



REPORT OF APS EMPLOYEE SURVEY

2014- 2020

July 2021
Team project

TEAM INTRODUCTION



Ayushi Singh

3 years of work experience in SQL programming and support and automation



Lucas Felix

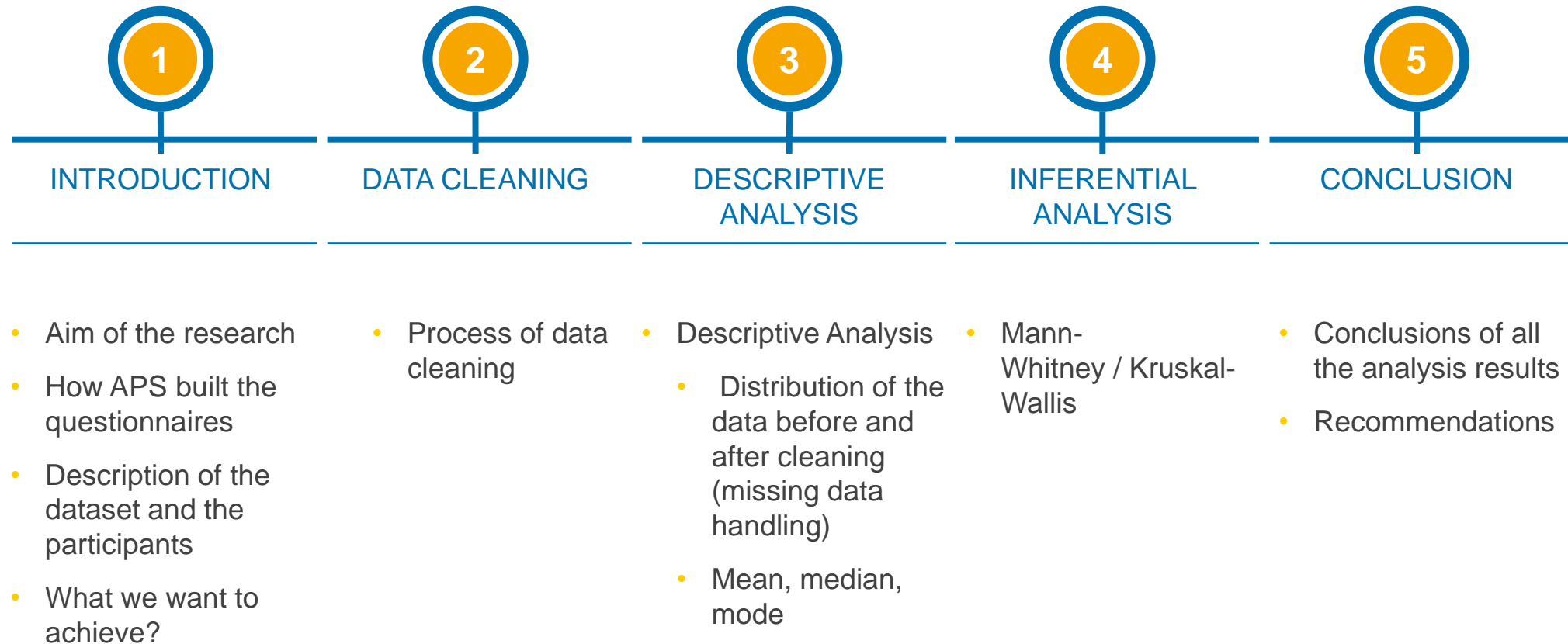
4 years experience in customer management, data analyst aspirant



Lien Pham

17 years of professional experience within data analytics strategy consulting

THE REPORT CONSISTS OF 5 PARTS



BACKGROUND OF THE SURVEY ANALYSIS



APS

- The Australia Public Service Census is a yearly survey used to collect opinions from the Australian Public Service employees regarding different areas of their workspaces. But mainly employee engagement and well-being



SURVEY QUESTIONS

- All respondents are asked a set of questions and the results are used for comparison and benchmark between years.
- These questions are reviewed and updated every year ensuring that all questions meet a required purpose



RESPONDENTS

- All employees of around 100 Public Service Agencies across all of Australia.
- In the last 2020 survey, over 108 thousand employees responded to it. An adherence of almost



APS GOALS

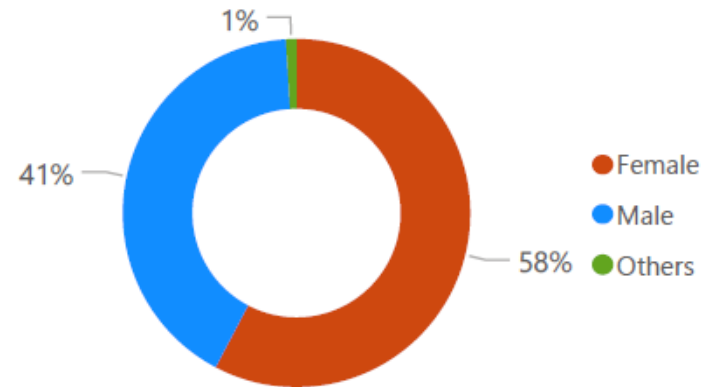
- Increase the inclusion and **diversity rate** is one of the goals of the APS
 - **Natives, people with disability, gender inclusion, sexuality**

EXPECTATION OF THE SURVEY ANALYSIS

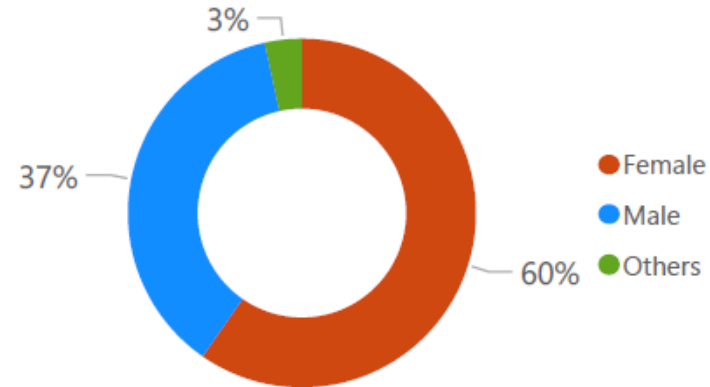
- **Examine the change** in employee satisfaction level from 2014 to 2020
- **Analyze the difference** of level agreement in areas of **well-being, cooperation, leadership, employee commitment among groups (age, gender, minority groups)**
- **Factor analysis:** what factors impact the employee satisfaction & commitment (OUT OF SCOPE)

