



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



**Lived Experience  
Wellbeing Project**

BIOLOGICAL - PSYCHOLOGICAL - SOCIAL

# **Impact of COVID on Aviation Worker Wellbeing (March 21, 2022)**

## **Comparison of Survey Results – Irish Registered Airlines & All Others**

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# Overview

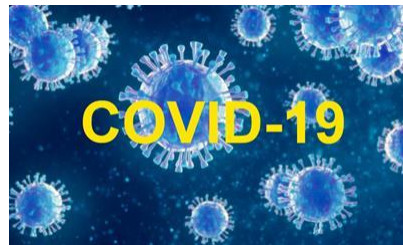
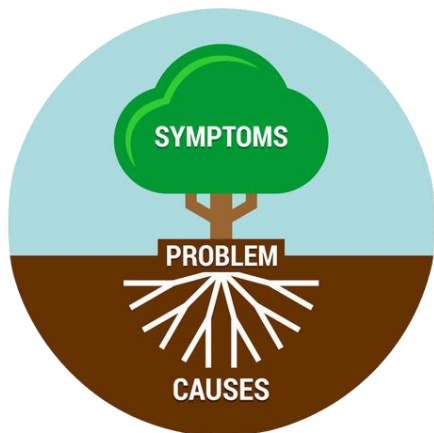
1. About COVID Survey
2. **Findings Irish Registered V All**
3. **Context**
  - Aviation & MH
  - Context: 2021 Survey, Health Findings (Different Roles)
4. Contact & Follow-up



# About 2021 COVID Survey

# About COVID Survey

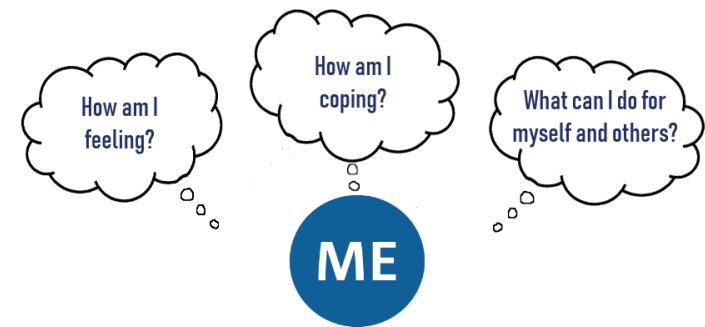
- **Second COVID Survey, October & November 2021**
- **n= 1,114, with n= 1,010 completing PHQ9 & GAD 7**
- Examine impact of the COVID 19 pandemic on (1) job and employment, (2) wellbeing and morale, (3) performance and safety behaviour, and (4) safety oversight. Also, investigated reporting culture, coping strategies, fitness to work assessment, and the supports provided by aviation companies to workers during the pandemic.
- First COVID Survey (COVID Survey 1, July & August 2020)



- **Anonymous online questionnaire, using Qualtrics.**
- Targeted at ALL aviation workers.
- Incorporates validated instruments predicting presence of **depression** (PHQ 9) & **anxiety** (GAD 7).
- **Involvement of stakeholders** in survey design
- **Ethics (including GDPR) approval**, REC, School of Psychology, Trinity College Dublin, Ireland

# Survey Topics

- COVID 19 Pandemic and impact on employment
- COVID 19 Pandemic and impact on health and wellbeing
- Talking about mental health and accessing/seeking help
- Coping Methods/Self Care & Looking for Help
- Supports and Wellbeing Culture
- Impact on performance and safety
- COVID 19 Pandemic and return to work
- COVID 19 Pandemic, remote work, work impact and change



# Analysis

- Descriptive findings for subset of questions
  - All survey respondents (n=1,010)
  - Group 1: Irish Registered Airlines (n=288)
  - Group 2: All Others (all survey respondents minus group 1, n=722)
- Logistic Regression – statistically significant differences between 2 groups & odds ratio
  - Group 1: Irish Registered Airlines
  - Group 2: All Others

## Irish registered

Respondents who gave the name of their company (=airline registered in Ireland)

## All Others

Respondents who gave the name of their company and it is not an Irish registered airline (includes those working for non-Irish registered airlines, or those work for an ATM [Irish or otherwise] or airport operator [Irish or otherwise], and/or those who did not give the name of their company)

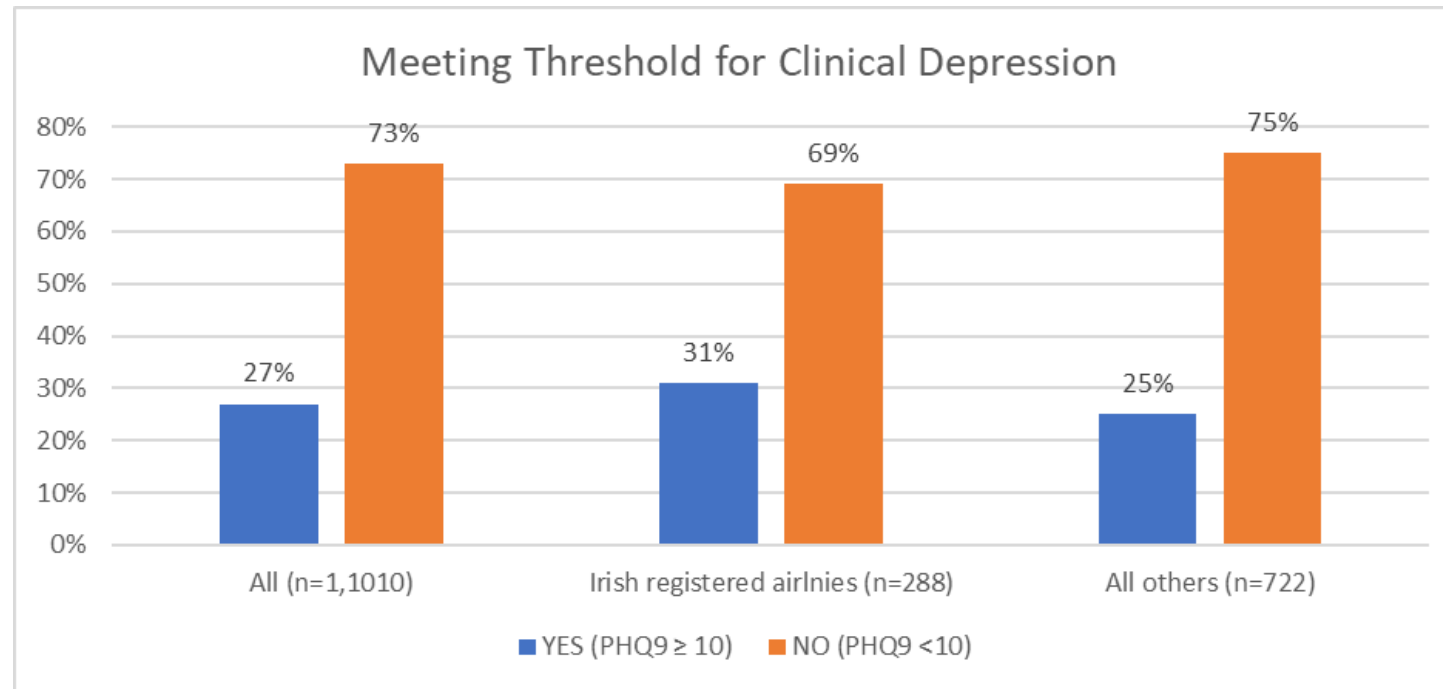
# Analysis: Health Variables

- Depression Binary (PHQ 9)
  - Reach threshold for depression - score of 10 or over (success = 1)
  - Score of less than 10 (fail = 0)
- Anxiety Binary (GAD 7)
  - Reach threshold for anxiety - score of 10 or over (success = 1)
  - Score of less than 10 (fail = 0)
- Suicidal Ideation Binary (PHQ 9, Q9)
  - Presence of SI (success = 1)
  - No SI (fail = 0)
- Life Satisfaction & Happiness Binary
  - Score of 6.5 or over/at or above OECD average (success= 1)
  - Below 6.5/below OECD average (fail = 0)

