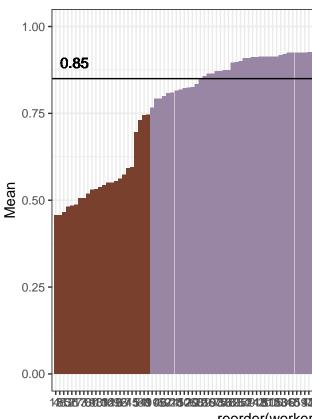
Perceptual Difficulty - Randomized and Timed Perceptibility2 (difficulty analysis)

Stimuli check

```
##
          color material
##
             81
                       81
     no
             81
                       81
##
     yes
```

Exclusions Participants whose native language is not English are excluded

```
##
     workerid language
## 1
           57
               Chinese
## 2
           82
## 3
           90
               Spanish
```



Participants with accuracy lower than 75% are excluded (29 participants)

```
## # A tibble: 24 x 7
##
     workerid Mean CILow CIHigh YMin YMax lowacc
##
         <int> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <chr>
            0 0.519 0.0991 0.111 0.419 0.630 1
             1 0.746 0.119
                             0.104 0.627 0.851 1
##
```

reorder(worker

```
##
             3 0.506 0.101
                              0.114 0.405 0.620 1
##
    4
             6 0.573 0.12
                              0.107 0.453 0.68 1
             7 0.593 0.0991
##
    5
                              0.111 0.494 0.704 1
##
   6
            12 0.457 0.111
                              0.123 0.346 0.580 1
##
    7
            13 0.481 0.101
                              0.114 0.380 0.595 1
                              0.112 0.429 0.667 1
##
   8
            16 0.556 0.127
                              0.111 0.395 0.617 1
            17 0.506 0.111
## 10
            27 0.488 0.112
                              0.1
                                    0.375 0.588 1
## # ... with 14 more rows
```

By response times

Regardless of response correctness and feature matching

```
## # A tibble: 15 x 7
##
      label
                                       condition
                                                     Mean CILow CIHigh count group
##
      <fct>
                                       <chr>>
                                                    <dbl> <dbl>
                                                                  <dbl> <int> <chr>
##
    1 table_metal_blue
                                       material yes 1266.
                                                            143.
                                                                   150.
                                                                            22 rt
##
    2 table_metal_green
                                       material yes 1253.
                                                            173.
                                                                   177.
                                                                            20 rt
##
    3 chair_metal_purple
                                       material yes 1244.
                                                            116.
                                                                   121.
                                                                            25 rt
##
    4 box_wood_blue
                                       material yes 1212.
                                                            133.
                                                                   161.
                                                                           23 rt
    5 plate_plastic_pink
                                       material yes 1211.
                                                            127.
                                                                   132.
                                                                            20 rt
                                                            125.
                                                                   110.
##
   6 table_metal_silver_original
                                      material yes 1204.
                                                                           20 rt
  7 table wood green
                                      material yes 1201.
                                                            109.
                                                                   115.
                                                                            26 rt
  8 chair_metal_green
                                                            127.
                                                                   136.
                                                                           20 rt
##
                                      material yes 1187.
   9 jacket_leather_green
                                                            125.
                                                                   130.
                                       material yes 1187.
                                                                            24 rt.
## 10 bottle_glass_blue
                                      material yes 1185.
                                                            117.
                                                                   126.
                                                                           23 rt
## 11 pitcher metal blue
                                      material yes 1185.
                                                            167.
                                                                   152.
                                                                           22 rt
## 12 spoon_wood_green
                                       material yes 1179.
                                                            135.
                                                                   142.
                                                                           24 rt
## 13 plate_paper_blue
                                       material no 1177.
                                                            125.
                                                                   135.
                                                                           25 rt
## 14 boot_leather_green
                                      material yes 1174.
                                                            124.
                                                                   131.
                                                                           19 rt
## 15 pitcher_plastic_white_original material yes 1174.
                                                            123.
                                                                   122.
                                                                           20 rt
## # A tibble: 15 x 7
##
      label
                                                   Mean CILow CIHigh count group
                                     condition
##
      <fct>
                                     <chr>
                                                  <dbl> <dbl>
                                                                <dbl> <int> <chr>
                                                   943. 106.
   1 plate_paper_blue
##
                                     color yes
                                                                119.
                                                                         25 rt
##
    2 table_metal_blue
                                     color yes
                                                   941. 102.
                                                                110.
                                                                         26 rt
                                                                105.
                                                                         26 rt
##
    3 box_cardboard_brown_original color yes
                                                   941.
                                                         91.9
   4 table wood green
                                     color no
                                                   940.
                                                         92.4
                                                                103.
                                                                         20 rt
                                                         69.6
    5 table_metal_green
                                                   938.
                                                                 80.8
                                                                         20 rt
##
                                     color yes
##
    6 cup_plastic_green
                                     color no
                                                   932.
                                                         70.7
                                                                 79.5
                                                                         25 rt
##
   7 chair_plastic_blue_original
                                    color yes
                                                   930.
                                                         80.9
                                                                 84.0
                                                                         20 rt
   8 table_wood_brown_original
                                    material yes
                                                   928.
                                                         94.8
                                                                103.
                                                                         25 rt
    9 spoon metal green
                                     color yes
                                                   924.
                                                         96.3
                                                                103.
                                                                         25 rt
## 10 jacket_denim_purple
                                                   922.
                                                         68.9
                                                                 84.1
                                                                         20 rt
                                     color yes
## 11 pitcher metal blue
                                     color yes
                                                   922
                                                          95.6
                                                                120.
                                                                         20 rt
## 12 cup_plastic_blue
                                    material yes
                                                   918.
                                                         72.5
                                                                 86.8
                                                                         26 rt
## 13 table_wood_brown_original
                                     color yes
                                                   917.
                                                         74.8
                                                                 87.4
                                                                         24 rt
                                     color yes
                                                                135.
## 14 cup_plastic_green
                                                   911. 119.
                                                                         20 rt
## 15 plate_plastic_blue_original
                                                   875.
                                                         90.0
                                                                101.
                                                                         24 rt
                                    color yes
```

