+), (0,+), (+,0)]	21	14	16	**51**
	Decreasing trend [(-,-), (0,-), (-,0)]	4	6	4	**14**
	Mixed trend [(-,+), (+,-)]	2	4	6	**12**
	Steady trend [(0,0)]	*0*	*0*	*1*	***1***
	Total	**27**	**24**	**27**	**78**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**	
	Pearson Chi-Square	5.7838	6	0.2240	
	Likelihood Ratio	6.1043	6	0.2060	
	Linear-by-Linear Association	3.4892	1	0.0310 **	

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Confidence level is solicited in 11-point rating scale (0 [not at all confident] - 10 [very confident]).*

[c] *In a coordinate (a,b), a describes the trend of EPS_{YR+1} forecast relative to EPS_{YR0} and b describes the trend of EPS_{YR+2} relative to EPS_{YR+1}. The notions +, 0, - denote increase, no change, and decrease, respectively.*

4.4.4. Additional Issues in Experiment 2

Table 4.16 presents an evaluation of financial position in Experiment 2. The participants equally evaluate the financial position of the hypothetical firm (F = 0.3942, p-value = 0.6756).

Table 4.17 portrays earnings management possibility in Experiment 2. Similar to Experiment 1, the participants believe that the hypothetical firm has a tendency (rating score of ~6 out of 0-10 rating scale) to engage in earnings management. However, the rating scores across the experimental conditions are not statistically different from each other (F = 0.3094, p-value = 0.7348).

Table 4.18 is an analysis of Probable Cause of Increase in Cost of Goods Sold in Experiment 2. The evidence shows that 56.25% of participants correctly identified that the increase in labor cost is a probable cause of the increase in cost of goods sold, suggesting that they acquire the by-nature information presented even if it is disclosed in the notes to financial statements. The Chi-square analysis suggests that most of the participants in WFS-FACE condition correctly response to the question (χ^2 = 41.5892, p-value <0.0000).

Table 4.16: Analysis of Financial Position Evaluation in Experiment 2

Analysis of Financial Position Evaluation in Experiment 2
Mean Financial Position Evaluation (Standard Deviation**)**

Evaluation of Financial Position[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Evaluation of Financial position	**5.8148**	**5.4615**	**5.8800**	**0.3942**
	(1.7982)	(1.5551)	(2.0881)	(0.6756)

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Judgment on financial position evaluation is solicited in 11-point rating scale (0 [weaker] - 10 [stronger]).*

Table 4.17: Analysis of Earnings Management Possibility in Experiment 2

Analysis of Earnings Management Possibility in Experiment 2
Mean Possilbility of Earnings Management (Standard Deviation**)**

Earnings Management Possibility[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Probability that the company cut down costs to maximize short-term profit	**6.3704**	**5.9630**	**6.3462**	**0.3094**
	(1.9245)	(2.3284)	(2.1155)	(0.7348)

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Judgment on earnings management possibility is solicited in 11-point rating scale (0 [not likely] - 10 [very*

Table 4.18: Analysis of Probable Cause of Increases in Cost of Goods Sold in Experiment 2

Analysis of Probable Cause of Increases in Cost of Goods Sold in Experiment 2
Cross-Tabulation of Causes and Experimental Condition

Issues	Responses	Experimental Conditions			Total
		Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Causes of increases in cost of goods sold	Increase in material cost	0	9	2	**11**
	increase in labor cost	19	3	23	**45**
	Increase in overhead	3	2	0	**5**
	Cannot be identified	5	13	1	**19**
	Total	**27**	**27**	**26**	**80**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**	
	Pearson Chi-Square	41.5892	6	<0.0000 ***	
	Likelihood Ratio	49.5995	6	<0.0000 ***	
	Linear-by-Linear Association	2.9886	1	0.0420 **	

Note [a] **** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

4.4.5. Understandability of Financial Statements in Experiment 2

Panel A of Table 4.19 presents the understandability rating of the financial statements in Experiment 2. While, Panel B of Table 4.19 shows usefulness rating of the information presented on the financial statements in Experiment 2. The 11-point rating scale (0-10) is used to assess the understandability and usefulness of financial statements as perceived by the participants in each condition. The mean understandability rating related to each financial statement is not significantly different across conditions ($F = 0.3252$, p-value = 0.7233 for balance sheet; $F = 1.1753$, p-value = 0.3141 for income statement; $F = 0.4357$, p-value = 0.6369 for statement of stockholders' equity; and $F = 1.5123$, p-value = 0.2268 for statement of cash flows). The results are consistent with the manipulation in second the experiment because the participants received similar format of financial statements with varying by-nature information presentation.