# Key Findings 2021 – Comparing Irish Registered & All others

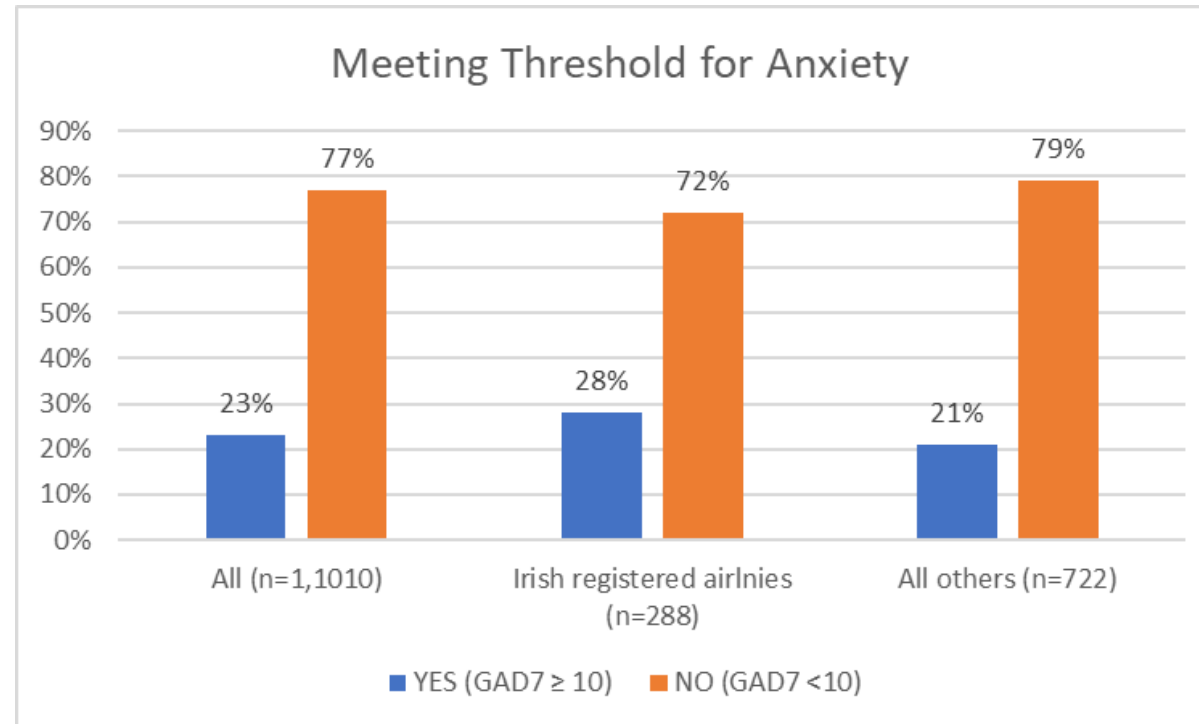


# Depression Threshold (PHQ9, $\geq 10$ )



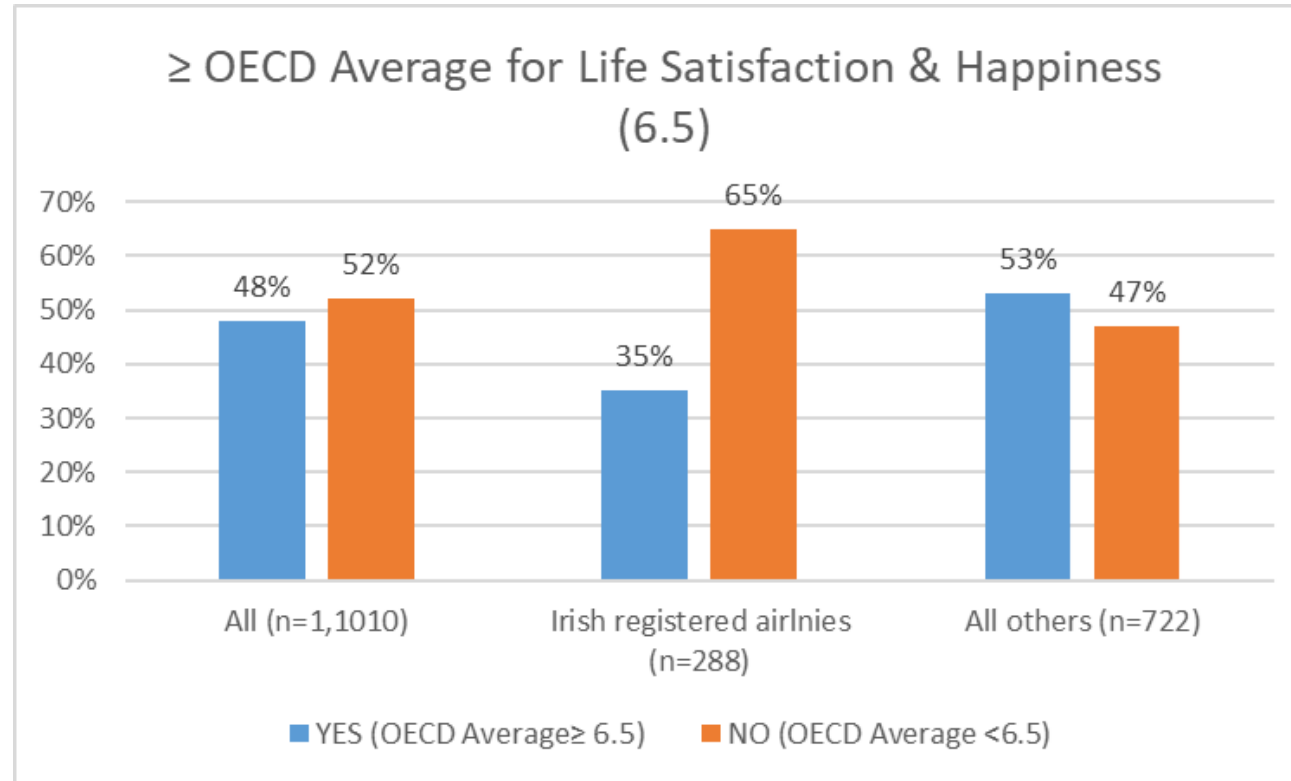
P value	$\beta$	Log Odds	Odds Ratio	Summary
0.0569 (close to significant at 0.05)	Positive	<b>0.29177</b>	1.35	The odds of having major depression is 35% (1.35-1 *100) higher for Irish registered airlines than for all other groups

# Anxiety Threshold (GAD 7, $\geq 10$ )



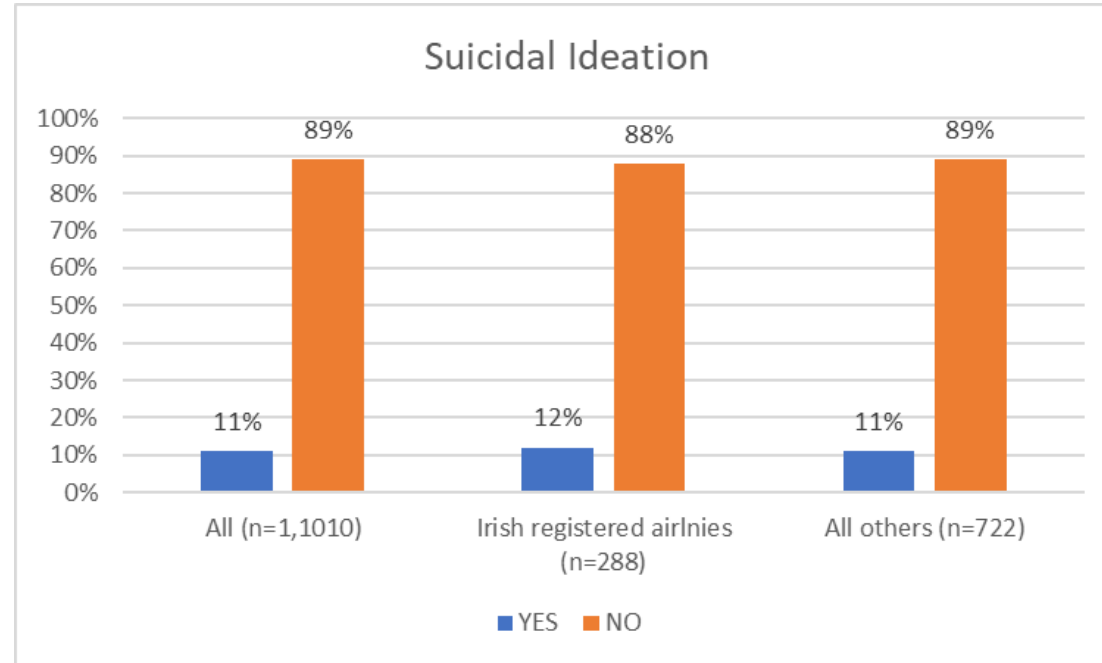
P value	$\beta$	Log Odds	Odds Ratio	Summary
0.0107	Positive	0.40867	1.5	The odds of having anxiety is 50% (1.50-1 *100) higher for Irish registered airlines than for all other Groups

# Life Satisfaction & Happiness



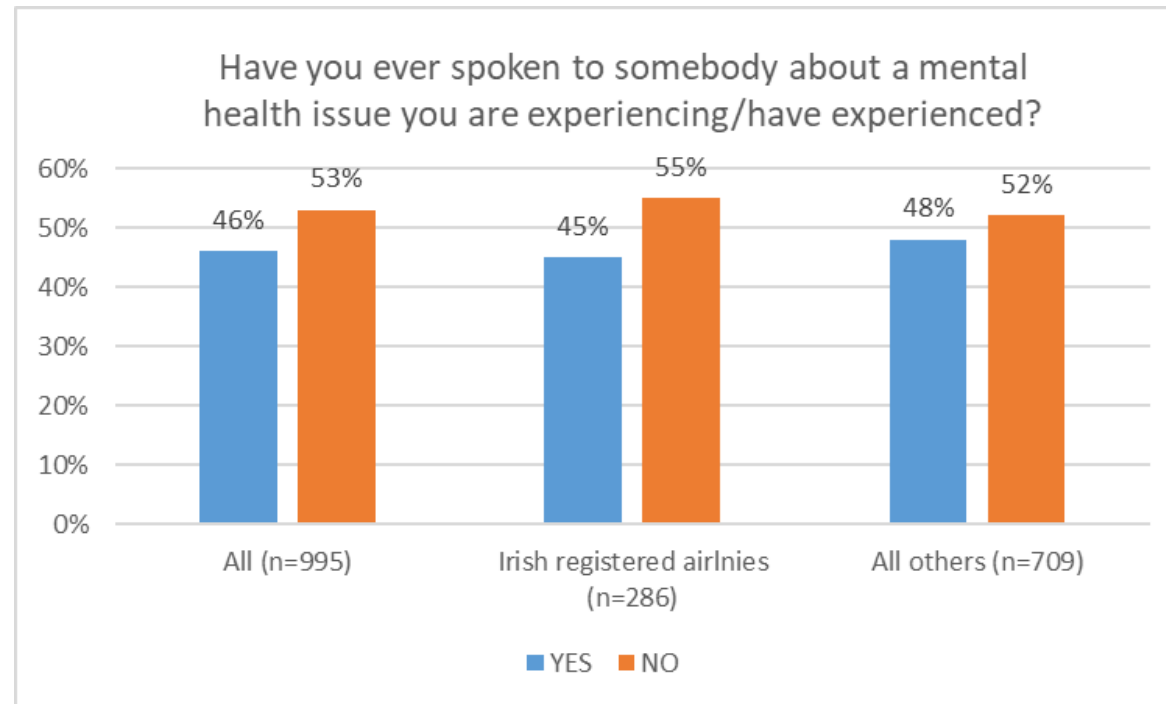
P value	$\beta$	Log Odds	Odds Ratio	Summary
3.48e-07	Negative	-0.7339	0.48	The odds of having life satisfaction and happiness score which is the same or above the OECD average of 6.5) is 52% (.48-1 *100) lower for Irish registered airlines than for all other Groups