Only correct responses, regardless of feature matching

```
<dbl> <int> <chr>
##
      <fct>
                                                 <dbl> <dbl>
##
                                   material yes 1316.
   1 table_metal_green
                                                        200.
                                                               216.
                                                                        12 correct_rt
##
    2 table_metal_blue
                                   material yes 1305.
                                                        196.
                                                               205.
                                                                        14 correct rt
##
    3 chair metal purple
                                   material yes 1282.
                                                               138.
                                                                        19 correct rt
                                                        135.
   4 table_wood_green
                                   material yes 1206.
                                                        117.
                                                               121.
                                                                        23 correct rt
    5 bottle_glass_clear_original color no
##
                                                 1190.
                                                        132.
                                                               134.
                                                                        22 correct rt
    6 table_metal_silver_original material yes 1185.
                                                        156.
                                                               155.
                                                                        15 correct_rt
##
   7 jacket_leather_purple
                                   material yes 1185.
                                                        170.
                                                               194.
                                                                        17 correct_rt
   8 chair_metal_green
                                   material yes 1181.
                                                        141.
                                                               134.
                                                                        19 correct_rt
   9 boot_leather_green
                                   material yes 1174.
                                                        120.
                                                               126.
                                                                        19 correct_rt
## 10 chair_metal_silver_original material yes 1165.
                                                               156.
                                                        157.
                                                                        24 correct_rt
## 11 boot_leather_black_original material no 1164.
                                                               150.
                                                                        24 correct_rt
## 12 spoon_metal_green
                                   material yes 1161.
                                                        167.
                                                               177.
                                                                        18 correct_rt
## 13 spoon_wood_blue
                                   color no
                                                 1160.
                                                        157.
                                                                171.
                                                                        21 correct_rt
## 14 chair_wood_purple
                                   material yes 1157.
                                                        158.
                                                               172.
                                                                        21 correct_rt
## 15 table_wood_blue
                                   material yes 1156.
                                                        139.
                                                                        25 correct_rt
## # A tibble: 15 x 7
##
      label
                                                  Mean CILow CIHigh count group
                                   condition
##
      <fct>
                                                              <dbl> <int> <chr>
                                   <chr>
                                                 <dbl> <dbl>
   1 box_wood_brown_original
                                                 936
                                                        94.7
                                                              108.
                                   material yes
                                                                        23 correct_rt
    2 bottle plastic green
                                   color yes
                                                  935. 106.
                                                              108.
                                                                        18 correct rt
   3 bowl_metal_silver_original
##
                                   material yes
                                                 934. 101.
                                                              127.
                                                                        22 correct_rt
   4 cup plastic green
                                   color no
                                                  932.
                                                        76.3
                                                               82.6
                                                                        25 correct rt
   5 table_wood_brown_original
                                                        88.1
                                                              104.
                                   material yes
                                                  928.
                                                                        25 correct_rt
    6 jacket_denim_purple
                                   color yes
                                                  922.
                                                        80.7
                                                               82.1
                                                                        20 correct_rt
## 7 table_metal_blue
                                   color yes
                                                  922.
                                                        90.4
                                                              100.
                                                                        25 correct_rt
  8 cup_plastic_blue
                                   material yes
                                                        80.3
                                                  918.
                                                               87.9
                                                                        26 correct rt
   9 cup_plastic_clear_original
                                                              109.
                                   color yes
                                                  917. 103.
                                                                        21 correct_rt
## 10 pitcher_metal_blue
                                   color yes
                                                  915.
                                                        97.2
                                                              109.
                                                                        19 correct_rt
## 11 cup_plastic_green
                                   color yes
                                                  911. 121.
                                                              135.
                                                                        20 correct_rt
## 12 bottle_glass_green
                                   color yes
                                                  903.
                                                        79.6
                                                               93.0
                                                                        19 correct_rt
## 13 chair_plastic_blue_original color yes
                                                        81.6
                                                               73.5
                                                  890.
                                                                        18 correct_rt
## 14 table_wood_brown_original
                                   color yes
                                                  876.
                                                        62.5
                                                               70.3
                                                                        22 correct rt
                                                                        24 correct_rt
## 15 plate_plastic_blue_original color yes
                                                  875.
                                                        98.9
                                                              104.
Only correct responses, only matching features
## # A tibble: 15 x 7
##
      label
                               condition
                                            Mean CILow CIHigh count group
##
      <fct>
                                                         <dbl> <int> <chr>
                               <chr>>
                                            <dbl> <dbl>
##
    1 table_metal_green
                               material y~ 1316. 200.
                                                         222.
                                                                   12 correct matchin~
##
    2 table_metal_blue
                               material y~ 1305. 203.
                                                         200.
                                                                   14 correct_matchin~
    3 chair_metal_purple
                               material y~ 1282. 139.
                                                         141.
                                                                   19 correct_matchin~
    4 table_wood_green
                               material y~ 1206. 120.
                                                         128.
                                                                  23 correct_matchin~
    5 table_metal_silver_ori~
                                                                  15 correct_matchin~
                               material y~ 1185. 155.
                                                         161.
##
   6 jacket_leather_purple
                               material y~ 1185. 180.
                                                         207.
                                                                  17 correct_matchin~
   7 chair_metal_green
                               material y~ 1181. 133.
                                                         143.
                                                                  19 correct_matchin~
                               material y~ 1174. 129.
   8 boot_leather_green
                                                         135.
                                                                  19 correct_matchin~
    9 chair_metal_silver_ori~ material y~ 1165. 145.
                                                         155.
                                                                  24 correct_matchin~
                                                                   18 correct_matchin~
## 10 spoon_metal_green
                               material y~ 1161. 164.
                                                         179.
## 11 chair wood purple
                               material y~ 1157. 167.
                                                         176.
                                                                   21 correct matchin~
```