The participants in the second experiment moderately rate (5.7778 for WFS-NOTES; 6.2963 for WFS-NO; 5.9630 for WFS-FACE) overall usefulness of financial information presented in financial statements ($F = 0.4958$, p-value = 0.6110). Similarly, they moderately rate the linkage of financial statement and ability to identify the causes of changes in financial position and cash flows ($F = 0.6755$, p-value = 0.5119 for linkage variable; $F = 0.7107$, p-value = 0.4944 for ability to explain the changes in financial position).

The participants perceived that the financial information in an annual report is, to some extent, useful when they make investment decisions.

Table 4.19: Analysis of Understandability and Usefulness of Financial Statements in Experiment 2

Analysis of Understandability and Usefulness of Financial Statements in Experiment 2

Panel A: Mean Understandability Rating of Financial Statements (Standard Deviation)

Understandability Rating[b]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Understandability of balance sheet	**4.7407**	**5.2222**	**5.1481**	**0.3252**
	(2.1767)	(2.6938)	(2.1786)	(0.7233)
Understandability of income statement	**5.7407**	**6.6296**	**6.0741**	**1.1753**
	(2.5206)	(1.6675)	(2.1826)	(0.3141)
Understandability of statement of changes in stockholders' equity	**5.2222**	**5.7407**	**5.8148**	**0.4537**
	(2.4703)	(2.6688)	(2.3211)	(0.6369)
Understandability of statement of cash flows	**5.2963**	**6.3704**	**6.0370**	**1.5123**
	(2.4149)	(2.1688)	(2.3775)	(0.2268)

Panel B: Mean Rating of Usefulness of Financial Statements (Standard Deviation)

Usefulness of Financial Statements Rating[c]	Experimental Conditions			F-Statistic (P-Value)[a]
	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Linkage of financial statements (0 [not clear] - 10 [very clear])	**5.1538**	**5.5926**	**4.8889**	**0.6755**
	(2.3612)	(2.4220)	(1.9282)	(0.5119)
Ability to identify causes of changes in financial position and cash flows (0 [no] - 10 [yes])	**5.2593**	**5.6667**	**5.0370**	**0.7107**
	(1.7671)	(2.1839)	(1.9312)	(0.4944)
Overall usefulness of financial statements (0 [not at all useful] - 10 [very useful])	**5.7778**	**6.2963**	**5.9630**	**0.4958**
	(2.1364)	(1.8567)	(1.8077)	(0.6110)

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Understandability rating is solicited in 11-point rating scale (0 [not at all understandable] - 10 [very*

[c] *Usefulness rating is solicited in 11-point rating scale.*

4.5. Post-Experimental Analysis

4.5.1. Manipulation Checks

4.5.1.1. Familiarity with Financial Statement Presentation Formats

Panel A through Panel D of Table 4.20 present the participant's familiarity with the balance sheet, income statement, statement of stockholders' equity, and statement of cash flows, respectively. The participants are answered the questions related to their familiarity with the presentation format of each of the financial statements of the hypothetical company that they received without referring back to the case materials. The cross tabulation analysis suggests that the participants in TFS-

NOTES (96.55%) and MFS-NOTES 92.86%) conditions consider the presentation format of balance sheet they received in the case materials are not new to them; however, the participants in WFS-NOTES (85.19%), WFS-NO (88.89%), and WFS-FACE (92.59%) conditions judge that the presentation format of the balance sheet is new to them (χ^2 = 94.6781, p-value < 0.0000). Note that the subjects in TFS-NOTES and MFS-NOTES received the traditional format of balance sheet in the annual reports. Almost all of the subjects correctly respond to the manipulation-check questions, suggesting that my manipulation is successful.