DESCRIPTIVE ANALYSIS – GENDER GROUP

Gender Response Rate 2014



Gender Response Rate 2020

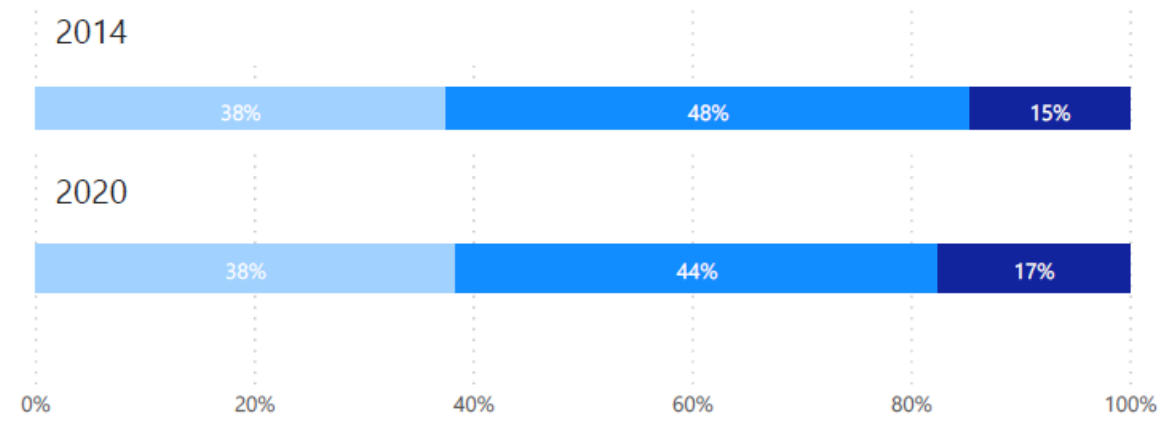


Section	Avg Growth vs 2014	
1. General Impressions: Current Job	↑	5%
2. General Impressions: Immediate Workgroup	↑	5%
3. General Impressions: Senior Executive Service	↑	16%
4. General Impressions: Agency and APS	↑	9%
5. Wellbeing	↑	3%
6. Aps Values and code of conduct	↑	2%

DESCRIPTIVE ANALYSIS – AGE GROUP

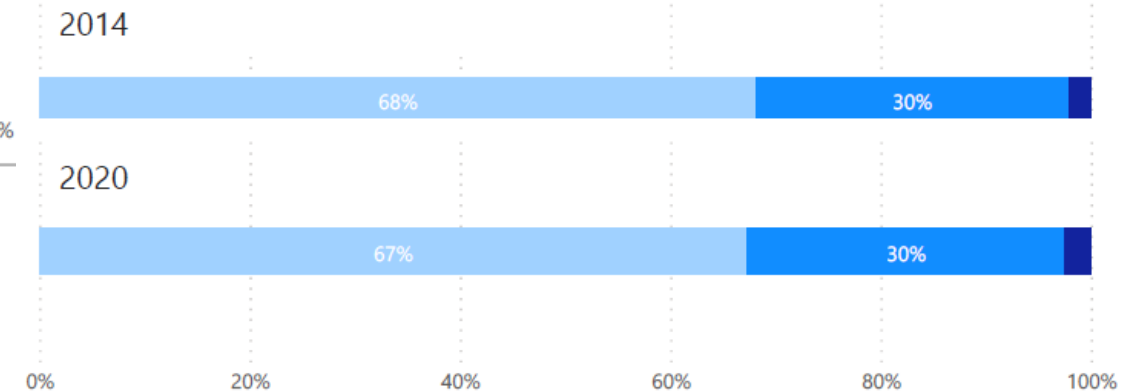
Response Rate by Age

● 1 - "Under 40 years" ● 2 - "40 to 54 years" ● 3 - "55 years or older"



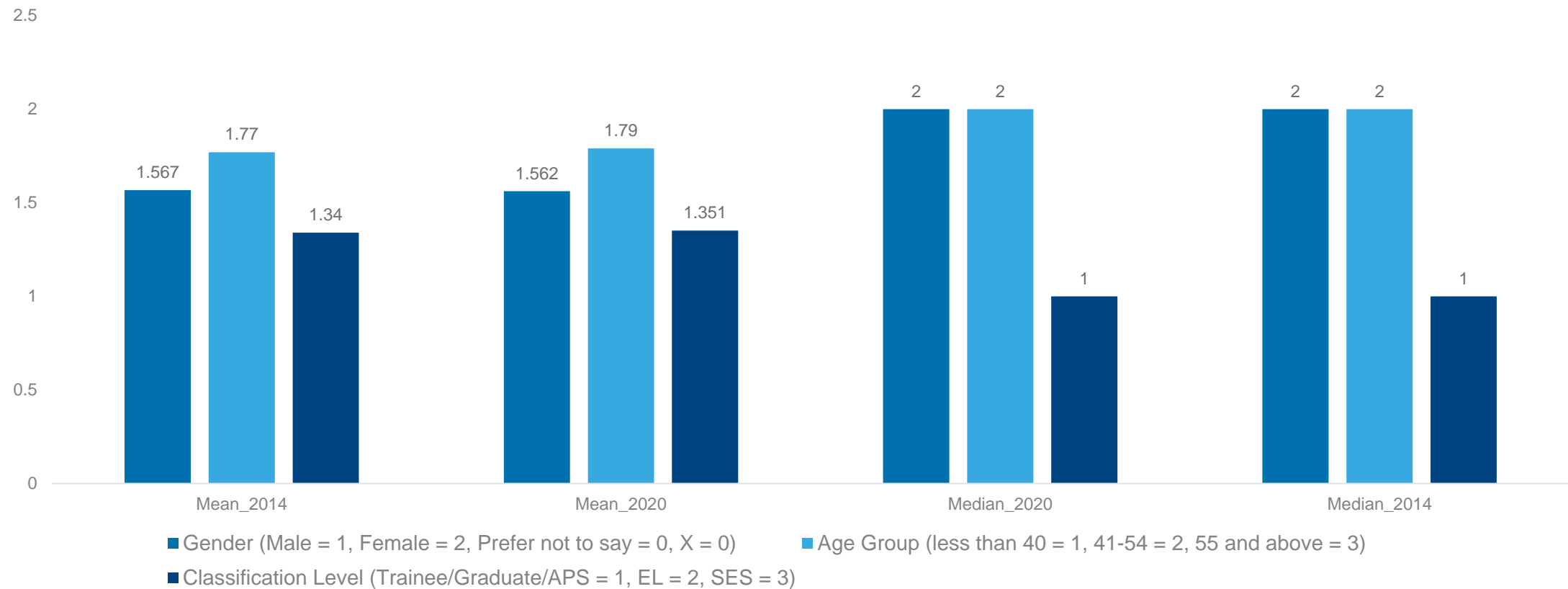
Response Rate by Level

● 1 - "Trainee/Graduate/APS" ● 2 - "EL" ● 3 - "SES"