# Suicidal Ideation



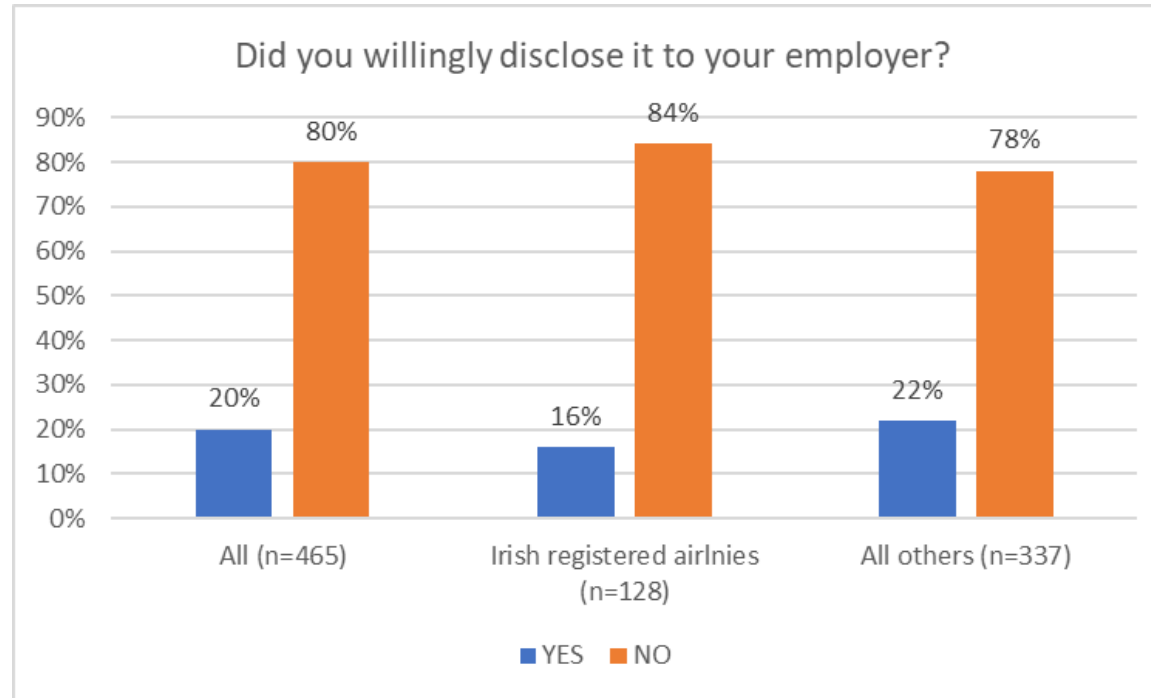
P value	$\beta$	Log Odds	Odds Ratio	Summary
0.456 (not SS)	Positive	0.1620	1.1758	The odds of meeting threshold for SI is 17.58% (1.17586024132-1 *100) higher for Irish registered airlines than for all other Groups

# Have you ever spoken to somebody about a mental health issue you are experiencing/have experienced?



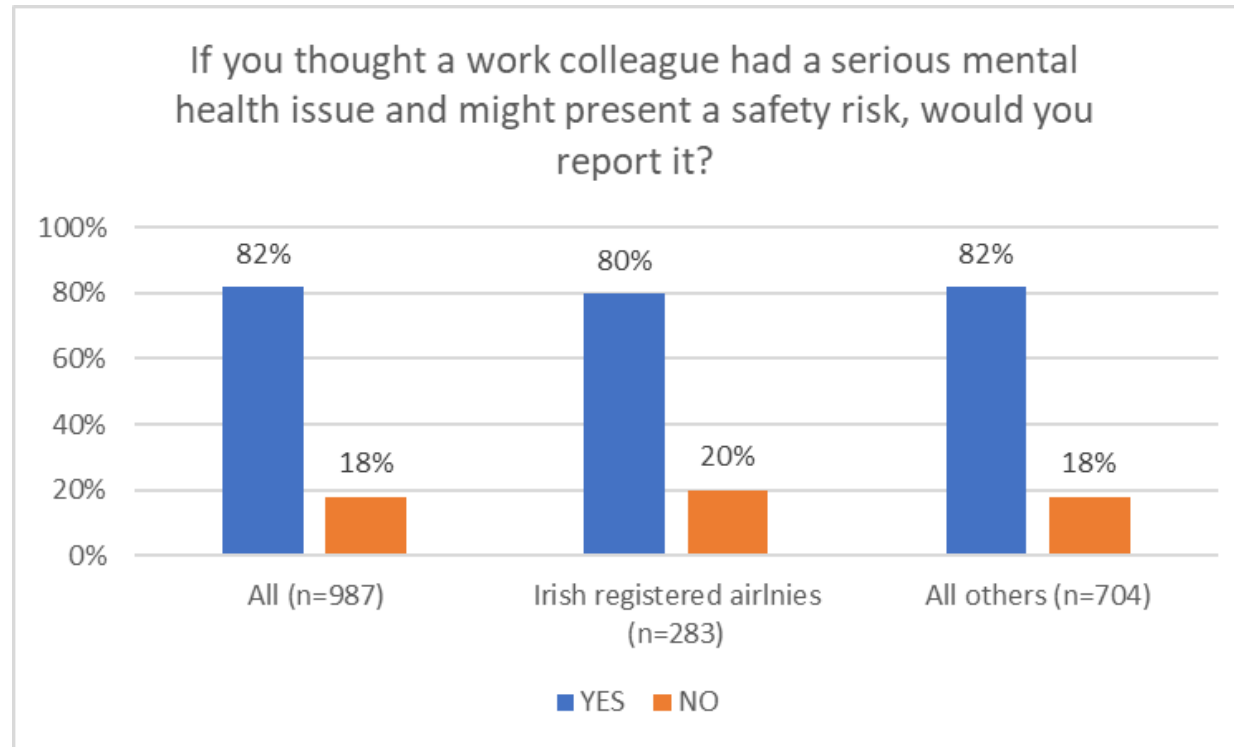
P value	$\beta$	Log Odds	Odds Ratio
<2e-16	Positive	0.9639	2.62

# Did you willingly disclose it to your employer?



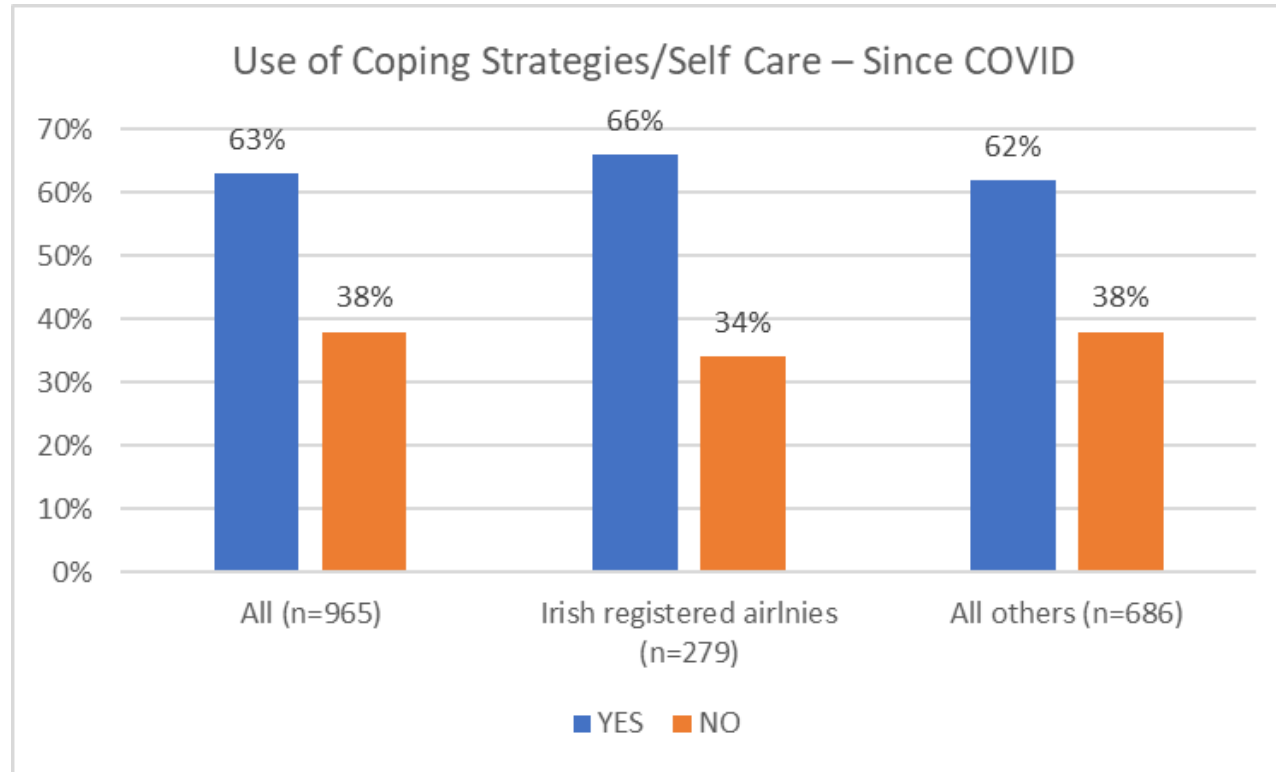
P value	$\beta$	Log Odds	Odds Ratio
0.5207 (not SS)	Negative	-0.089	0.9148

# If you thought a work colleague had a serious mental health issue and might present a safety risk, would you report it?