condition

Mean CILow CIHigh count group

A tibble: 15 x 7

12 table_wood_blue

label

##

160.

25 correct_matchin~

material y~ 1156. 151.

```
material y~ 1149. 147.
## 13 plate_paper_blue
                                                         155.
                                                                   16 correct matchin~
## 14 bottle_glass_blue
                               material y~ 1147. 122.
                                                         118.
                                                                   21 correct_matchin~
## 15 jacket_denim_green
                                                                   17 correct_matchin~
                               material y~ 1146.
                                                  85.8
                                                          87.8
## # A tibble: 15 x 7
##
      label
                                              Mean CILow CIHigh count group
                               condition
##
      <fct>
                               <chr>>
                                             <dbl> <dbl>
                                                          <dbl> <int> <chr>
##
    1 box_cardboard_brown_or~ material yes
                                              936.
                                                    92.8
                                                          101.
                                                                    23 correct_matchi~
##
    2 box_wood_brown_original material yes
                                              936
                                                    90.1
                                                          103.
                                                                    23 correct matchi~
##
    3 bottle_plastic_green
                               color yes
                                              935. 105.
                                                           109.
                                                                    18 correct_matchi~
    4 bowl_metal_silver_orig~ material yes
                                              934. 101.
                                                           126.
                                                                    22 correct_matchi~
    5 table_wood_brown_origi~ material yes
                                              928.
                                                    98.1
                                                          105.
                                                                    25 correct_matchi~
    6 jacket_denim_purple
                               color yes
                                              922.
                                                    79.4
                                                           75.0
                                                                    20 correct_matchi~
##
                                              922.
                                                    93.5
   7 table_metal_blue
                               color yes
                                                         102.
                                                                    25 correct_matchi~
   8 cup_plastic_blue
                               material yes
                                              918.
                                                    76.6
                                                           87.4
                                                                    26 correct_matchi~
                                              917. 103.
                                                           113.
    9 cup_plastic_clear_orig~ color yes
                                                                    21 correct_matchi~
## 10 pitcher_metal_blue
                               color yes
                                              915.
                                                    85.1
                                                          108.
                                                                    19 correct_matchi~
## 11 cup_plastic_green
                               color yes
                                              911. 116.
                                                           130.
                                                                    20 correct_matchi~
## 12 bottle_glass_green
                               color yes
                                              903.
                                                    74.7
                                                           89.7
                                                                    19 correct_matchi~
## 13 chair_plastic_blue_ori~ color yes
                                              890.
                                                    74.5
                                                           75.9
                                                                    18 correct_matchi~
## 14 table_wood_brown_origi~ color yes
                                              876.
                                                    62.2
                                                           61.7
                                                                    22 correct_matchi~
## 15 plate_plastic_blue_ori~ color yes
                                                    88.5
                                                          110.
                                                                    24 correct_matchi~
```