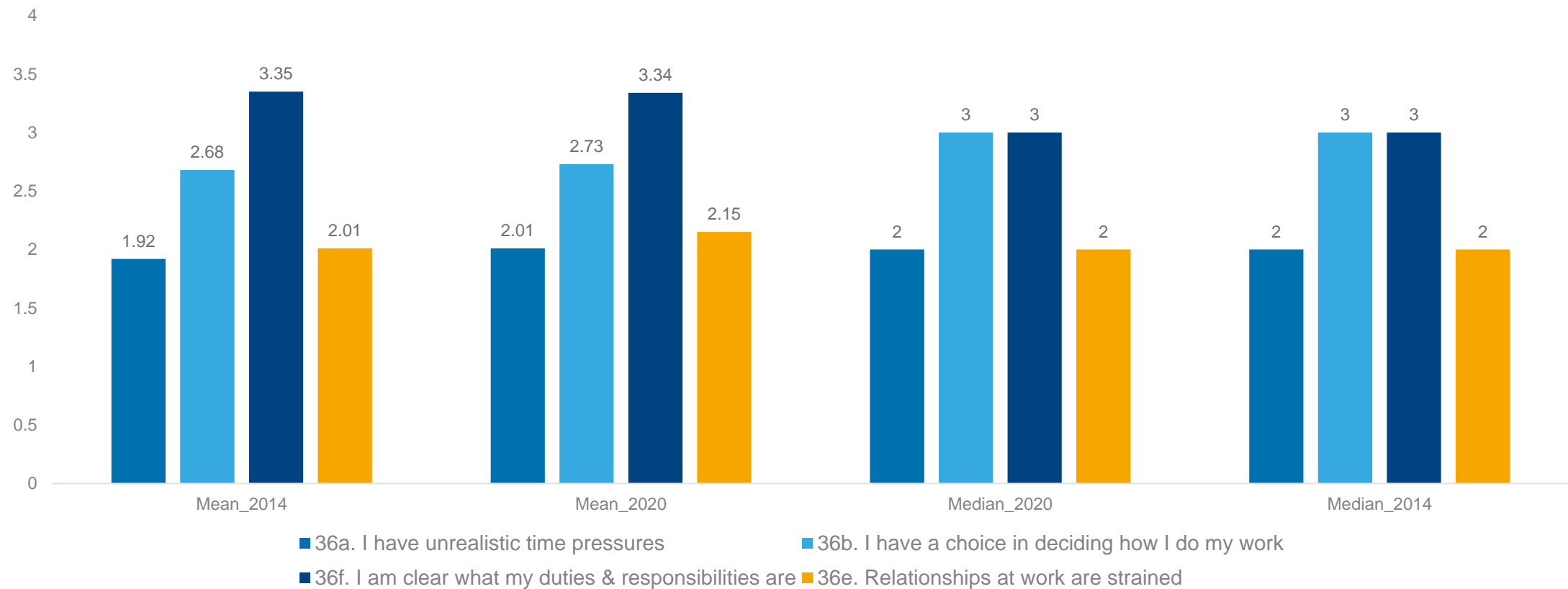
DESCRIPTIVE ANALYSIS - ABOUT YOU

Mean Median Comparison of two years

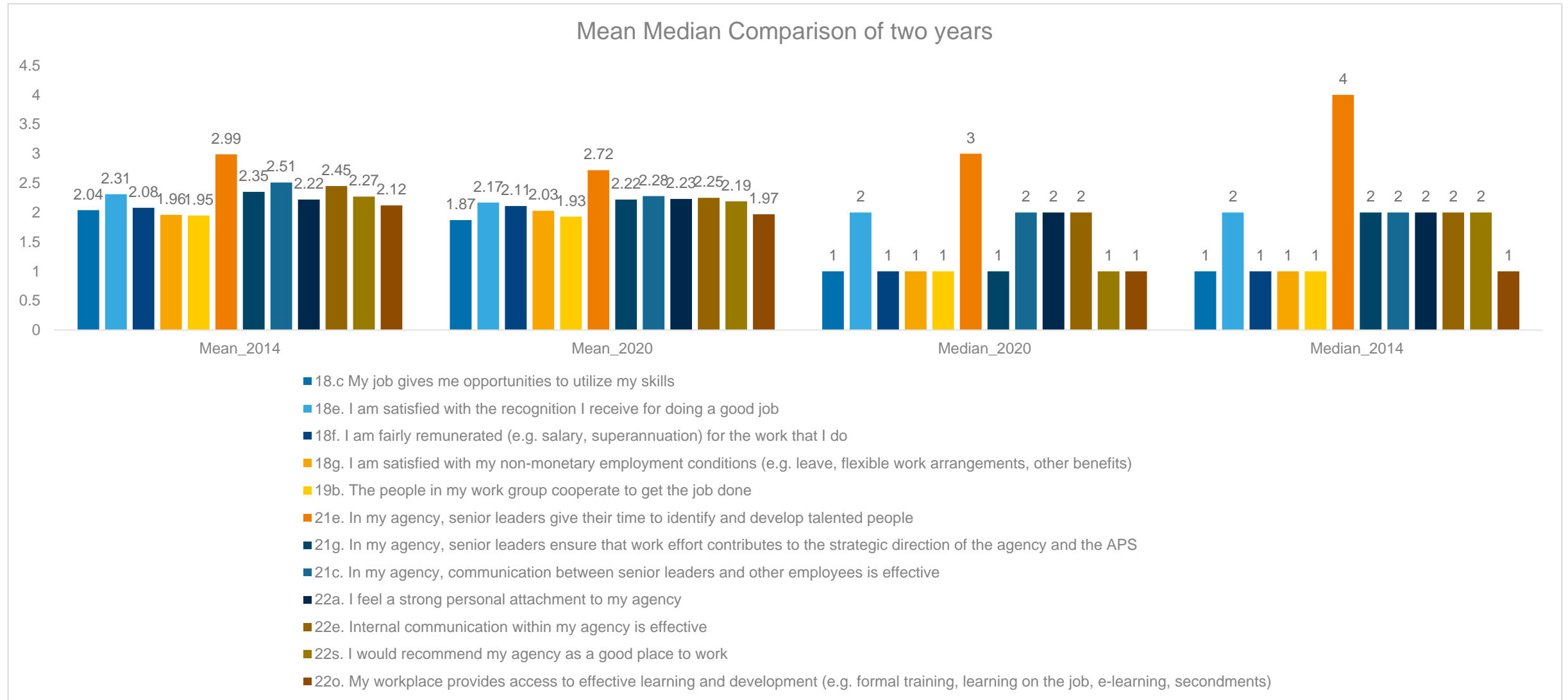


DESCRIPTIVE ANALYSIS - WELL BEING

Mean Median comparison of two years

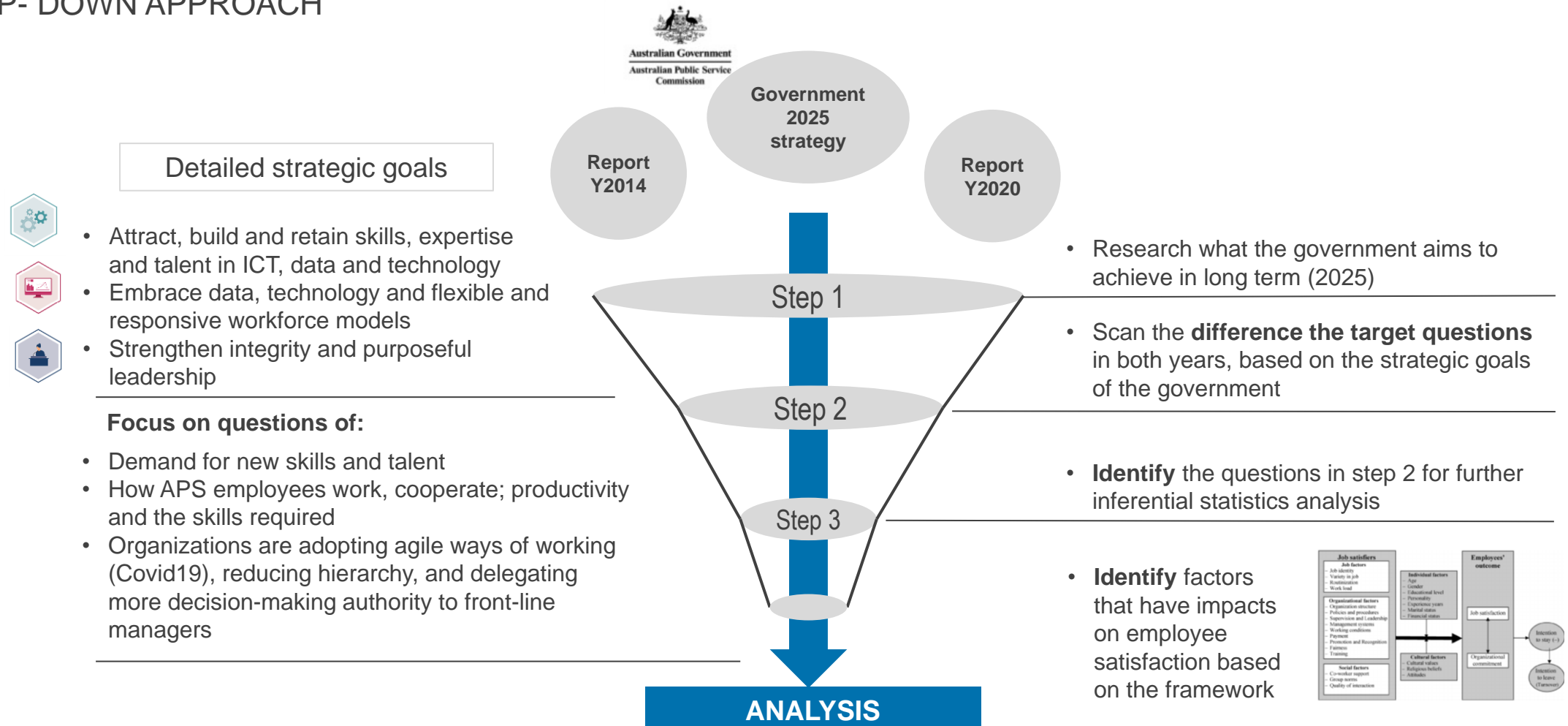


DESCRIPTIVE ANALYSIS



OUR APPROACH FOR ANALYSIS

TOP- DOWN APPROACH



To be positioned for the future we need our workforce to be:

Agile, collaborative, responsive and able to navigate complexity

Skilled, knowledgeable and committed to life-long learning

Maximising data and technology, and digital engagement

Professional, engaged and committed to integrity

Citizen-centred in approach, inclusive and representative of our diverse communities

Our Action Plan – To build towards our vision for the APS workforce we are committed to three areas of action:

QUOTES FROM APS MATERIALS

“

” Strategies to improve diversity in the APS have been developed; the Commonwealth Aboriginal and Torres Strait Islander Workforce Strategy and a new APS Disability Employment Strategy ”

”

” Each year the content of the APS Employee Census questionnaire is reviewed to ensure that each question has value and meets a specific purpose ”

”

“

”A significant restructure of the APS was in place from 1 February 2020, reducing the number of APS departments from 18 to 14, designed to streamline government functions, improve decision-making and deliver better services ”

”

“

” Strategic workforce planning continues and streams of work to develop APS capability, improve performance management and integrity measures, ”

”

QUESTIONS SELECTION OF BOTH YEARS FOR COMPARISON AND ANALYSIS

Y2014		Y2020		NOTE
6	A - About You	5	A - About You	<ul style="list-style-type: none"> What is your current, actual classification level? [This is the classification level you are currently assigned, including temporary assignment and/or acting or higher duties]