P value	$\beta$	Log Odds	Odds Ratio
0.469 (Not SS)	Positive	0.3696	1.447156

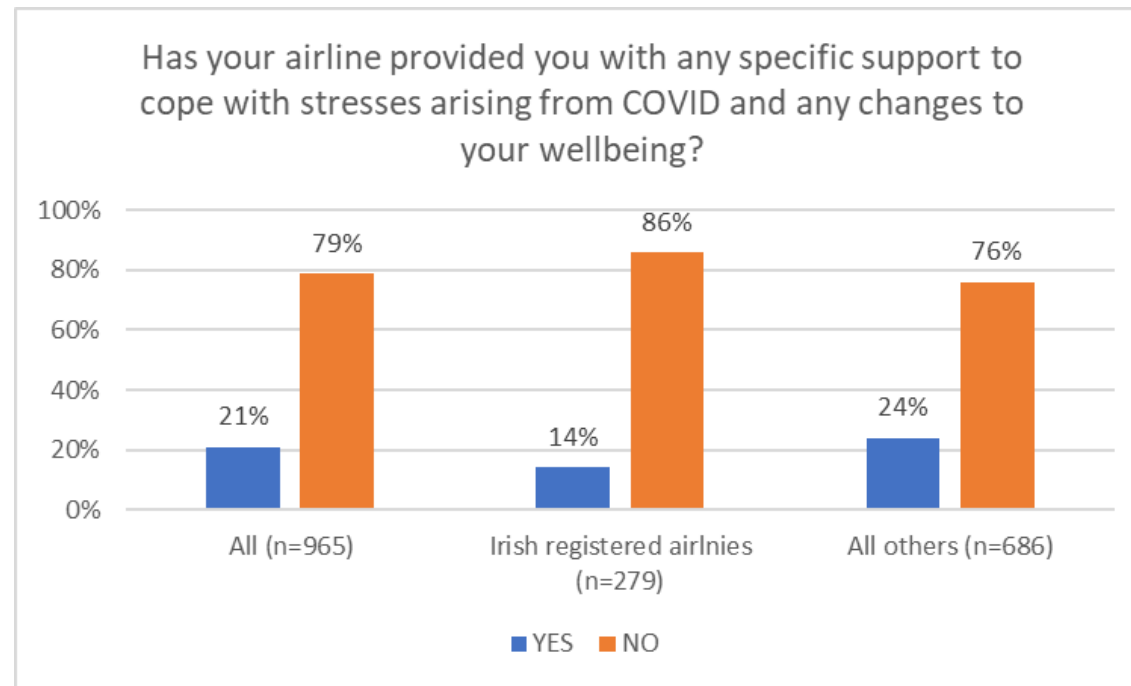
# Use of Coping Strategies/Self Care – Since COVID



P value	$\beta$	Log Odds	Odds Ratio
0.2 (not SS)	Positive	0.4866	1.63

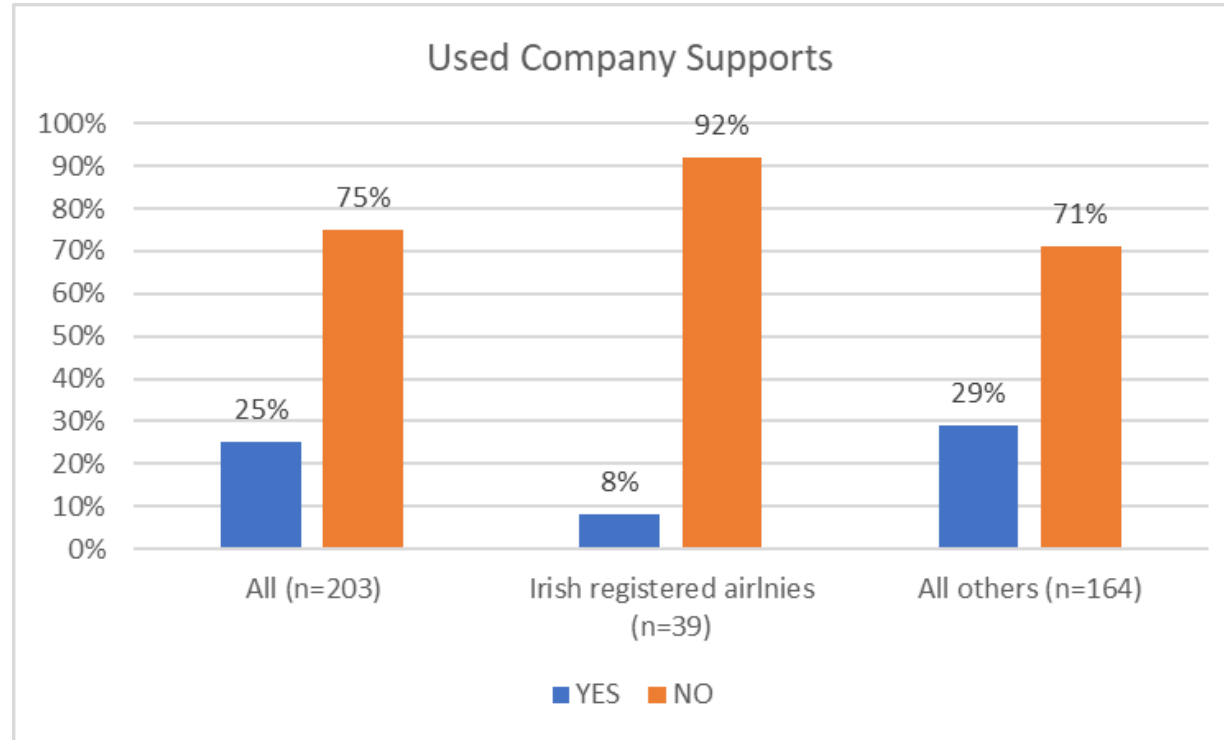


# Has your airline provided you with any specific support to cope with stresses arising from COVID and any changes to your wellbeing?



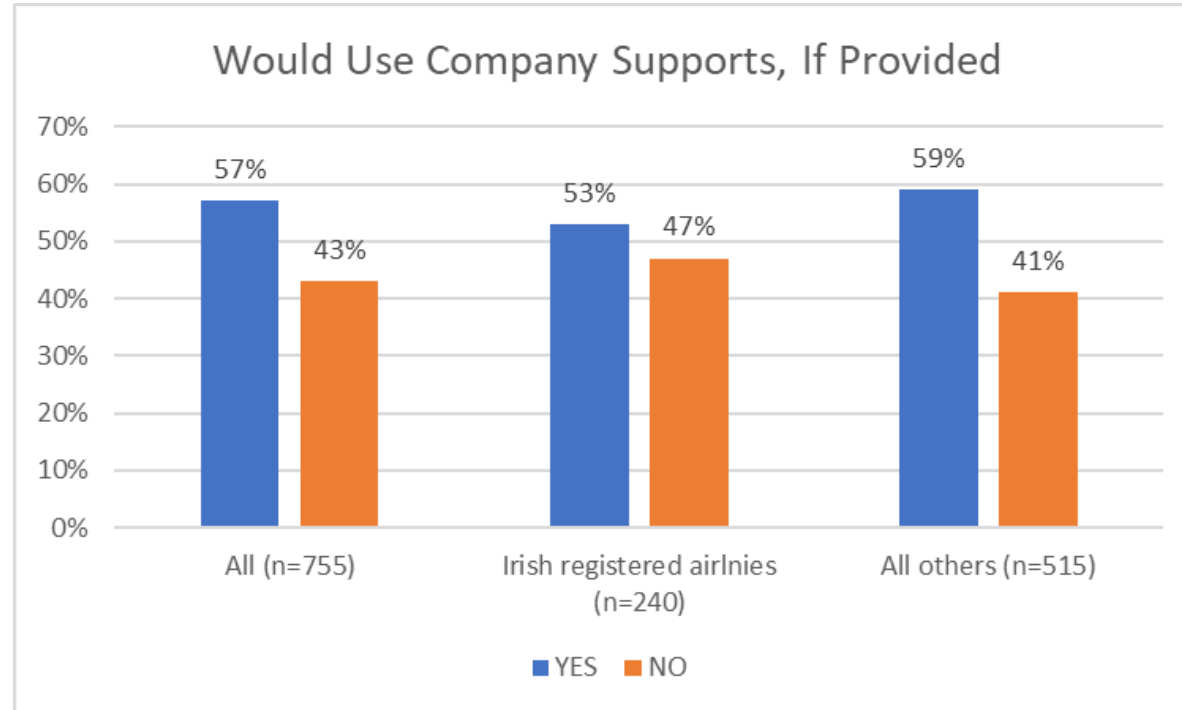
P value	$\beta$	Log Odds	Odds Ratio
0.2 (not SS)	Positive	0.4866	1.6267

