Functional/Dysfunctional classification

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In total 64% of people said that they had felt worried about getting COVID-19 in the past 3 weeks.

## Functional/ Dysfunctional worry

This is the table created by Jon’s rules for Non-worried (foc = NO) and Functionally worried (worried about catching covid in past 3 weeks and quality of life is not reduced by worry and take precautions against catching covid and quality of life is not reduced by precaution and prec make them feel safer) groups, and everyone else as Dysfunctionally worried:

data <- data %>%   
 mutate(fearcovid = case\_when(  
 # Unworried  
 b\_foc=="No" ~ "Unworried", # not worried  
 # Functional  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Not at all", "A little") & # quality of life is not reduced by precaution  
 b\_precs %in% c("Moderately","Quite a bit","Very much") ~ "Functional", #prec make them feel safer  
 #Dysfunctional  
 TRUE ~"Dysfunctional") #everyone else   
 )

In this case I get the same table (almost, I found 3 extra people, need to check where they came from…!):

|  |  |
| --- | --- |
| fearcovid | n |
| Dysfunctional | 533 |
| Functional | 166 |
| Unworried | 401 |

But then I thought let’s try to define the Dysfunctional group with logic too, so instead of saying all others are dysfunctional worried, I defined this group as:

worried about covid and quality of life affected by worry but doesn’t take precaution

OR

worried about covid and quality of life affected by worry and takes precautions but precautions don’t work

OR

worried about covid and quality of life affected by worry and takes precautions but precautions affect QoL

Like so:

data <- data %>%   
 mutate(fearcovid = case\_when(  
 # Unworried  
 b\_foc=="No" ~ "Unworried", # not worried  
 # Functional  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Not at all", "A little") & # quality of life is not reduced by precaution  
 b\_precs %in% c("Moderately","Quite a bit","Very much") ~ "Functional", #prec make them feel safer  
 #Dysfunctional  
 b\_foc=="Yes" & # worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="No" | #doesn't take precaution  
 # OR  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precs %in% c("Not at all", "A little") | #precautions don't work  
 # OR  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precqof %in% c("Moderately","Quite a bit","Very much") ~"Dysfunctional", # precautions affect QoL  
 TRUE ~"???") #everyone else   
 )

This leaves another 265 people who aren’t classified by these parameters:

|  |  |
| --- | --- |
| fearcovid | n |
| ??? | 265 |
| Dysfunctional | 268 |
| Functional | 166 |
| Unworried | 401 |

So I had a look and tried to classify all of these people, and some do go into dysfunctional, but some do not, here is my thinking:

**Unworried**

not worried (same in all)

**Functional worry:**

worried about catching covid in past 3 weeks and quality of life is not reduced by worry and doesn’t take precautions agaist covid

OR

worried about catching covid in past 3 weeks and quality of life is not reduced by worry and take precautions against catching covid and quality of life is not reduced by precaution and prec make them feel safer

**Dysfunctional worry:**

worried about covid and quality of life affected by worry and doesn’t take precaution

OR

worried about covid and quality of life affected by worry and takes precautions and precautions don’t work

OR

worried about covid and quality of life affected by worry and takes precautions and precautions affect QoL

OR

worried about covid and quality of life affected by worry and takes precautions and precautions do not affect QoL

OR

worried about catching covid in past 3 weeks and quality of life is not reduced by worry and take precautions against catching covid and quality of life is not reduced by precaution and prec make them feel safer

**??s:**

worried about covid and quality of life affected by worry and takes precaution but NA for these affecting QoL or safety

OR

worried about covid and quality of life not affected by worry and takes precaution but NA for these affecting QoL or safety

data <- data %>%  
 mutate(fearcovid\_reka = case\_when(  
 # Unworried  
 b\_foc=="No" ~ "Unworried", # not worried  
 # Functional  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="No" | # doesn't take precautions agaist covid  
 #OR  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Not at all", "A little") ~ "Functional", # quality of life is not reduced by precaution  
 # b\_precs %in% c("Moderately","Quite a bit","Very much") ~ "Functional", #prec make them feel safer  
 #Dysfunctional  
 b\_foc=="Yes" & # worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="No" | #doesn't take precaution  
 # OR  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precs %in% c("Not at all", "A little") | #precautions don't work  
 # OR  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precqof %in% c("Moderately","Quite a bit","Very much") | # precautions affect QoL  
 # OR  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precqof %in% c("Not at all", "A little") | # precautions do not affect QoL  
 # OR  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Moderately","Quite a bit","Very much") ~"Dysfunctional", # precautions affect QoL  
 TRUE ~"???")   
 )

This changes the numbers to:

|  |  |
| --- | --- |
| fearcovid\_reka | n |
| ??? | 19 |
| Dysfunctional | 456 |
| Functional | 224 |
| Unworried | 401 |

Groups labelled separately:

data <- data %>%  
 mutate(fearcovid\_labels = case\_when(  
 # Unworried  
 b\_foc=="No" ~ "Unworried", # not worried  
 # Worry no prec  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="No" ~"Worried, QoL not reduced, No precs", # doesn't take precautions agaist covid  
 # Worry no qol  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Not at all", "A little") ~ "Worried, QoL not reduced, Takes precs, QoL not reduced", # quality of life is not reduced by precaution  
 #Worry with qol no prec  
 b\_foc=="Yes" & # worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="No" ~"Worried, QoL is reduced, No precs", #doesn't take precaution  
 # worry quol prec no qol  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precs %in% c("Not at all", "A little") ~ "Worry, QoL reduced, Precs, QoL not reduced", #precautions don't work  
 # worry and prec qol  
 b\_foc=="Yes" & #worried about covid  
 b\_focqol %in% c("Moderately","Quite a bit","Very much") & #quality of life affected by worry  
 b\_prec=="Yes" & #takes precautions  
 b\_precqof %in% c("Moderately","Quite a bit","Very much") ~ "worry and prec, both reduce qol", # precautions affect QoL  
 # worry no qol prec yes qol  
 b\_foc=="Yes" & # worried about catching covid in past 3 weeks  
 b\_focqol %in% c("Not at all", "A little") & # quality of life is not reduced by worry  
 b\_prec=="Yes" & # take precautions against catching covid  
 b\_precqof %in% c("Moderately","Quite a bit","Very much") ~"worry, QoL not reduced, but takes precs and these reduce qol", # precautions affect QoL  
 TRUE ~"???")   
 )

|  |  |
| --- | --- |
| fearcovid\_labels | n |
| ??? | 85 |
| Unworried | 401 |
| Worried, QoL is reduced, No precs | 16 |
| Worried, QoL not reduced, No precs | 18 |
| Worried, QoL not reduced, Takes precs, QoL not reduced | 206 |
| worry and prec, both reduce qol | 205 |
| worry, QoL not reduced, but takes precs and these reduce qol | 122 |
| Worry, QoL reduced, Precs, QoL not reduced | 47 |