18	B - General Impressions: Current Job	17	B - General Impressions: Current Job	<ul style="list-style-type: none"> Please rate your level of agreement with the following statements regarding your current job
19	C - General Impressions: Immediate Workgroup	18	C - General Impressions: Immediate Workgroup	<ul style="list-style-type: none"> Please rate your level of agreement with the following statements regarding your immediate workgroup. [This survey uses immediate workgroup, workgroup and team interchangeably. Your immediate workgroup and/or team are the people you currently work with on a daily basis.]
21	E - General Impressions Senior Leadership	21	E - General Impressions Senior Executive Service	<ul style="list-style-type: none"> The following questions only relate to the leadership practices of your immediate Senior Executive Service (SES) Line/Branch/Group manager or equivalent. Please rate your level of agreement with the following statements regarding your SES manager.
22	F - General Impressions: Agency	23	F - General Impressions: Agency and APS	<ul style="list-style-type: none"> Please rate your level of agreement with the following statements regarding aspects of your agency's working environment
36	I - Wellbeing	47	I - Wellbeing	<ul style="list-style-type: none"> Based on your experience in your current job, please respond to the following statements.
70	P - APS values and code of conduct	63	K - APS values and code of conduct	<ul style="list-style-type: none"> Excluding behaviour reported to you as part of your duties, in the last 12 months have you witnessed another APS employee in your agency engaging in behaviour that you consider may be serious enough to be viewed as corruption?
71	P - APS values and code of conduct	64	K - APS values and code of conduct	<ul style="list-style-type: none"> Which of the following best describes the corrupt behaviors you witnessed?