# Used Company Supports



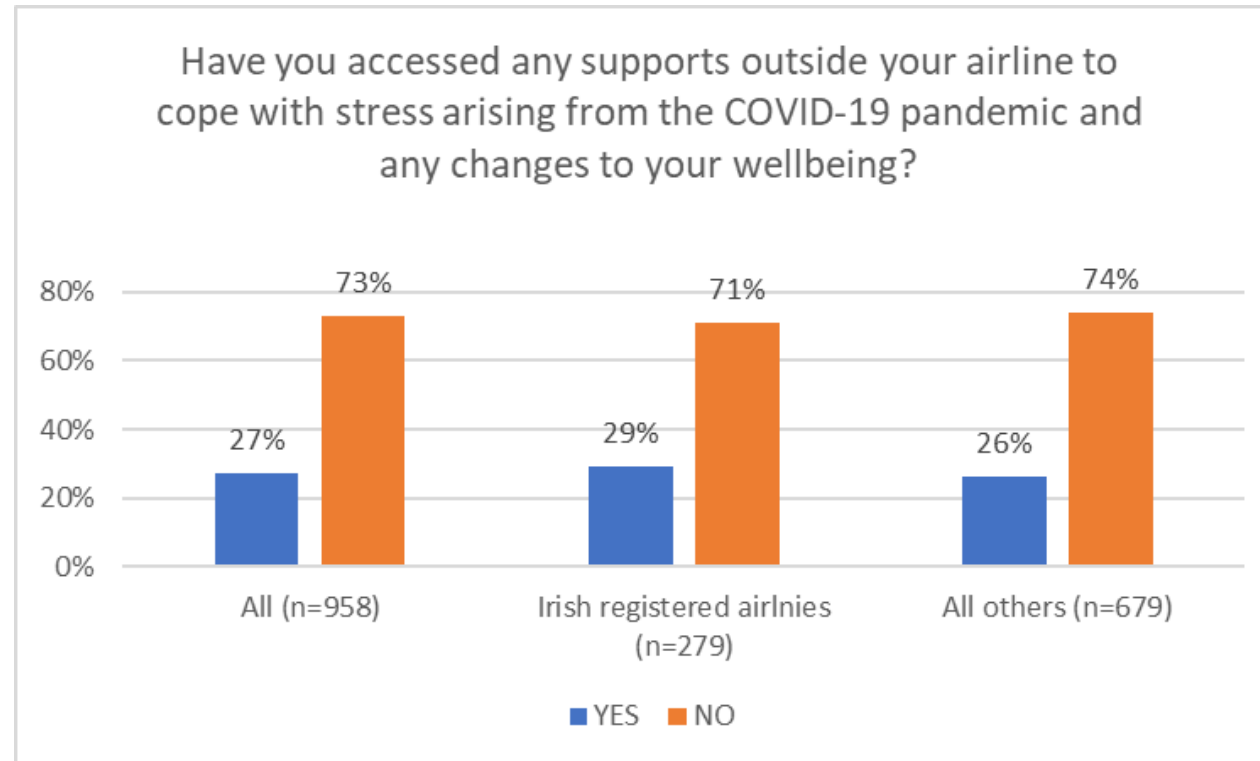
P value	$\beta$	Log Odds	Odds Ratio
0.00116	Negative	-0.62940	0.53

# Would Use Company Supports, If Provided



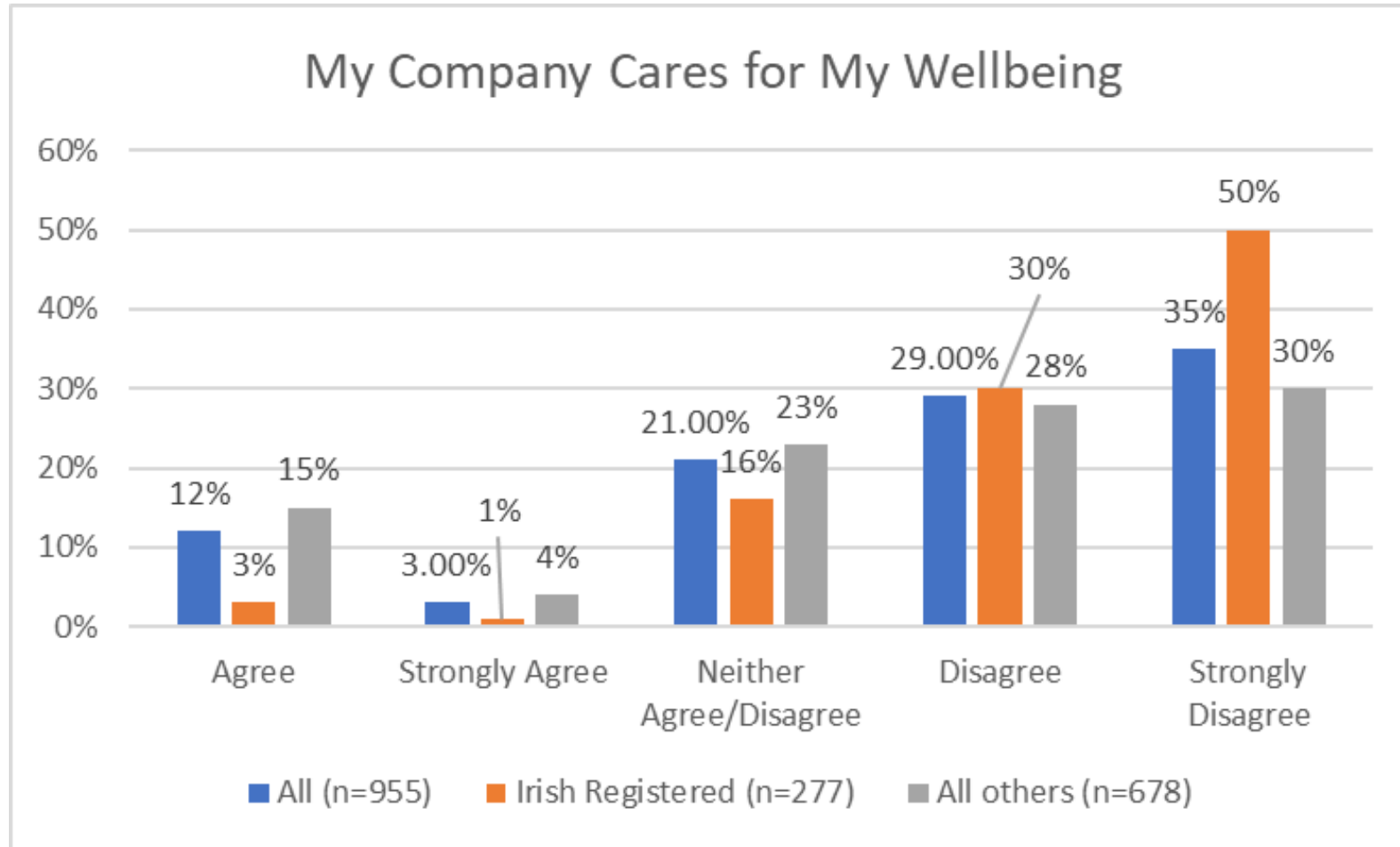
P value	$\beta$	Log Odds	Odds Ratio
3.916 9.01e-05	Positive	0.6980	2.009729

# Have you accessed any supports outside your airline to cope with stress arising from the COVID-19 pandemic and any changes to your wellbeing?