The Chi-square analysis suggests that the participants across the experimental conditions evaluate the newness of the income statement presentation format differently (χ^2 = 12.9027, p-value = 0.0060). Most of the participants in TFS-NOTES condition (82.76%) considered that the presentation format of the income statement is not new to them. Note that only TFS-NOTES condition presents the traditional income statement to the participants. Again, the evidence suggests that my presentation format variable is successfully manipulated.

The Chi-square analysis presents that perception as to newness of presentation format of statement of changes in stockholders' equity and statement of cash flows is not different among the experimental conditions (χ^2 = 3.3283, p-value = 0.2520 for statement of stockholders' equity and χ^2 = 6.1824, p-value = 0.0930 for statement of cash flows).

In addition, Panel E of Table 4.20 presents the ANOVA analysis to compare the mean of familiarity rating of format of financial statements and of line items, content, and account titles of the financial statements. The participants in TFS-NOTES (Mean = 6.3448 out of 0-10 rating scale) and MFS-NOTES (Mean = 7.0357 out of 0-10 rating scale) conditions rate their familiarity with the presentation format of the financial statements significantly higher than that of the participants in WFS-NOTES (Mean = 3.8846 out of 0-10 rating scale), WFS-NO (Mean = 3.9259 out of 0-10 rating scale), and WFS-FACE (Mean = 3.1481 out of 0-10 rating scale) conditions (F = 23.5454, p-value <0.0000).

Moreover, the means of familiarity rating on line items, content, and account titles of the financial statements across experimental conditions (TFS-NOTES, $\bar{x}$ = 6.7586; MFS-NOTES, $\bar{x}$ = 6.9286; WFS-NOTES, $\bar{x}$ = 5.1923; WFS-NO, $\bar{x}$ = 6.2963;

WFS-FACE, $\bar{x}$ = 5.0000) are significantly different from each other (F = 5.3896, p-value = 0.0005). The results show that the participants in the WFS-NOTES and WFS-FACE condition rate their familiarity with the financial statement contents significantly lower than those in other conditions. This is due to the fact that the WFS-NOTES presents several new subtotals proposed in the accounting standard on Financial Statement Presentation and the WFS-FACE presents a lot more detailed information on the face of the income statement. Yet again, the results show that the financial statement presentation format manipulation and the by-nature information presentation manipulation are successful.

Table 4.20: Analysis of Financial Statement Presentation Format Familiarity of Research Participants in Each Experimental Condition

Analysis of Financial Statement Presentation Format Familiarity of Research Participants in Each Experimental Condition

Panel A: Familiarity with Balance Sheet Format

Issues	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Balance sheet format is new to research participants.	Yes	1	2	23	24	25	75
	No	28	26	4	3	2	63
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	94.6781	4	<0.0000 ***			
	Likelihood Ratio	111.4064	4	<0.0000 ***			
	Linear-by-Linear Association	75.8844	1	<0.0000 ***			

Panel B: Familiarity with Income Statement Format

Issues	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Income statement format is new to research participants.	Yes	5	12	13	10	17	57
	No	24	16	14	17	10	81
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	12.9027	4	0.0060 ***			
	Likelihood Ratio	13.6270	4	0.0045 ***			
	Linear-by-Linear Association	8.5054	1	0.0020 ***			

Panel C: Familiarity with Statement of Stockholders' Equity Format

Issues	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Statement of stockholders' equity format is new to research participants.	Yes	7	11	10	10	6	44
	No	22	17	17	17	21	94
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	3.3283	4	0.2520			
	Likelihood Ratio	3.4063	4	0.2460			
	Linear-by-Linear Association	0.0324	1	0.4285			

Table 4.20 (Continued)

Panel D: Familiarity with Statement of Cash Flows Format

Issues	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Statement of cash flows format is new to research participants	Yes	3	5	10	6	6	30
	No	26	23	17	21	21	108
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	6.1824	4	0.0930 *			
	Likelihood Ratio	6.1405	4	0.0945 *			
	Linear-by-Linear Association	1.3687	1	0.1210			