Only correct responses, only not matching features

```
## # A tibble: 15 x 7
##
      label
                              condition
                                            Mean CILow CIHigh count group
##
      <fct>
                                           <dbl> <dbl>
                                                         <dbl> <int> <chr>
                              <chr>
##
    1 bottle_glass_clear_or~ color no
                                           1190.
                                                  132.
                                                          131.
                                                                  22 correct_notmatch~
    2 boot_leather_black_or~ material no 1164.
                                                  126.
                                                          138.
                                                                  24 correct_notmatch~
    3 spoon_wood_blue
                                           1160.
                                                  158.
                                                          176.
                                                                  21 correct notmatch~
                              color no
##
                              material no 1155.
                                                  125.
    4 plate_paper_blue
                                                          141.
                                                                  23 correct_notmatch~
    5 boot_leather_brown
                              color no
                                           1150.
                                                  149.
                                                          148.
                                                                  25 correct_notmatch~
##
                              material no 1146.
                                                  138.
                                                          138.
                                                                  22 correct_notmatch~
   6 bottle_glass_green
##
   7 chair_metal_green
                              color no
                                           1146.
                                                  151.
                                                          165.
                                                                  25 correct_notmatch~
    8 spoon_wood_green
                              material no 1144.
                                                  134.
##
                                                          146.
                                                                  22 correct_notmatch~
    9 table_wood_brown_orig~ color no
                                           1140.
                                                  135.
                                                          154.
                                                                  23 correct_notmatch~
                                           1137.
                                                  119.
                                                          128.
## 10 bottle_glass_green
                              color no
                                                                  24 correct_notmatch~
## 11 bag_paper_brown_origi~ material no 1135.
                                                  124.
                                                          137.
                                                                  25 correct_notmatch~
## 12 cup_metal_green
                              color no
                                           1131.
                                                  153.
                                                          164.
                                                                  24 correct_notmatch~
## 13 boot_leather_green
                              material no 1126.
                                                  124.
                                                          142.
                                                                  26 correct_notmatch~
## 14 jacket denim green
                              material no 1123.
                                                  132.
                                                          145.
                                                                  27 correct notmatch~
                                                                  26 correct_notmatch~
## 15 plate_paper_white_ori~ material no 1122.
                                                  119.
                                                          125.
## # A tibble: 15 x 7
##
      label
                                             Mean CILow CIHigh count group
                               condition
##
      <fct>
                               <chr>
                                            <dbl> <dbl>
                                                          <dbl> <int> <chr>
                                             979. 97.2
                                                           91.7
##
    1 pitcher_glass_blue
                               material no
                                                                   17 correct_notmatc~
    2 pitcher_plastic_white_~ material no
##
                                             978. 114.
                                                          135.
                                                                   24 correct_notmatc~
##
    3 chair_wood_brown_origi~ color no
                                             977. 106.
                                                          114.
                                                                   20 correct_notmatc~
##
    4 chair_plastic_blue_ori~ color no
                                             972. 104.
                                                          108.
                                                                   24 correct_notmatc~
##
    5 jacket_denim_purple
                               material no
                                             968. 125.
                                                          128.
                                                                   22 correct_notmatc~
##
    6 cup_metal_silver_origi~ color no
                                             966 104.
                                                          105.
                                                                   22 correct_notmatc~
   7 jacket_denim_blue_orig~ color no
                                             964. 90.0
                                                          117.
                                                                   19 correct_notmatc~
    8 chair_metal_purple
                               color no
                                             962. 115.
                                                          123.
                                                                   18 correct_notmatc~
    9 table_wood_green
                               material no
                                             961. 120.
                                                          139.
                                                                   20 correct notmatc~
```

```
## 10 table_wood_brown_origi~ material no
                                           961. 71.6
                                                         81.8
                                                                 20 correct notmatc~
## 11 jacket_leather_black_o~ color no
                                            960. 88.9
                                                        101.
                                                                 19 correct_notmatc~
                                           954. 104.
## 12 bowl glass green
                              material no
                                                        117.
                                                                 20 correct notmatc~
## 13 boot_rubber_brown
                                           942.
                                                 84.1
                                                         90.2
                                                                 23 correct_notmatc~
                              color no
## 14 table_wood_green
                              color no
                                            937.
                                                  93.2
                                                        103.
                                                                 19 correct notmatc~
## 15 cup_plastic_green
                              color no
                                           932. 80.4
                                                                 25 correct notmatc~
                                                         77.5
```