PROCEDURE OF SELECTING RIGHT INFERENTIAL STATISTICS METHODS

STEP 1: Hypothesis

- Null Hypothesis:
 - There is no difference between 2 groups
- Alternate Hypothesis:
 - There is difference of between groups

- Hypothesis

STEP 2: Assumptions

1. Dependent variable that is measured at the continuous/ordinal level (**Likert**)
2. Independent variable that consists of two categorical, **independent groups**
3. **No relationship** between the observations in **each group** of the independent variable or between the groups themselves
4. **The distribution of scores** for both groups of independent variable have the same shape or a different shape

- Different respondent groups of both years 2014 & 2020
 - Classification level
 - Age
 - Gender

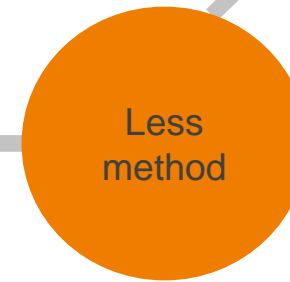
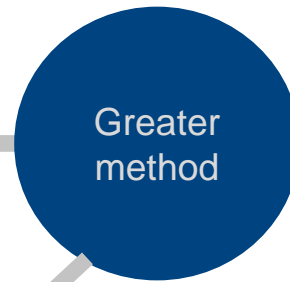
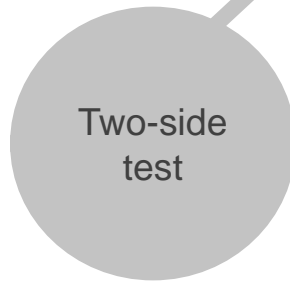
STEP 3: Statistical methods selection

- Mann-Whitney for comparison of the median/mean ranks of 2 groups
- Kruskal-Wallis for comparison of the median/mean ranks of more than 2 groups
- Bootstrap test to compare the median of two or more groups

- Employee satisfaction (well-being supervisors, workgroup, etc)
- Employee engagement
- Employee productivity
- Others

PROCESS TO CONDUCT THE MANN WHITNEY TEST

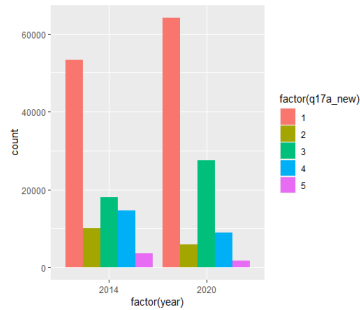
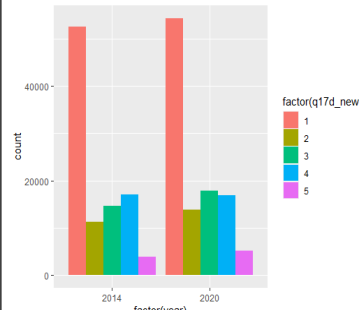
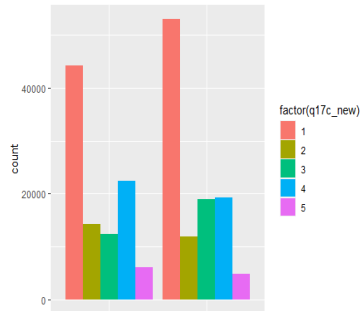
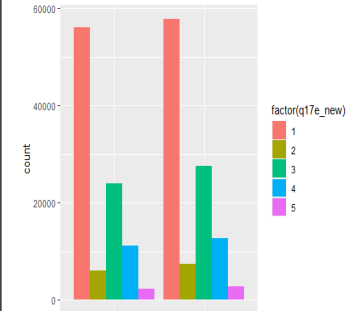
- ▶ If $p\text{value} < 0.05 \rightarrow$ continue with greater method
- ▶ If $p\text{value} > 0.05 \rightarrow$ conclude that no difference between 2 groups



- ▶ If $p\text{value} < 0.05 \rightarrow$ conclude $2014 < 2020$

- ▶ If $p\text{value} < 0.05 \rightarrow$ conclude $2014 > 2020$
- ▶ If $p\text{value} > 0.05 \rightarrow$ continue with 'less' method

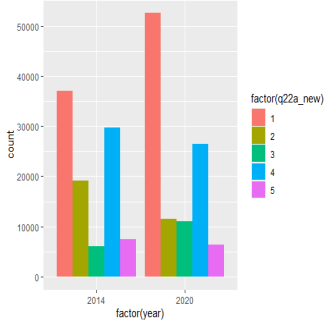
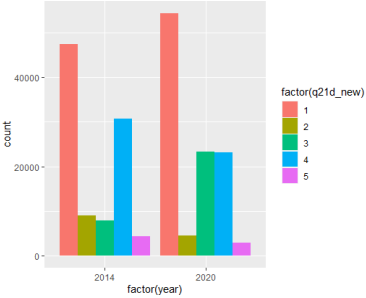
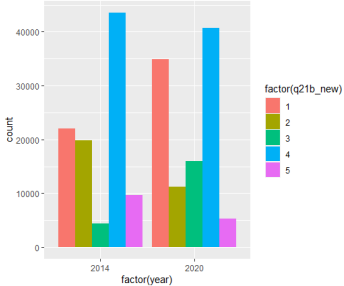
COMPARE MEAN RANKS FOR EMPLOYEE'S JOB SATISFACTION

Questions	Distribution	Mann-Whitney Test	Questions	Distribution	Mann-Whitney Test
A - General Impressions: Current Job Please rate your level of agreement with the following statements regarding your current job					
17a. My job gives me opportunities to utilize my skills		<p>$W = 5274586757$, $p\text{-value} = 6.101e-13$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>	17d. I am fairly remunerated (e.g. salary, superannuation) for the work that I do		<p>$W = 5274586757$, $p\text{-value} = 6.101e-13$ (less method)</p> <p><u>Comment:</u> The mean ranks of agreement about salary of 2014 year is lower than 2020</p>
17c. I am satisfied with the recognition I receive for doing a good job		<p>$W = 5676557937$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>	17e. I am satisfied with my non-monetary employment conditions (e.g. leave, flexible work arrangements, other benefits)		<p>$W = 5215541833$, $p\text{-value} < 2.2e-16$ (less method)</p> <p><u>Comment:</u> The mean ranks of agreement about salary of 2014 year is lower than 2020</p>