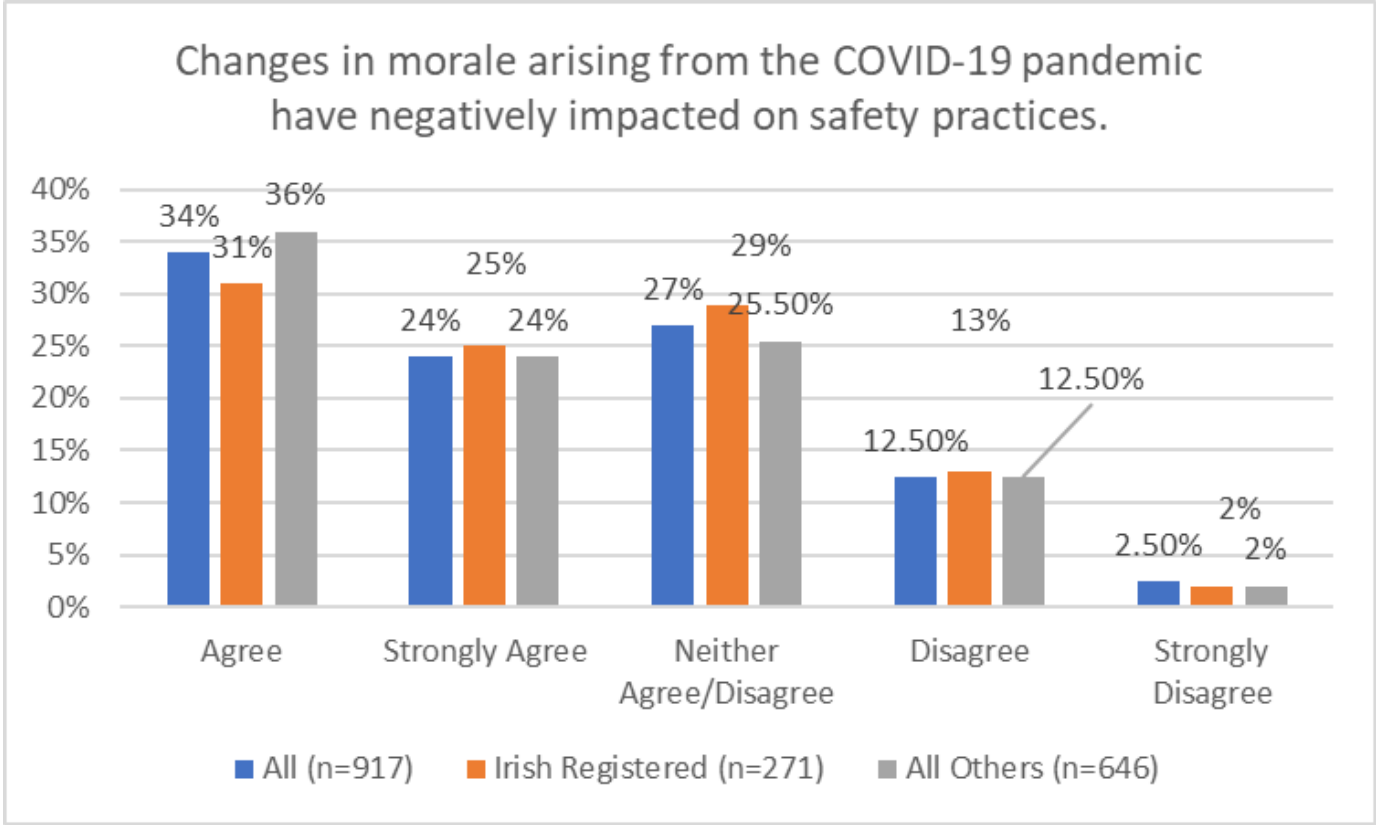


P value	$\beta$	Log Odds	Odds Ratio
0.0708 (not SS)	Positive	0.6746	1.96

# My Company Cares for My Wellbeing



# Changes in Morale Impact Safety



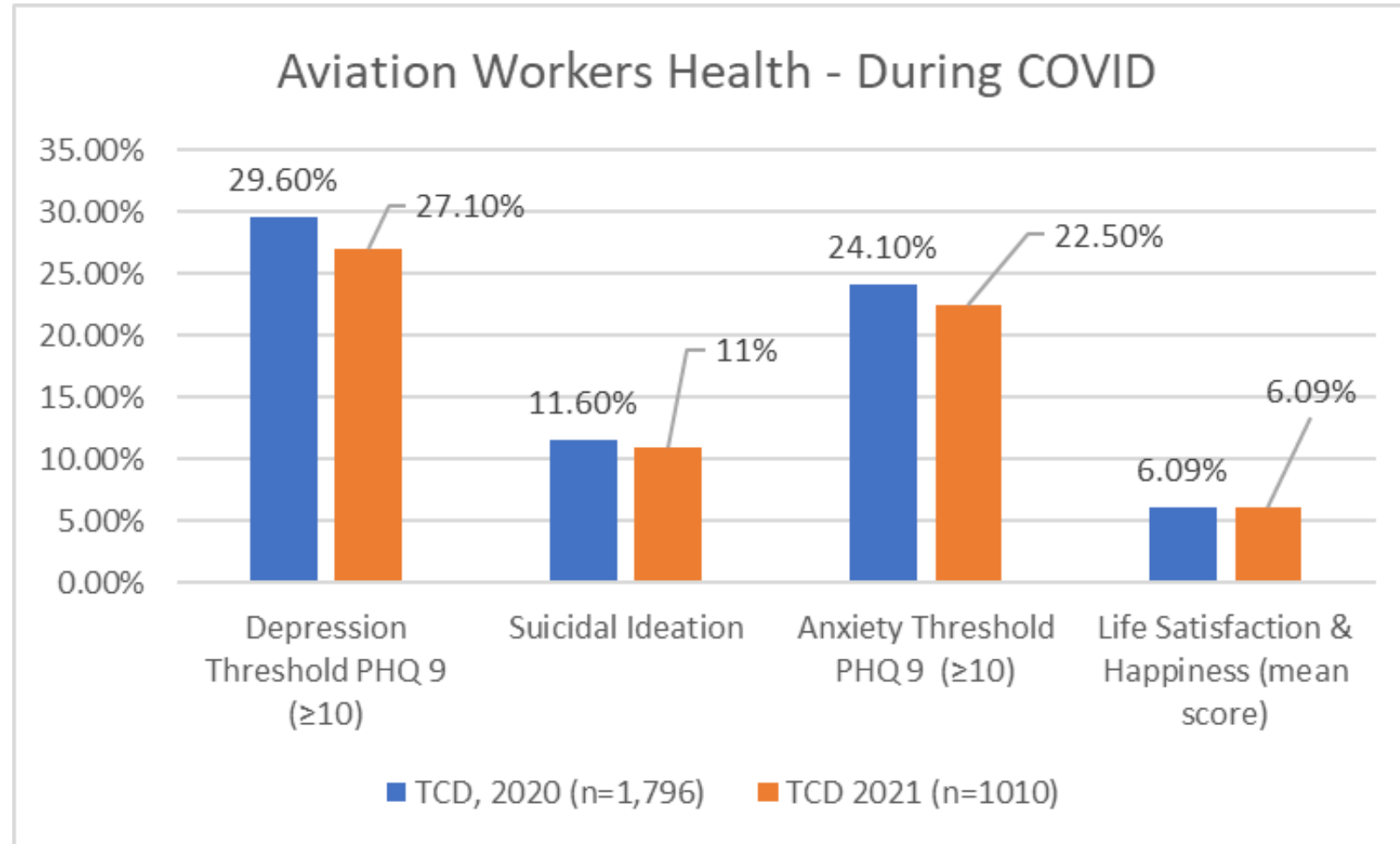
# Context: Aviation Worker Wellbeing

# Aviation Worker Wellbeing (Pre & Since COVID)

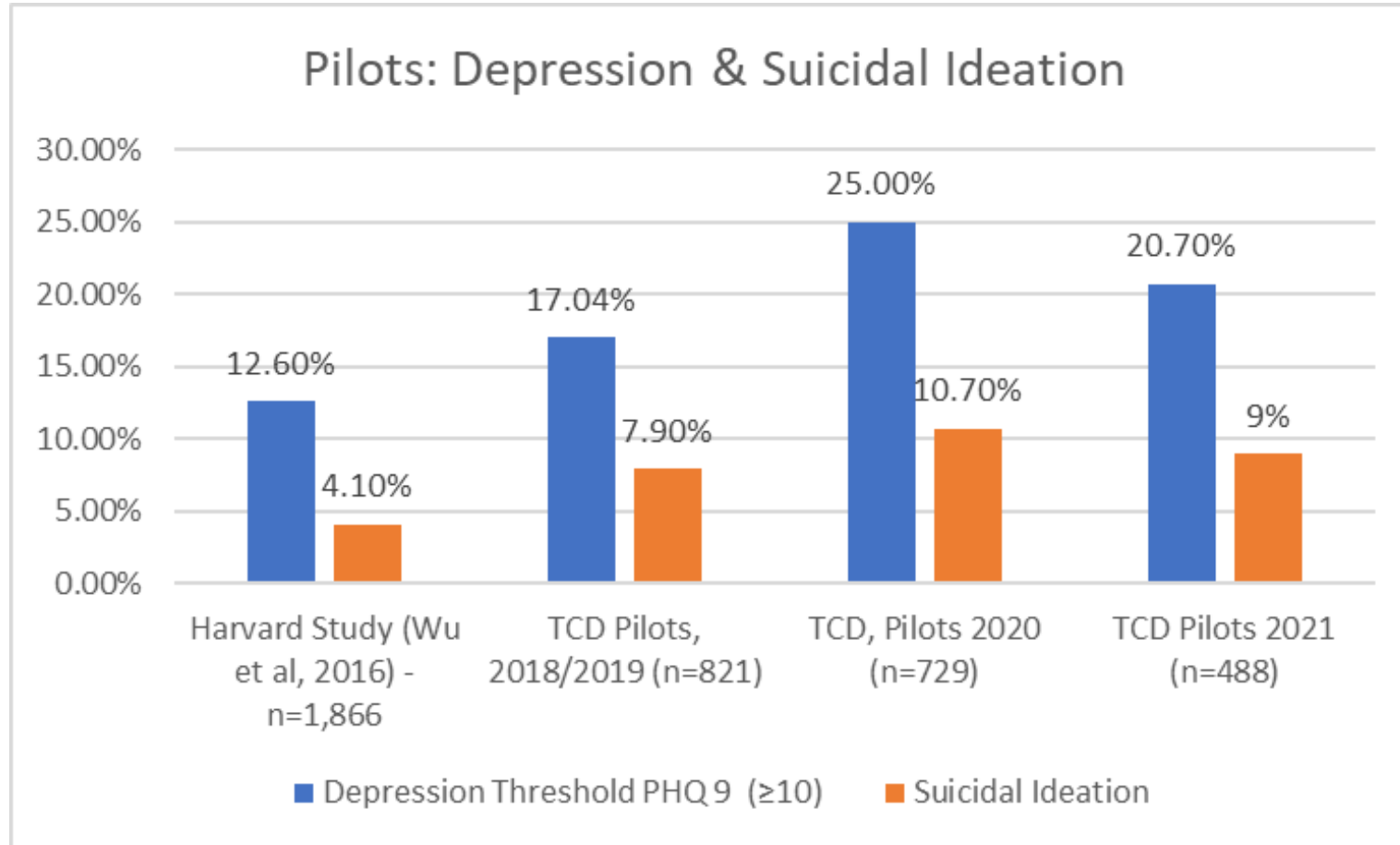
Measure	Baseline (Population)	Baseline (Aviation Workers- Pilots only thus far) – Prior to COVID	2020 (All) (n=1076)	2021 (All) (n= 1010)	Change/ Status (During COVID)
Happiness & Life Satisfaction	6.5. (OECD, 2021).	-	6.086%	6.089%	=
Depression (PHQ 9: Threshold for Moderate Depression, >10)	4.4% (WHO)	12.6% (Wu et al, 2016) 17.04% (Cahill et al, 2021)	29.6%	27.1%	↓
Suicidal Ideation	3.1% (Nock et al, 2018), 3.9% (CDC)	4.1% (Wu et al, 2016) 7.9% (Cahill et al, 2020).	11.6%	11%	↓
Anxiety (GAD 7: Threshold for Moderate Depression, >10)	3.6% (WHO)	-	24.1%	23%	↓