By error rates

##

##

label

<fct>

Regardless of feature matching

```
## # A tibble: 15 x 7
##
      label
                                   condition
                                                 Mean CILow CIHigh count group
                                                              <dbl> <int> <chr>
##
      <fct>
                                   <chr>>
                                                <dbl> <dbl>
                                   material yes 0.6
                                                      0.200
    1 table_metal_green
                                                              0.2
                                                                       20 er
##
   2 table_metal_blue
                                   material yes 0.636 0.182
                                                                       22 er
                                                             0.182
  3 plate_paper_blue
                                   material yes 0.667 0.208
                                                              0.167
                                                                       24 er
##
   4 spoon_wood_green
                                   material yes 0.667 0.208
                                                              0.208
                                                                       24 er
## 5 box_cardboard_blue
                                   material no 0.708 0.167
                                                              0.167
                                                                       24 er
## 6 boot_rubber_brown
                                   material yes 0.72 0.160
                                                              0.16
                                                                       25 er
                                   material yes 0.737 0.211
## 7 spoon_wood_blue
                                                              0.211
                                                                       19 er
    8 bowl_glass_blue
                                   material ves 0.75
                                                      0.200
                                                              0.15
                                                                       20 er
## 9 table_metal_silver_original material yes 0.75 0.200
                                                                       20 er
                                                              0.15
## 10 chair metal purple
                                   material yes 0.76 0.200
                                                              0.16
                                                                       25 er
## 11 jacket_denim_purple
                                   material yes 0.76 0.16
                                                              0.16
                                                                       25 er
## 12 bag_plastic_blue
                                   material no 0.789 0.211
                                                                       19 er
                                                              0.158
## 13 plate_plastic_green
                                   material yes 0.789 0.211
                                                              0.158
                                                                       19 er
## 14 bag plastic green
                                   material no 0.792 0.167
                                                              0.126
                                                                       24 er
## 15 boot_rubber_green
                                   color yes
                                                0.792 0.167 0.167
                                                                       24 er
## # A tibble: 15 x 7
##
      label
                                    condition
                                                  Mean CILow CIHigh count group
##
      <fct>
                                    <chr>
                                                  <dbl> <dbl>
                                                               <dbl> <int> <chr>
##
    1 spoon_metal_silver_original
                                    material ves
                                                            0
                                                                   0
                                                                        24 er
                                                                        25 er
    2 spoon_plastic_green
                                                            0
                                                                   0
                                    color yes
                                                      1
   3 spoon_plastic_white_original color no
                                                     1
                                                                        24 er
##
  4 spoon_wood_brown_original
                                    material no
                                                      1
                                                            0
                                                                   0
                                                                        24 er
## 5 spoon_wood_green
                                    material no
                                                     1
                                                            0
                                                                        22 er
## 6 table_metal_blue
                                                            0
                                                                   0
                                    material no
                                                                        20 er
## 7 table metal green
                                    material no
                                                     1
                                                            0
                                                                        24 er
## 8 table_metal_silver_original material no
                                                                   0
                                                                        25 er
                                                      1
                                                            0
## 9 table_wood_blue
                                    color no
                                                     1
                                                            0
                                                                   0
                                                                        23 er
## 10 table_wood_blue
                                    color yes
                                                            0
                                                                   0
                                                                        27 er
## 11 table_wood_blue
                                    material no
                                                            0
                                                                   0
                                                                        20 er
                                                     1
## 12 table wood blue
                                    material yes
                                                            0
                                                                   0
                                                                        25 er
                                                     1
## 13 table_wood_brown_original
                                                            0
                                                                   0
                                                                        20 er
                                    material no
                                                     1
## 14 table wood brown original
                                    material yes
                                                            0
                                                                        25 er
## 15 table_wood_green
                                    color yes
                                                                        25 er
Only matching features
## # A tibble: 15 x 7
```

