

## Data Summary: Fer+

### Training Images:

Total Training Images: **28,561**

Total Images for **Angry** class: **3,970**  
as percent of data **13.90%**

Total Images for **Disgust** class: **435**  
as percent of data **1.52%**

Total Images for **Fear** class: **4,080**  
as percent of data **14.29%**

Total Images for **Happy** class: **7,186**  
as percent of data **25.16%**

Total Images for **Sad** class: **4,797**  
as percent of data **16.80%**

Total Images for **Surprise** class: **3,161**  
as percent of data **11.07%**

Total Images for **Neutral** class: **4,932**  
as percent of data **17.27%**

### Test Images:

Total Test Images: **3,574**

Total Images for **Angry** class: **489**  
as percent of data **13.68%**

Total Images for **Disgust** class: **55**  
as percent of data **1.54%**

Total Images for **Fear** class: **527**  
as percent of data **14.75%**

Total Images for **Happy** class: **876**  
as percent of data **24.51%**

Total Images for **Sad** class: **589**  
as percent of data **16.48%**

Total Images for **Surprise** class: **414**  
as percent of data **11.58%**

Total Images for **Neutral** class: **624**  
as percent of data **17.46%**

**Discussion:**

**Budget:**

**\$1,000-\$1,500**

**Number evaluators:**

**50-100**

**Three types of design:**

**1. Conjoint Rank-Order Design (Balanced Incomplete Block Design)**

- **Limits possible bias**
- **Difficult to design the experiment**
- **Ranking of 10 sets of triplets**
- **Need overlapping observations**

**2. Rank Scale Design**

- **Highly biased by individual scorers**

**3. Rank + Standard Score**

- **Control over the Standard Score and hence the bias**
- **This currently looks like the preferred method**

## Amazon Turk STATS:

Some HITs take 10 minutes and pay out \$1 (a \$6/hour pay rate); others call for 5 minutes and pay \$0.10 (\$1.20/hour). Requesters have control over the rates they choose to set — and Amazon takes a [20%-45% cut](#) of each transaction.

Turkers [skew](#) young (77% fall between the ages of 18-37), educated (70% have a B.A. or higher), and slightly female (51%). Despite an uptick in foreign users over the past few years, the majority of them (75%) are based in the US.

These workers also tend to suffer economically.

One in 3 Turkers is [unemployed](#), and the average Turker reports a household income of ~\$47k per year (\$12k [below](#) the US national average). In a 2016 Pew [survey](#), 25% of Turkers said they used MTurk because they lacked other available opportunities.

A 2018 [academic study](#) analyzed 3.8m tasks completed by 2,676 workers on MTurk and found that average earnings through the platform amounted to **\$2 per hour**. Only 4% of all workers earned more than the federal minimum wage of \$7.25/hour.

The amount they earn on MTurk is determined almost entirely on their ability to: A) Secure as many “higher-paying” (i.e. minimum wage +) tasks as possible, and B) Complete them as fast as possible within the bounds of what requesters will accept. If the job isn’t completed satisfactorily, it can be rejected without pay.

A user has to constantly run time assessments in his head: A task that pays \$0.25 for 1 minute (\$15/hr) is better than a task that pays \$1 and takes 10 minutes (\$6/hr). Anything that **pays out at an hourly rate of less than \$6 is “sucky.”**