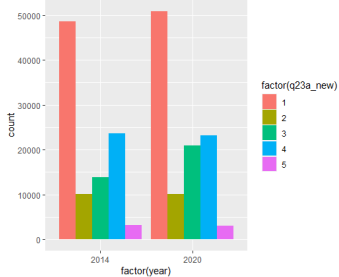
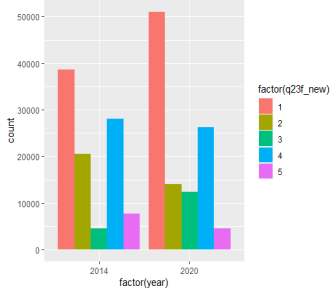
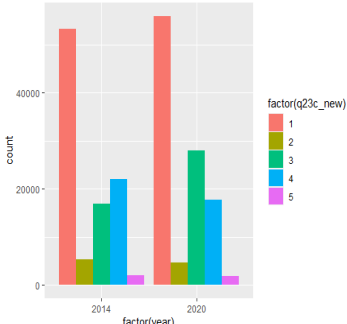
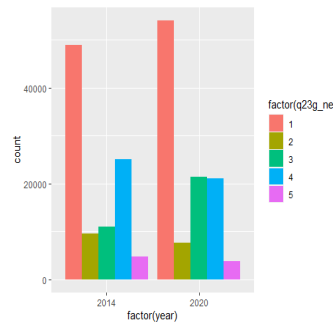
COMPARE MEAN RANKS FOR WORKGROUP AND CAPABILITIES DEVELOPMENT

Questions	Distribution	Mann-Whitney Test	Questions	Distribution	Mann-Whitney Test
C - General Impressions: Immediate Workgroup Please rate your level of agreement with the following statements regarding your immediate work group:			H - Developing Capability		
18b. The people in my workgroup cooperate to get the job done		<p>$W = 5419129865$, $p\text{-value} = 0.0002303$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>	46. I am able to access relevant formal and informal learning and development when and where required		<p>$W = 5705760717$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>

COMPARE MEAN RANKS FOR EMPLOYEE' AGREEMENT ON LEADERSHIP

Questions	Distribution	Mann- Whitney Test	Questions	Distribution	Mann-Whitney Test
E. General Impressions: Senior leadership Please rate your level of agreement with the following statements regarding the SES in your agency					
22a. In my agency, communication between the SES and other employees is effective		<p>$W = 5917915253$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>	21d. My SES manager ensures that work effort contributes to the strategic direction of the agency and the APS		<p>$W = 5700849272$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>
21b. My SES manager gives their time to identify and develop talented people		<p>$W = 6037587466$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>			

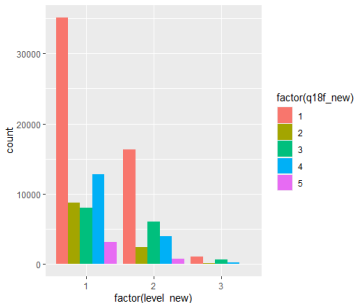
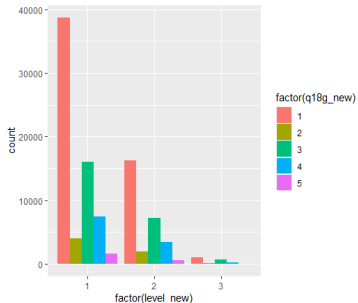
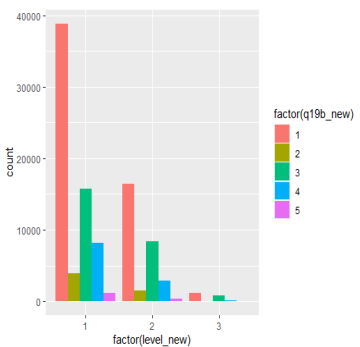
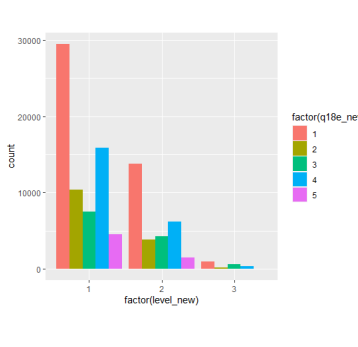
COMPARE MEAN RANKS FOR EMPLOYEE'S ENGAGEMENT & COMMITMENT

Questions	Distribution	Mann-Whitney Test	Questions	Distribution	Mann-Whitney Test
F - General Impressions: Agency and APS 23. Please rate your level of agreement with the following statements regarding aspects of your agency's working environment					
23a. I feel a strong personal attachment to my agency		<p>$W = 5340169424$, $p\text{-value} = 0.01098$ (less method)</p> <p><u>Comment:</u> The mean ranks of 2014 year is lower than 2020</p>	23f. Internal communication within my agency is effective		<p>$W = 5843667560$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>
23c. I am proud to work in my agency		<p>$W = 5410858052$, $p\text{-value} = 0.001891$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>	23g. I would recommend my agency as a good place to work		<p>$W = 5546432751$, $p\text{-value} < 2.2e-16$ (greater method)</p> <p><u>Comment:</u> The mean ranks of 2014 group is higher than 2020</p>

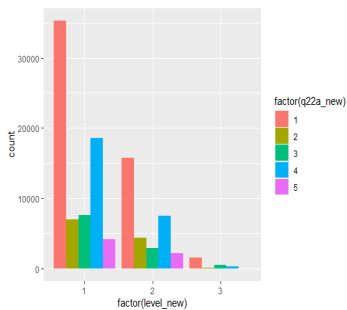
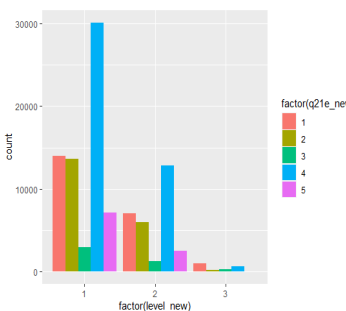
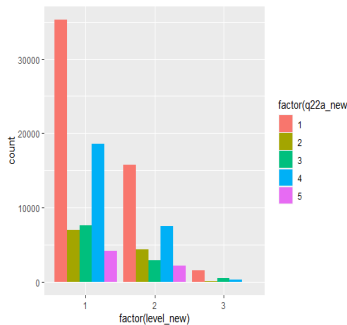
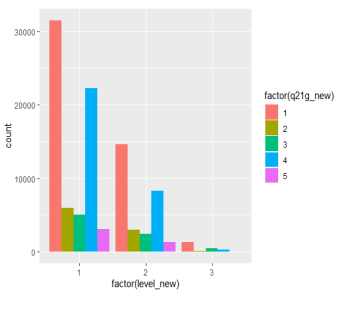
COMPARE MEAN RANKS FOR EMPLOYEE'S WELL-BEING