condition

<chr>

Mean CILow CIHigh count group

<dbl> <dbl> <int> <chr>

```
1 table_metal_green
                                                              0.2
                                                                        20 matching er
                                   material yes 0.6
                                                       0.200
                                                              0.182
##
                                   material yes 0.636 0.182
                                                                        22 matching_er
    2 table_metal_blue
                                                                        24 matching er
   3 plate_paper_blue
                                   material yes 0.667 0.167
                                                              0.167
    4 spoon_wood_green
                                   material yes 0.667 0.208
##
                                                              0.167
                                                                        24 matching_er
##
    5 boot_rubber_brown
                                   material yes 0.72 0.200
                                                              0.16
                                                                        25 matching_er
##
   6 spoon wood blue
                                   material yes 0.737 0.211
                                                              0.159
                                                                        19 matching er
   7 bowl glass blue
                                   material yes 0.75 0.200
                                                              0.15
                                                                        20 matching er
##
    8 table_metal_silver_original material yes 0.75
                                                       0.200
                                                              0.151
                                                                        20 matching er
##
   9 chair_metal_purple
                                   material yes 0.76
                                                      0.16
                                                               0.16
                                                                        25 matching er
## 10 jacket_denim_purple
                                   material yes 0.76 0.200
                                                              0.16
                                                                        25 matching_er
## 11 plate_plastic_green
                                   material yes 0.789 0.211
                                                              0.158
                                                                        19 matching_er
## 12 boot_rubber_green
                                   color yes
                                                 0.792 0.167
                                                              0.167
                                                                        24 matching_er
## 13 spoon_wood_blue
                                                 0.792 0.167
                                                              0.167
                                                                        24 matching_er
                                   color yes
                                   material yes 0.8
                                                       0.16
                                                                        25 matching_er
## 14 bowl_metal_blue
                                                               0.12
## 15 bowl_metal_green
                                   color yes
                                                 0.8
                                                       0.16
                                                               0.12
                                                                        25 matching_er
## # A tibble: 15 x 7
##
      label
                                   condition
                                                  Mean CILow CIHigh count group
##
      <fct>
                                   <chr>
                                                 <dbl> <dbl>
                                                               <dbl> <int> <chr>
                                                     1
                                                                   0
                                                                        25 matching er
##
    1 pitcher_metal_green
                                   color yes
                                                           0
##
    2 pitcher_metal_green
                                   material yes
                                                     1
                                                           0
                                                                   0
                                                                        19 matching_er
##
    3 pitcher_plastic_blue
                                   material yes
                                                           0
                                                                   0
                                                                        26 matching_er
                                                           0
                                                                   0
    4 plate_paper_blue
                                   color yes
                                                     1
                                                                        25 matching_er
##
    5 plate paper green
                                   color yes
                                                     1
                                                           0
                                                                   0
                                                                        26 matching er
                                                                   0
##
    6 plate_paper_white_original
                                   color yes
                                                     1
                                                           0
                                                                        25 matching_er
   7 plate_plastic_blue_original color yes
                                                           0
                                                                   0
                                                                        24 matching er
   8 plate_plastic_green
                                   color yes
                                                                   0
                                                                        25 matching_er
##
                                                     1
                                                           0
    9 spoon_metal_silver_original color yes
                                                     1
                                                           0
                                                                   0
                                                                        20 matching_er
                                                                   0
## 10 spoon_metal_silver_original material yes
                                                     1
                                                           0
                                                                        24 matching_er
                                                     1
                                                           0
                                                                   0
                                                                        25 matching er
## 11 spoon_plastic_green
                                   color yes
## 12 table_wood_blue
                                                           0
                                                                   0
                                   color yes
                                                     1
                                                                        27 matching_er
## 13 table_wood_blue
                                   material yes
                                                     1
                                                           0
                                                                   0
                                                                        25 matching_er
## 14 table_wood_brown_original
                                   material yes
                                                           0
                                                                   0
                                                                        25 matching_er
                                                     1
## 15 table_wood_green
                                   color yes
                                                     1
                                                           0
                                                                        25 matching_er
```

Only not matching features

A tibble: 15 x 7 ## label condition Mean CILow CIHigh count group ## <fct> <chr>> <dbl> <dbl> <dbl> <int> <chr> ## 1 box_cardboard_blue material no 0.708 0.167 0.167 24 notmatching_~ ## 2 bag plastic blue material no 0.789 0.211 0.158 19 notmatching ~ ## 3 bag_plastic_green material no 0.792 0.167 0.126 24 notmatching ~ 4 pitcher glass green color no 0.792 0.167 0.167 24 notmatching ~ ## 5 box_cardboard_brown_origi~ material no 0.8 0.150 20 notmatching_~ 0.15 6 chair_metal_green material no 0.815 0.148 0.148 27 notmatching_~ 7 bag_paper_blue material no 0.833 0.126 0.125 24 notmatching_~ 24 notmatching_~ 8 cup_plastic_clear_original color no 0.833 0.167 0.125 ## 9 boot_rubber_brown material no 0.84 0.160 0.12 25 notmatching_~ ## 10 bag_paper_green color no 0.85 0.15 0.15 20 notmatching_~ ## 11 pitcher_glass_clear_origi~ color no 0.85 0.200 0.15 20 notmatching_~ ## 12 pitcher_plastic_blue color no 0.85 0.200 0.15 20 notmatching_~ 27 notmatching_~ ## 13 pitcher_metal_green material no 0.852 0.148 0.111 ## 14 plate_plastic_pink material no 0.852 0.148 0.111 27 notmatching ~ ## 15 spoon_metal_green material no 0.852 0.148 27 notmatching_~ 0.111

