

How Does Using a Mobile Device Change Investors' Reactions to Firm Disclosures?

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Compliance with the *Journal of Accounting Research* data policy

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Item 1. Data Handling

Data handling and analyses were conducted by Stephanie Grant.

Item 2. Generation of the Data

See the article for a detailed description of the procedures used to generate the data. Data for Experiment 1 reported in the paper was collected in November 2016 and December 2017 – February 2018. Participants were 324 graduate and senior undergraduate business students. Data for Experiment 2 reported in the paper was collected in September 2015 and December 2017 – February 2018. Participants were 238 graduate Accounting students. Data for Experiment 3 reported in the paper was collected in November 2016 and December 2017 – February 2018. Participants are 225 graduate and senior undergraduate business students. Participants in all experiments completed the experiment via a web-administered instrument in computer lab sessions. The data was downloaded in a csv file, processed in Microsoft Excel, and statistically analyzed using SPSS and Mplus. The experimental materials for the primary experiment are provided as a separate file. The file name is “Grant Research Materials” and is available to download as an online appendix on JAR’s web site.

Item 3. Proprietary Nature of Data

Not applicable.

Item 4. Steps Necessary to Collect and Process Data

See section 3 of the article for a detailed description of the steps necessary to collect and process the data. The experimental materials for the primary experiment are provided as a separate file. The file name is “Grant Research Materials” and is available to download as an online appendix on JAR’s web site.

Item 5. Code Used to Conduct Primary Analyses

The code to convert the raw data into the final dataset and conduct the primary analyses is available at the end of this document. As the data were obtained using an experiment, identifiers (e.g., CIK, CUSIP, etc.) are not applicable.

Item 6. Maintenance of Data and Programs

The author assures that the data and programs will be maintained for at least six years, consistent with National Science Foundation guidelines.

Item 5. Code Used to Conduct Primary Analyses

Variable Definitions

Independent Variables (all Experiments)

spatial_layout: 0 for the *less variable* (e.g., *large screen*) condition and 1 for the *more variable* (e.g., *small screen*) condition.

info_choice: 0 for the *low choice* condition and 1 for the *high choice* condition.

Dependent and Process Variables

Experiment 1

valuation: participants' responses to the following question using a 101-point scale with endpoints 0 ("Very low") and 100 ("Very high").

"What is an appropriate common stock valuation for FreshHouse?"

time_spent: the total amount of time participants spent reading the disclosure and estimating value, which the online experimental platform tracks.

Experiment 2

fundamental_value: participants' estimates of the fundamental value of a share of the firm's stock derived from a residual earnings valuation template spreadsheet. Participants provide their best estimate of the current year's net income (i.e., they could use earnings as reported or adjust it), earnings forecasts for the four subsequent years, a cost of capital estimate, and an estimated residual earnings growth rate after the fourth year (Penman [2012]). The template then calculates and displays the resulting estimate of fundamental value.

ni_adjustment: 0 if the participant *did not adjust* net income when applying the residual income model and 1 if the participant *did adjust* net income when applying the residual income model.

Experiment 3

valuation: participants' responses to the following question using a 101-point scale with endpoints 0 ("Very low") and 100 ("Very high").

"What is an appropriate common stock valuation for FreshHouse?"

Data Analyses

Table 1, Experiment 1

I used a 2×2 analysis of variance (ANOVA) to test the effect of my independent variables, *info_choice* and *spatial_layout*, on my dependent variable, *valuation*. The following SPSS syntax generated results reported in Table 1.

Table 1 Panels A and B

```
MEANS TABLES=valuation BY condition  
/CELLS=MEAN COUNT SEMEAN.
```

```
UNIANOVA valuation BY spatial_layout info_choice  
/METHOD=SSTYPE(3)  
/INTERCEPT=INCLUDE  
/EMMEANS=TABLES(OVERALL)  
/EMMEANS=TABLES(info_choice)  
/EMMEANS=TABLES(spatial_layout)  
/EMMEANS=TABLES(info_choice*spatial_layout)  
/CRITERIA=ALPHA(.05)  
/DESIGN=spatial_layout info_choice spatial_layout*info_choice.
```

Table 1 Panel C

```
SORT CASES BY spatial_layout.  
SPLIT FILE LAYERED BY spatial_layout.  
T-TEST GROUPS=info_choice(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=valuation  
/CRITERIA=CI(.95).
```

```
SORT CASES BY info_choice.  
SPLIT FILE LAYERED BY info_choice.  
T-TEST GROUPS=spatial_layout(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=valuation  
/CRITERIA=CI(.95).
```

Table 2, Experiment 1

I used a 2×2 ANOVA to test the effect of my independent variables, *info_choice* and *spatial_layout*, on my dependent variable, *time_spent*. The following SPSS syntax generated results tests reported in Table 2.