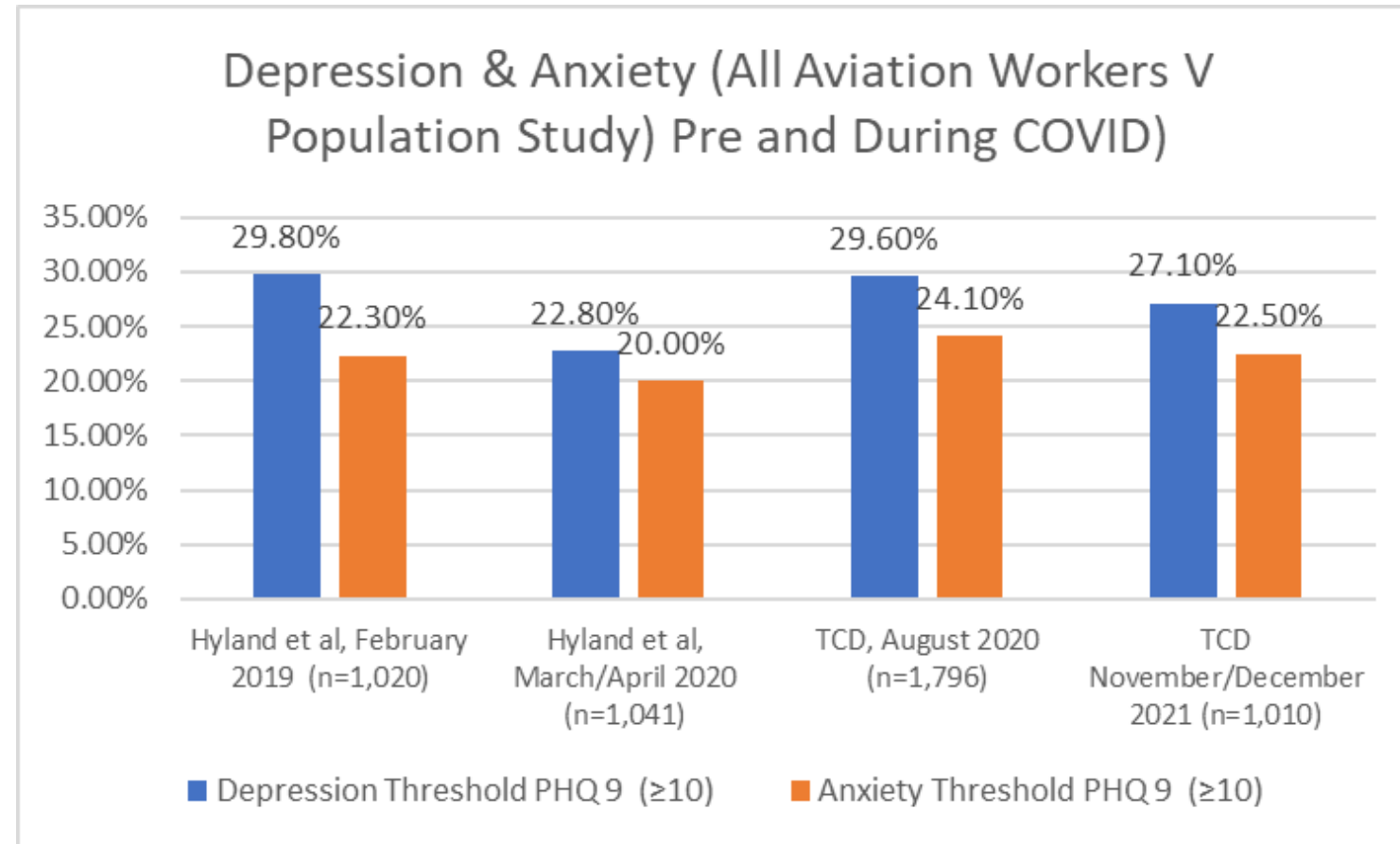
# All Aviation Workers: Life Satisfaction, Depression, Suicidal Ideation & Anxiety (2020 & 2021)



# Depression & Suicidal Ideation: Pilots (Pre & Since COVID)

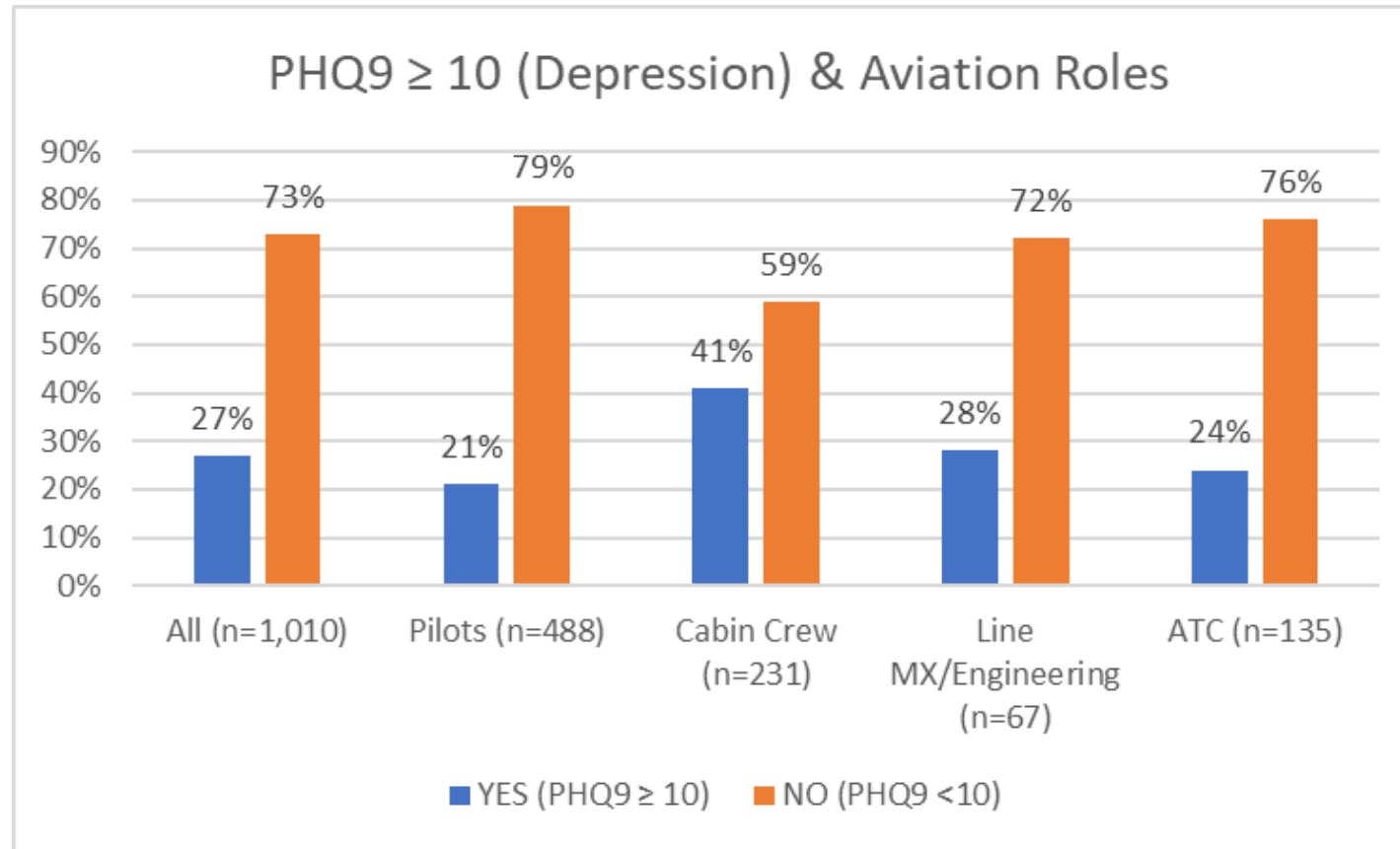


# Comparison with Population Study - Depression & Anxiety Threshold, (Pre & Since COVID)

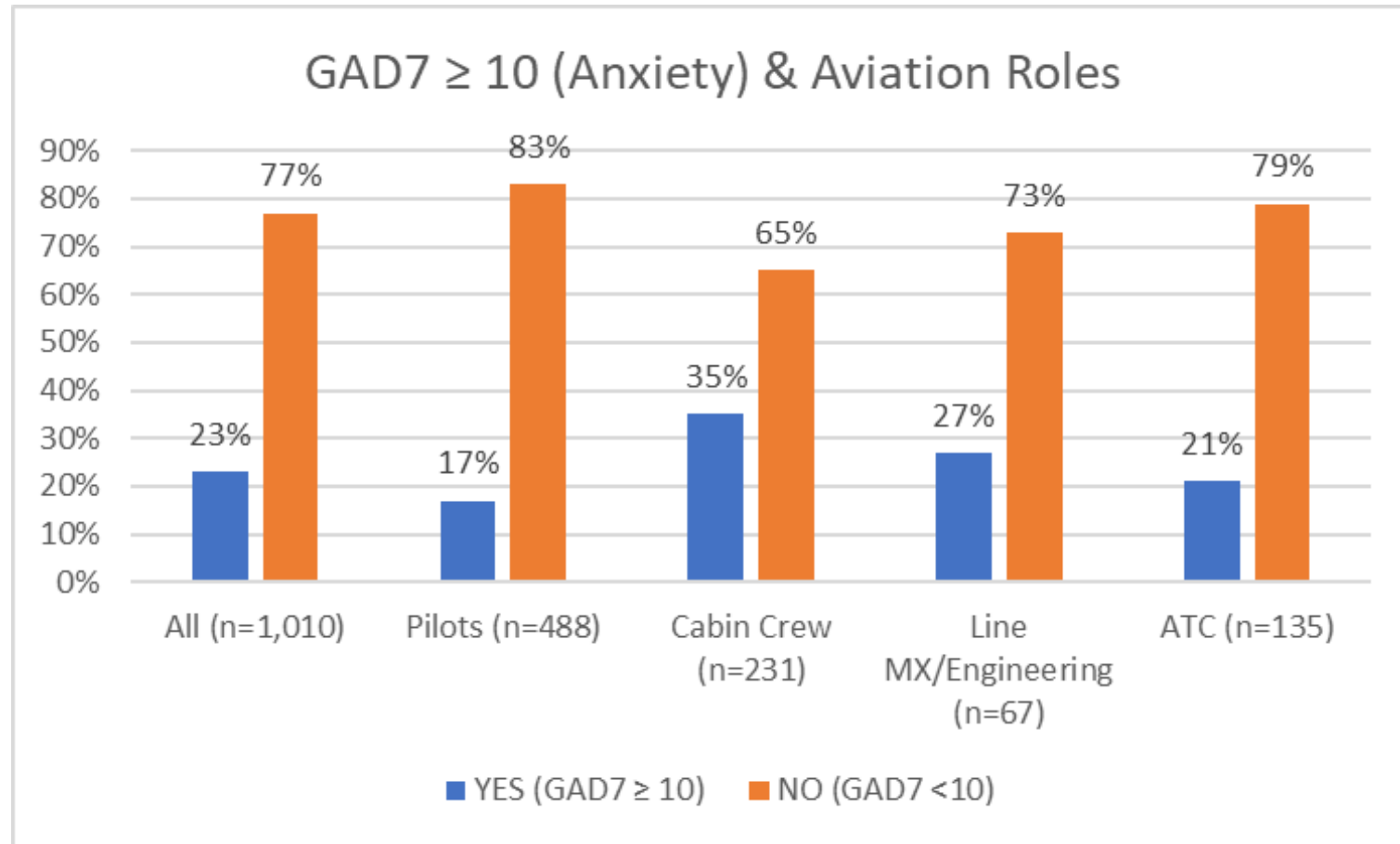


Hyland P, Shevlin M, Murphy J, McBride O, Fox R, Bondjers K, Karatzias T, Bentall RP, Martinez A, Vallières F. A longitudinal assessment of depression and anxiety in the Republic of Ireland before and during the COVID-19 pandemic. *Psychiatry Res.* 2021 Jun;300:113905. doi: 10.1016/j.psychres.2021.113905. Epub 2021 Mar 31. PMID: 33827013.