## # A tibble: 15 x 7											
##		label	condition	Mean	CILow	\mathtt{CIHigh}	${\tt count}$	group			
##		<fct></fct>	<chr></chr>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>	<int></int>	<chr></chr>			
##	1	<pre>jacket_leather_purple</pre>	material no	1	0	0	23	${\tt notmatching~}$			
##	2	pitcher_metal_blue	color no	1	0	0	24	${\tt notmatching~}$			
##	3	<pre>pitcher_metal_silver_origi~</pre>	color no	1	0	0	24	${\tt notmatching~}$			
##	4	pitcher_plastic_green	material no	1	0	0	22	${\tt notmatching~}$			
##	5	plate_paper_green	color no	1	0	0	23	${\tt notmatching} {\tt \sim}$			
##	6	${\tt plate_plastic_blue_original}$	material no	1	0	0	24	${\tt notmatching} \texttt{-}$			
##	7	<pre>spoon_plastic_white_origin~</pre>	color no	1	0	0	24	${\tt notmatching} {\tt \sim}$			
##	8	spoon_wood_brown_original	material no	1	0	0	24	${\tt notmatching} {\tt \sim}$			
##	9	spoon_wood_green	material no	1	0	0	22	${\tt notmatching} {\tt \sim}$			
##	10	table_metal_blue	material no	1	0	0	20	${\tt notmatching} {\tt \sim}$			
##	11	table_metal_green	material no	1	0	0	24	notmatching~			
##	12	${\tt table_metal_silver_original}$	material no	1	0	0	25	${\tt notmatching~}$			
##	13	table_wood_blue	color no	1	0	0	23	${\tt notmatching~}$			
##	14	table_wood_blue	material no	1	0	0	20	${\tt notmatching~}$			
##	15	table_wood_brown_original	material no	1	0	0	20	${\tt notmatching~}$			