Analysis of Financial Statement Presentation Format Familiarity of Research Participants in Each Experimental Condition

Panel E: Mean Familiairty with Format and Content of Financial Statements (Standard Deviation**)**

Familiarity with Format and Content of Fnancial Statements [b]	Experimental Conditions					F-Statistic (P-Value)[a]
	Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Familiairty with financial statement format	**6.3448**	**7.0357**	**3.8846**	**3.9259**	**3.1481**	**23.5454**
	(2.0049)	(1.4525)	(1.6328)	(2.2690)	(1.7911)	(<0.0000) ***
Familiairty with line items, content, and account titles	**6.7586**	**6.9286**	**5.1923**	**6.2963**	**5.0000**	**5.3896**
	(1.5505)	(1.8243)	(1.7893)	(2.1450)	(2.5869)	(0.0005) ***

Note [a] *One-tailed test. *** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*

[b] *Familiarity rating is solicited in 11-point rating scale (0 [not familiar] - 10 [very familiar]).*

4.5.1.2. Totals and Subtotals Recall Test and By-Nature Information Presentation

The recall test on totals and subtotals presented on the face of the financial statements is analyzed in Panel A through Panel H of Table 4.21. In fact, the recalled items can be categorized into three groups. First group consists of the item that is presented only on the traditional income statement such as earnings before interest and taxes. Second group is the group of subtotals that are unique for proposed income statement such as operating income, investing income, business income, financing income and income from discontinued operations. Lastly, the third group is the group that contains the subtotals that are presented on both traditional and proposed income statement such as gross profit and income taxes.

The results show that the participants in the MFS-NOTES, WFS-NOTES, WFS-NO, and WFS-FACE conditions correctly recalled that they found information on the items that only be presented on the proposed income statement and the participants in the TFS-NOTES correctly recalled that they have not seen those items (χ^2 = 87.5594, p-value <0.0000 for operating income; χ^2 = 84.4463, p-value <0.0000 for investing income; χ^2 = 44.7098, p-value <0.0000 for business income; χ^2 =

42.9656, p-value <0.0000 for financing income; and χ^2 = 56.7562, p-value <0.0000 for income from discontinued operations). Most of the participants in TFS-NOTES correctly recalled that they found the information on earnings before interest and taxes and most the participants in other conditions properly recalled that they have not seen such an information (χ^2 = 27.0441, p-value = 0.0005). Almost all participants correctly recalled that they noticed the information regarding the income taxes (χ^2 = 7.3171, p-value = 0.2515).

In sum, the results from the cued recall test indicate that the subjects acquire the information contained in the financial statements and that they are attentive when they examine the financial information of the hypothetical company.

Panel I of Table 4.21 portrays the analysis of by-nature information presentation, which is the manipulation check for information disaggregation manipulation. Most of the participants correctly answer the presentation location of the by-nature information related to the cost of goods sold components (χ^2 = 141.4455, p-value <0.0000). That is, 82.76% of the participants in TFS-NOTES condition, 96.43% of the participants in MFS-NOTES condition and 70.37% of the participants in WFS-NOTES condition correctly identified that by-nature information is disclosed in the notes to financial statements. However, 92.59% of the participants in WFS-FACE conditions correctly identified that the details of cost of goods sold are presented on the face of the income statement. The evidence suggests that the data aggregation level manipulation is successfully administered.