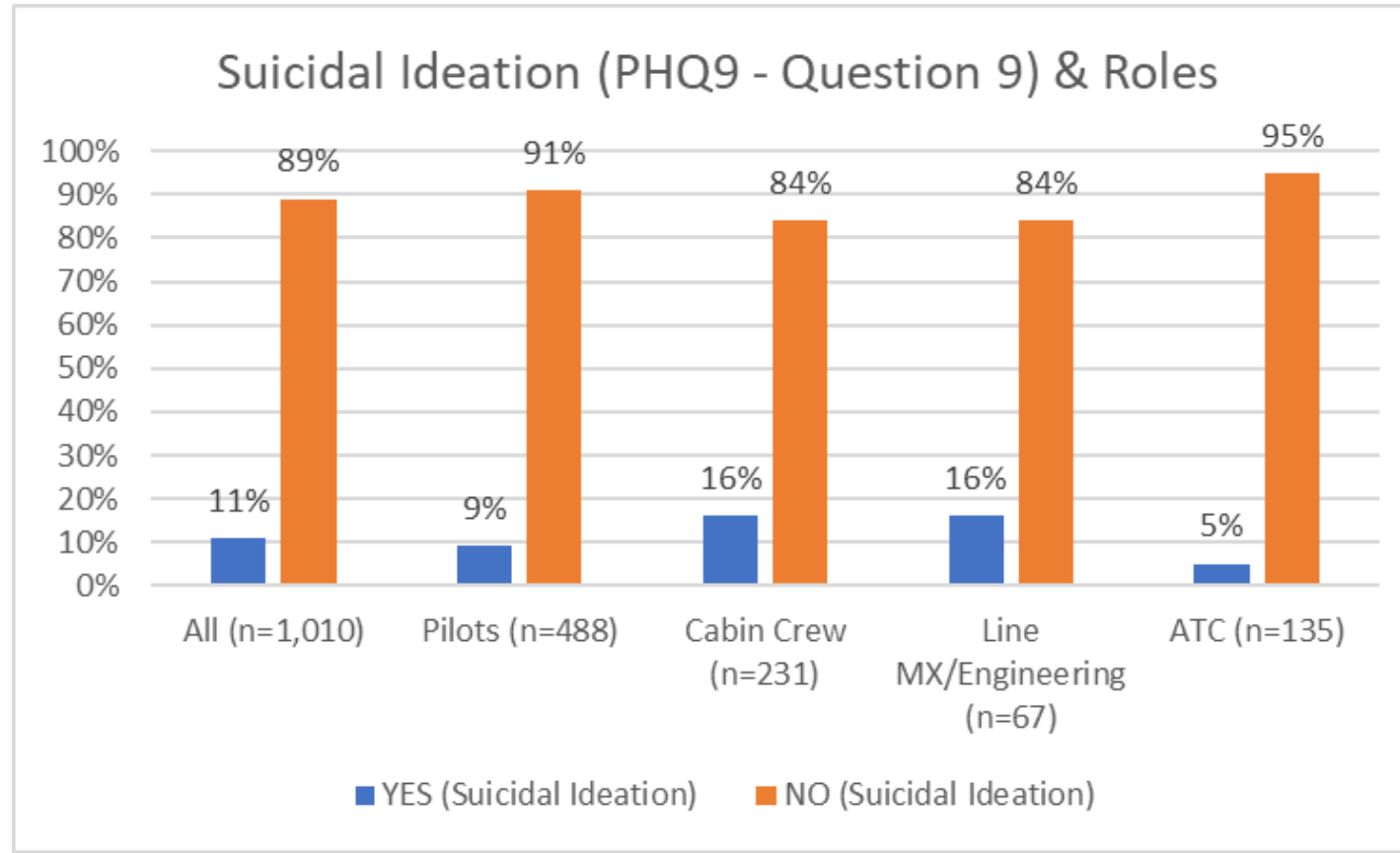
# 2021 Survey: Depression & Roles



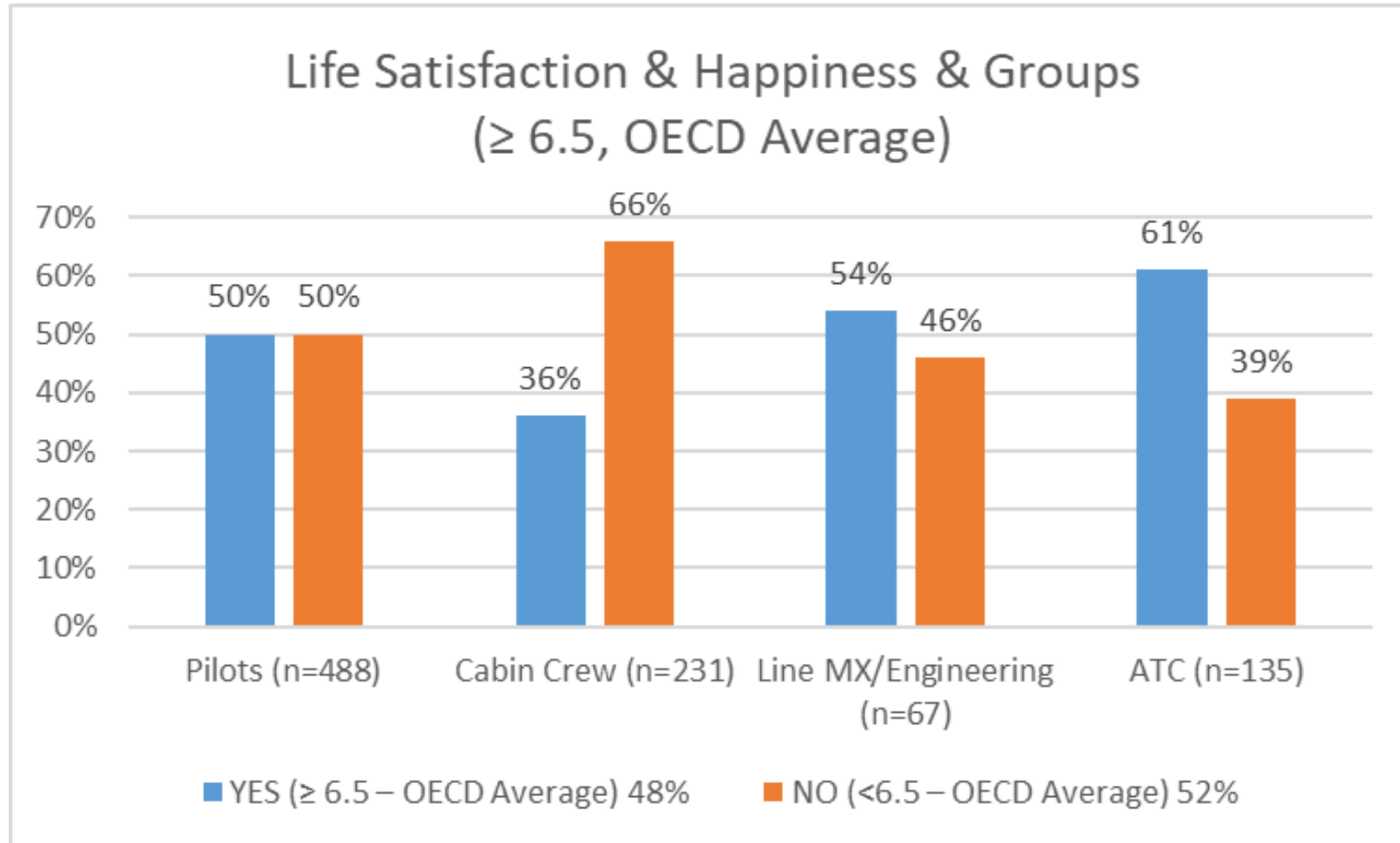
# 2021 Survey: Anxiety & Roles



# 2021 Survey: Suicidal Ideation & Roles



# 2021 Survey: Life Satisfaction/Happiness & Roles



# Acknowledgements & Contact



# Acknowledgements

- Thanks to all the aviation workers who participated in our research so far.
- Thanks also to the following groups who have supported this survey/research`.



# Contact

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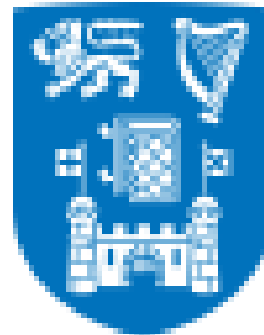
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<http://www.tcd.ie/cihs>



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