Questions	Distribution	Mann- Whitney Test	Questions	Distribution	Mann-Whitney Test
<p align="center">I – Wellbeing</p> <p align="center">Based on your experience in your current job, please respond to the following statements.</p>					
47f. Relationships at work are strained		<p>$W = 4961538894$, $p\text{-value} < 2.2e-16$ (less method)</p> <p><u>Comment:</u> The mean ranks of agreement about salary of 2014 year is lower than 2020</p>	47a. I have unrealistic time pressures		<p>$W = 5181920759$, $p\text{-value} < 2.2e-16$ (less method)</p> <p><u>Comment:</u> The mean ranks of agreement about salary of 2014 year is lower than 2020</p>
47e. I am clear what my duties and responsibilities are		<p>$W = 5392460291$, $p\text{-value} = 0.1221$</p> <p><u>Comment:</u> The level of agreement about duties and responsibilities are NO different for 2 groups/years</p>	47b. I have a choice in deciding how I do my work		<p>$W = 5270593894$, $p\text{-value} = 7.015e-14$ (less method)</p> <p><u>Comment:</u> The mean ranks of agreement about salary of 2014 year is lower than 2020</p>

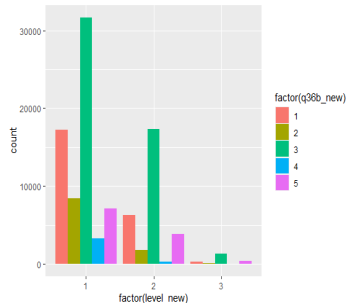
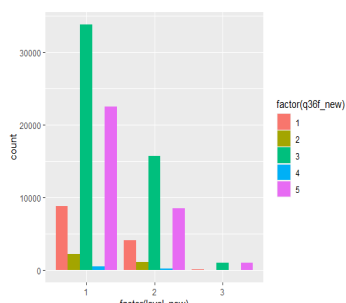
KRUSKAL-WALLIS TEST FOR EMPLOYEE JOB SATISFACTION - 2014

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
A - General Impressions: Current Job – Y2014 Please rate your level of agreement with the following statements regarding your current job					
Level on salary 18f. I am fairly remunerated		Kruskal-Wallis chi-squared = 166.26, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on salary satisfaction	Level on non-salary 18g. I am satisfied with my non-monetary employment		Kruskal-Wallis chi-squared = 41.073, df = 2, p-value = 1.205e-09 <u>Comment:</u> There is difference of agreement level among classification levels on non-salary
Levels on collaboration 19b. The people in my workgroup cooperate to get the job done		Kruskal-Wallis chi-squared = 41.073, df = 2, p-value = 1.205e-09 <u>Comment:</u> There is difference among classification level on collaboration	Level on job recognition 18e. I am satisfied with the recognition I receive for doing a good job		Kruskal-Wallis chi-squared = 119.23, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference of agreement level among classification levels on recognition

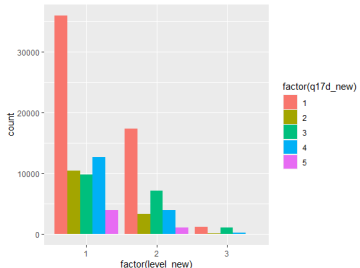
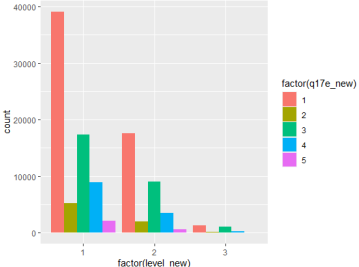
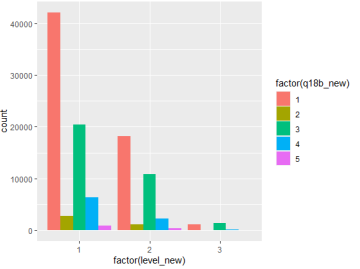
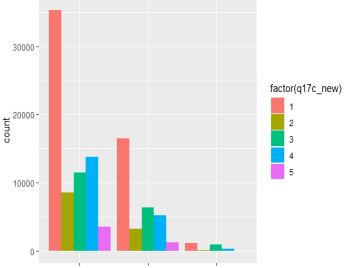
KRUSKAL-WALLIS TEST FOR EMPLOYEE ENGAGEMENT - 2014

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
F - General Impressions: Agency and APS E. General Impressions: Senior leadership					
Level on engagement 22a. I feel a strong personal attachment to my agency		Kruskal-Wallis chi-squared = 200.15, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on engagement	Level on SES talent development 21b. My SES manager gives their time to identify and develop talented people		Kruskal-Wallis chi-squared = 721.81, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference of agreement level among classification levels on SES' talent development
Level on commitment 22s. I would recommend my agency as a good place to work		Kruskal-Wallis chi-squared = 200.15, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on recommendation	Level on SES's strategy direction 21g. My SES manager ensures that work effort contributes to the strategic direction of the agency and the APS		Kruskal-Wallis chi-squared = 400.66, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on collaboration

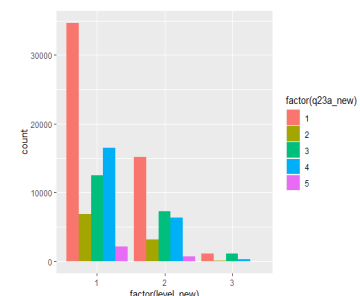
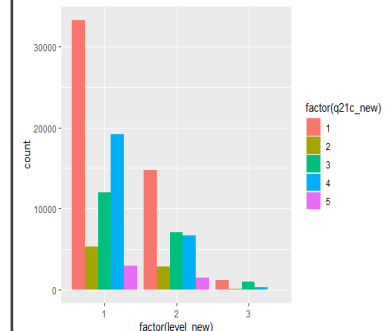
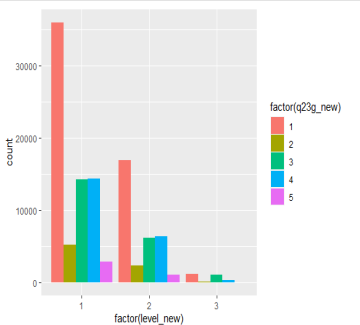
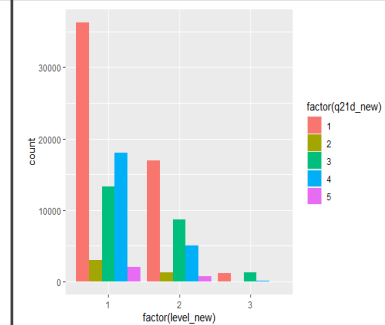
KRUSKAL-WALLIS TEST FOR EMPLOYEE WELLBEING - 2014

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
I – Wellbeing					
Level on work freedom 36b. I have a choice in deciding how I do my work		Kruskal-Wallis chi-squared = 615.13, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on work freedom	Level on duties 36f. I am clear what my duties and responsibilities are		Kruskal-Wallis chi-squared = 462.71, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference of agreement level among classification levels on duties