Table 4.21: Analysis of Recall Test of Totals and Subtotals by Experimental Conditions

Analysis of Recall Test of Totals and Subtotals by Experimental Conditions

Panel A: Cross Tabulation Analysis of Recall of Gross Profit in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of gross profit	Yes	26	18	23	19	18	104
	No	2	5	1	4	1	13
	Not certain	1	5	3	4	8	21
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	13.7223	8	0.0445 **			
	Likelihood Ratio	14.1519	8	0.0390 **			
	Linear-by-Linear Association	4.0879	1	0.0215 **			

Panel B: Cross Tabulation Analysis of Recall of Earnings Before Interest and Taxes in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of earnings before interest and taxes	Yes	27	14	10	11	10	72
	No	1	8	10	11	9	39
	Not certain	1	6	7	5	8	27
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	27.0441	8	0.0005 ***			
	Likelihood Ratio	30.9786	8	<0.0000 ***			
	Linear-by-Linear Association	13.6327	1	<0.0000 ***			

Panel C: Cross Tabulation Analysis of Recall of Operating Income in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of operating income	Yes	6	27	26	26	25	110
	No	21	1	0	0	1	23
	Not certain	2	0	1	1	0	4
	Total	**29**	**28**	**27**	**27**	**26**	**137**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	87.5594	8	<0.0000 ***			
	Likelihood Ratio	81.2727	8	<0.0000 ***			
	Linear-by-Linear Association	31.9329	1	<0.0000 ***			

Panel D: Cross Tabulation Analysis of Recall of Investing Income in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of investing income	Yes	4	24	26	27	24	105
	No	22	2	1	0	2	27
	Not certain	3	2	0	0	1	6
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	84.4463	8	<0.0000 ***			
	Likelihood Ratio	81.7769	8	<0.0000 ***			
	Linear-by-Linear Association	33.9884	1	<0.0000 ***			

Table 4.21 (Continued)

Panel E: Cross Tabulation Analysis of Recall of Business Income in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of business income	Yes	6	13	21	24	17	81
	No	19	10	5	1	3	38
	Not certain	4	5	1	2	7	19
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	44.7098	8	<0.0000 ***			
	Likelihood Ratio	46.6059	8	<0.0000 ***			
	Linear-by-Linear Association	7.0820	1	0.0040 ***			

Panel F: Cross Tabulation Analysis of Recall of Financing Income in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of financing income	Yes	3	11	20	21	17	72
	No	22	11	4	2	6	45
	Not certain	4	4	2	4	4	18
	Total	**29**	**26**	**26**	**27**	**27**	**135**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	42.9656	8	<0.0000 ***			
	Likelihood Ratio	46.4672	8	<0.0000 ***			
	Linear-by-Linear Association	10.8704	1	0.0005 ***			

Panel G: Cross Tabulation Analysis of Recall of Income from Discontinued Operations in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of income from discontinued operations	Yes	1	15	21	19	19	75
	No	23	10	6	4	1	44
	Not certain	5	3	0	4	7	19
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	56.7562	8	<0.0000 ***			
	Likelihood Ratio	68.3531	8	<0.0000 ***			
	Linear-by-Linear Association	9.4524	1	0.0010 ***			

Panel H: Cross Tabulation Analysis of Recall of Income Taxes in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
Participants notice the presentation of income taxes	Yes	20	22	24	24	24	114
	No	3	2	1	1	0	7
	Not certain	6	4	2	2	3	17
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	7.3171	8	0.2515			
	Likelihood Ratio	8.2321	8	0.2055			
	Linear-by-Linear Association	3.6205	1	0.0285 **			

Panel I: Cross Tabulation Analysis of Recall of By-Nature Information Presentation in Each Experimental Condition

Recalled Items	Responses	Experimental Conditions					Total
		Cell 1: TFS-NOTES	Cell 2: MFS-NOTES	Cell 3: WFS-NOTES	Cell 4: WFS-NO	Cell 5: WFS-FACE	
By-Nature Information Presentation	FACE	2	0	2	6	25	35
	NOTES	24	27	19	2	1	73
	NO	3	1	6	19	1	30
	Total	**29**	**28**	**27**	**27**	**27**	**138**
	Chi-Square Tests	**Value**	**df**	**p-value (one-sided)[a]**			
	Pearson Chi-Square	141.4455	8	<0.0000 ***			
	Likelihood Ratio	137.8911	8	<0.0000 ***			
	Linear-by-Linear Association	11.0508	1	0.0005 ***			

Note [a] **** denotes significance level of 1%, ** denotes significance level of 5%, and * denotes significance level of 10%.*