Is there overlap?

```
## # A tibble: 60 x 3
## # Groups:
               label [48]
      label
                                      condition
                                                   count
##
      <fct>
                                      <chr>
                                                   <int>
                                     material yes
## 1 chair_metal_purple
                                                       5
## 2 table metal blue
                                      material yes
## 3 table_metal_green
                                                       5
                                     material yes
                                      material yes
## 4 table_metal_silver_original
                                                       5
## 5 boot_leather_green
                                                       3
                                      material yes
## 6 chair_metal_green
                                      material yes
## 7 plate_paper_blue
                                      material yes
## 8 spoon_wood_green
                                      material yes
                                                       3
## 9 table_wood_green
                                      material yes
## 10 bag_plastic_blue
                                      material no
## 11 bag_plastic_green
                                      material no
## 12 boot_leather_black_original
                                      material no
                                                       2
## 13 boot_rubber_brown
                                      material yes
## 14 boot_rubber_green
                                      color yes
## 15 bottle_glass_blue
                                      material yes
## 16 bottle_glass_clear_original
                                      color no
                                                       2
## 17 bowl_glass_blue
                                      material yes
## 18 box_cardboard_blue
                                      material no
                                                       2
                                                       2
## 19 chair metal silver original
                                      material yes
## 20 chair_wood_purple
                                                       2
                                      material yes
## 21 jacket_denim_purple
                                      material yes
## 22 jacket_leather_purple
                                      material yes
## 23 plate_paper_blue
                                      material no
                                                       2
## 24 plate_plastic_green
                                      material yes
## 25 spoon_metal_green
                                     material yes
                                                       2
## 26 spoon_wood_blue
                                      color no
## 27 spoon_wood_blue
                                     material yes
```

```
material yes
## 28 table_wood_blue
## 29 bag_paper_blue
                                      material no
## 30 bag_paper_brown_original
                                      material no
## 31 bag_paper_green
                                      color no
                                                        1
## 32 boot_leather_brown
                                      color no
                                      material no
## 33 boot leather green
                                                        1
## 34 boot rubber brown
                                      material no
## 35 bottle_glass_green
                                      color no
## 36 bottle_glass_green
                                      material no
## 37 bowl_metal_blue
                                      material yes
## 38 bowl_metal_green
                                      color yes
                                                        1
## 39 box_cardboard_brown_original
                                      material no
                                                        1
## 40 box_wood_blue
                                      material yes
                                                        1
                                      color no
## 41 chair_metal_green
## 42 chair_metal_green
                                      material no
                                                        1
## 43 cup_metal_green
                                      color no
## 44 cup_plastic_clear_original
                                      color no
                                                        1
## 45 jacket_denim_green
                                      material no
## 46 jacket_denim_green
                                      material yes
                                                        1
## 47 jacket_leather_green
                                      material yes
## 48 pitcher_glass_clear_original
                                      color no
                                                        1
## 49 pitcher_glass_green
                                      color no
## 50 pitcher_metal_blue
                                      material yes
                                                        1
## 51 pitcher metal green
                                      material no
## 52 pitcher_plastic_blue
                                      color no
## 53 pitcher_plastic_white_original material yes
## 54 plate_paper_white_original
                                      material no
                                                        1
## 55 plate_plastic_pink
                                      material no
                                                        1
## 56 plate_plastic_pink
                                      material yes
                                                        1
## 57 spoon_metal_green
                                      material no
                                                        1
## 58 spoon_wood_blue
                                      color yes
## 59 spoon_wood_green
                                      material no
                                                        1
## 60 table_wood_brown_original
                                      color no
## # A tibble: 60 x 3
## # Groups:
               label [42]
##
      label
                                      condition
                                                   count
      <fct>
                                      <chr>
                                                    <int>
## 1 table_wood_brown_original
                                      material yes
## 2 plate_plastic_blue_original
                                      color yes
                                                        4
                                                        3
## 3 chair plastic blue original
                                      color yes
## 4 cup_plastic_blue
                                      material yes
                                                        3
## 5 cup plastic green
                                      color no
## 6 cup_plastic_green
                                                        3
                                      color yes
                                                        3
## 7 jacket_denim_purple
                                      color yes
## 8 pitcher_metal_blue
                                                        3
                                      color yes
## 9 table_metal_blue
                                                        3
                                      color yes
                                                        3
## 10 table_wood_brown_original
                                      color yes
## 11 table_wood_brown_original
                                      material no
## 12 bottle_glass_green
                                      color yes
## 13 bottle_plastic_green
                                      color yes
                                                        2
## 14 bowl_metal_silver_original
                                      material yes
## 15 box_wood_brown_original
                                      material yes
                                      color yes
## 16 cup_plastic_clear_original
```

##	17	plate_paper_blue	color yes	2
##	18	spoon_metal_silver_original	material yes	2
##	19	spoon_plastic_green	color yes	2
##	20	spoon_plastic_white_original	color no	2
##	21	spoon_wood_brown_original	material no	2
##	22	spoon_wood_green	material no	2
##	23	table_metal_blue	material no	2
##	24	table_metal_green	material no	2
##	25	table_metal_silver_original	material no	2
##	26	table_wood_blue	color no	2
##	27	table_wood_blue	color yes	2
##	28	table_wood_blue	material no	2
		table_wood_blue	material yes	2
		table_wood_green	color no	2
##	31	table_wood_green	color yes	2
		boot_rubber_brown	color no	1
##	33	bowl_glass_green	material no	1
		box_cardboard_brown_original	color yes	1
##	35	box_cardboard_brown_original	material yes	1
##	36	chair_metal_purple	color no	1
		<pre>chair_plastic_blue_original</pre>	color no	1
		chair_wood_brown_original	color no	1
		<pre>cup_metal_silver_original</pre>	color no	1
		<pre>jacket_denim_blue_original</pre>	color no	1
##	41	<pre>jacket_denim_purple</pre>	material no	1
##	42	<pre>jacket_leather_black_original</pre>	color no	1
##	43	<pre>jacket_leather_purple</pre>	material no	1
##	44	pitcher_glass_blue	material no	1
##	45	pitcher_metal_blue	color no	1
		pitcher_metal_green	color yes	1
##	47	pitcher_metal_green	material yes	1
		<pre>pitcher_metal_silver_original</pre>	color no	1
##	49	<pre>pitcher_plastic_blue</pre>	material yes	1
		<pre>pitcher_plastic_green</pre>	material no	1
		${\tt pitcher_plastic_white_original}$	material no	1
##	52	plate_paper_green	color no	1
		plate_paper_green	color yes	1
##	54	<pre>plate_paper_white_original</pre>	color yes	1
		<pre>plate_plastic_blue_original</pre>	material no	1
		plate_plastic_green	color yes	1
		spoon_metal_green	color yes	1
		spoon_metal_silver_original	color yes	1
		table_metal_green	color yes	1
##	60	table_wood_green	material no	1