Table 2 Panels A and B

```
MEANS TABLES=time_spent BY condition  
/CELLS=MEAN COUNT SEMEAN.
```

```
UNIANOVA time_spent BY spatial_layout info_choice  
/METHOD=SSTYPE(3)  
/INTERCEPT=INCLUDE  
/EMMEANS=TABLES(OVERALL)  
/EMMEANS=TABLES(info_choice)  
/EMMEANS=TABLES(spatial_layout)  
/EMMEANS=TABLES(info_choice*spatial_layout)  
/CRITERIA=ALPHA(.05)  
/DESIGN=spatial_layout info_choice spatial_layout*info_choice.
```

Table 2 Panel C

```
SORT CASES BY spatial_layout.  
SPLIT FILE LAYERED BY spatial_layout.  
T-TEST GROUPS=info_choice(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=time_spent  
/CRITERIA=CI(.95).
```

```
SORT CASES BY info_choice.  
SPLIT FILE LAYERED BY info_choice.  
T-TEST GROUPS=spatial_layout(0 1)  
/MISSING=ANALYSIS  
/VARIABLES= time_spent  
/CRITERIA=CI(.95).
```

Table 3, Experiment 2

I used a 2×2 ANOVA to test the effect of my independent variables, *info_choice* and *spatial_layout*, on my dependent variable, *fundamental_value*. The following SPSS syntax generated results reported in Table 3.

Table 3 Panels A and B

```
MEANS TABLES=fundamental_value BY condition  
/CELLS=MEAN COUNT SEMEAN.
```

```
UNIANOVA fundamental_value BY info_choice spatial_layout  
/METHOD=SSTYPE(3)  
/INTERCEPT=INCLUDE  
/EMMEANS=TABLES(OVERALL)  
/EMMEANS=TABLES(info_choice)  
/EMMEANS=TABLES(spatial_layout)  
/EMMEANS=TABLES(info_choice*spatial_layout)  
/CRITERIA=ALPHA(0.05)  
/DESIGN=info_choice spatial_layout info_choice*spatial_layout.
```

Table 3 Panel C

```
SORT CASES BY spatial_layout.  
SPLIT FILE LAYERED BY spatial_layout.  
T-TEST GROUPS=info_choice(0 1)  
/MISSING=ANALYSIS  
/VARIABLES= fundamental_value  
/CRITERIA=CI(.95).
```

```
SORT CASES BY info_choice.  
SPLIT FILE LAYERED BY info_choice.  
T-TEST GROUPS=spatial_layout(0 1)  
/MISSING=ANALYSIS  
/VARIABLES= fundamental_value  
/CRITERIA=CI(.95).
```

Table 4, Experiment 2

The following SPSS syntax generated results reported in Table 4 testing the effect of my independent variables, *info_choice* and *spatial_layout*, on my dependent variable, *ni_adjustment*.

Table 4 Panel A

CROSSTABS

```
/TABLES=condition BY ni_adjustment  
/FORMAT=AVALUE TABLES  
/CELLS=COUNT EXPECTED ROW  
/COUNT ROUND CELL.
```

Table 4 Panel B

```
SORT CASES BY spatial_layout.  
SPLIT FILE LAYERED BY spatial_layout.  
CROSSTABS  
/TABLES=info_choice BY ni_adjustment  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ  
/CELLS=COUNT EXPECTED ROW  
/COUNT ROUND CELL.
```

```
SORT CASES BY info_choice.  
SPLIT FILE LAYERED BY info_choice.  
CROSSTABS  
/TABLES=spatial_layout BY ni_adjustment  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ  
/CELLS=COUNT EXPECTED ROW  
/COUNT ROUND CELL.
```

Table 5, Experiment 3

I used a 2×2 ANOVA to test the effect of my independent variables, *info_choice* and *spatial_layout*, on my dependent variable, *valuation*. The following SPSS syntax generated results reported in Table 5.

Table 5 Panels A and B

```
MEANS TABLES=valuation BY condition  
/CELLS=MEAN COUNT SEMEAN.
```

```
UNIANOVA valuation BY spatial_layout info_choice  
/METHOD=SSTYPE(3)  
/INTERCEPT=INCLUDE  
/EMMEANS=TABLES(OVERALL)  
/EMMEANS=TABLES(info_choice)  
/EMMEANS=TABLES(spatial_layout)  
/EMMEANS=TABLES(info_choice*spatial_layout)  
/CRITERIA=ALPHA(.05)  
/DESIGN=spatial_layout info_choice spatial_layout*info_choice.
```

Table 5 Panel C

```
SORT CASES BY spatial_layout.  
SPLIT FILE LAYERED BY spatial_layout.  
T-TEST GROUPS=info_choice(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=valuation  
/CRITERIA=CI(.95).
```

```
SORT CASES BY info_choice.  
SPLIT FILE LAYERED BY info_choice.  
T-TEST GROUPS=spatial_layout(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=valuation  
/CRITERIA=CI(.95).
```