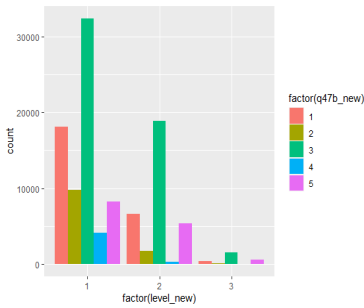
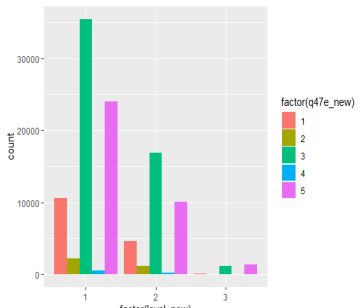
KRUSKAL-WALLIS TEST FOR EMPLOYEE JOB SATISFACTION - 2020

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
A - General Impressions: Current Job – Y2020 Please rate your level of agreement with the following statements regarding your current job					
Level on salary 17d. I am fairly remunerated		Kruskal-Wallis chi-squared = 176.58, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on salary satisfaction	Level on non-salary 17e. I am satisfied with my non-monetary employment		Kruskal-Wallis chi-squared = 29.649, df = 2, p-value = 3.646e-07 <u>Comment:</u> This is difference of agreement level among classification levels on non-salary
Levels on collaboration 18b. The people in my workgroup cooperate to get the job done		Kruskal-Wallis chi-squared = 118.69, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on collaboration	Level on job recognition 17c. I am satisfied with the recognition I receive for doing a good job		Kruskal-Wallis chi-squared = 62.62, df = 2, p-value = 2.525e-14 <u>Comment:</u> There is difference of agreement level among classification levels on recognition

KRUSKAL-WALLIS TEST FOR EMPLOYEE ENGAGEMENT - 2020

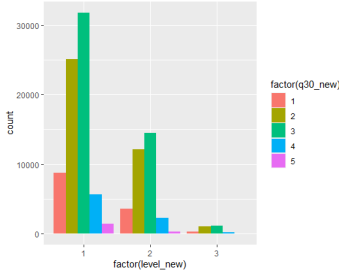
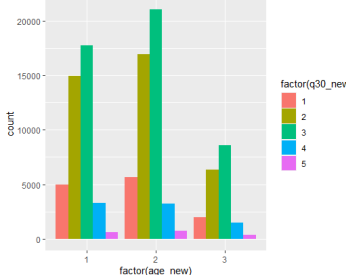
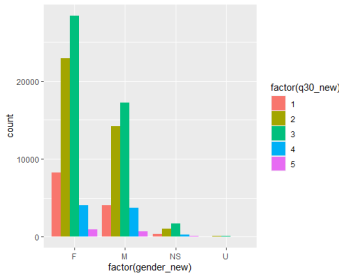
Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
F - General Impressions: Agency and APS E. General Impressions: Senior leadership					
Level on engagement 23a. I feel a strong personal attachment to my agency		Kruskal-Wallis chi-squared = 4.4412, df = 2, p-value = 0.1085 <u>Comment:</u> There is NO difference among classification level on engagement (no evidence to reject Ho)	Level on SES talent development 21b. My SES manager gives their time to identify and develop talented people		Kruskal-Wallis chi-squared = 80.204, df = 2, p-value < 2.2e-16 <u>Comment:</u> This is difference of agreement level among classification levels on SES'talent development
Level on commitment 23g.I would recommend my agency as a good place to work		Kruskal-Wallis chi-squared = 44.191, df = 2, p-value = 2.535e-10 <u>Comment:</u> There is difference among classification level on recommendation	Level on SES's strategy direction 21d. My SES manager ensures that work effort contributes to the strategic direction of the agency and the APS		Kruskal-Wallis chi-squared = 260.01, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on collaboration

KRUSKAL-WALLIS TEST FOR EMPLOYEE WELLBEING - 2020

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
I – Wellbeing					
Level on work freedom 47b. I have a choice in deciding how I do my work		Kruskal-Wallis chi-squared = 1112.1, df = 2, p-value < 2.2e-16 <u>Comment:</u> There is difference among classification level on work freedom	Level on duties 47e. I am clear what my duties and responsibilities are		Kruskal-Wallis chi-squared = 487.94, df = 2, p-value < 2.2e-16 <u>Comment:</u> This is difference of agreement level among classification levels on duties

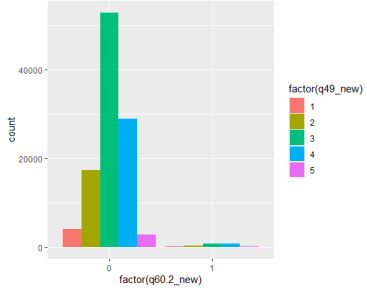
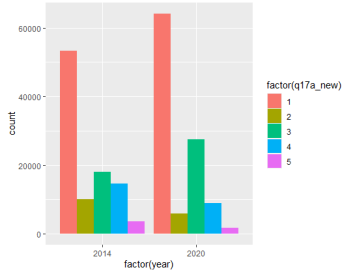
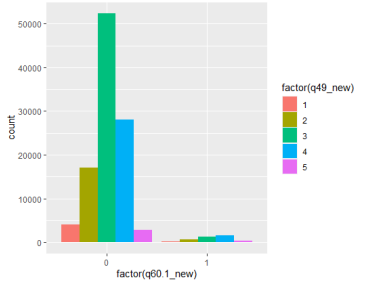
KRUSKAL-WALLIS TEST FOR EMPLOYEE ENGAGEMENT – 2020 COVID 19

AGE, GENDER, CLASSIFICATION LEVELS

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis/Mann-whitney
All questions related to productivity, workload, cooperation during Covid 19					
Level on productivity 30. Has your productivity changed since Covid 19?		Kruskal-Wallis chi-squared = 27.062, df = 2, p-value = 1.329e-06 <u>Comment:</u> This is difference of agreement level among classification levels on productivity	Age on productivity 30. Has your productivity changed since Covid 19?		Kruskal-Wallis chi-squared = 77.841, df = 2, p-value < 2.2e-16 <u>Comment:</u> This is difference of agreement level among age levels
Gender on productivity 30. Has your productivity changed since Covid 19?		Kruskal-Wallis chi-squared = 309.93, df = 3, p-value < 2.2e-16 <u>Comment:</u> This is difference of agreement level among levels on productivity			

KRUSKAL-WALLIS TEST FOR EMPLOYEE ENGAGEMENT – 2020 COVID 19

FOR GROUP OF DISCRIMINATION

Questions	Distribution	Kruskal-Wallis Test	Questions	Distribution	Kruskal-Wallis Test
All questions related to productivity, workload, cooperation during Covid 19 (applied for discriminated groups)					
Discrimination group on wellbeing 60.2. Race discrimination on wellbeing Q49 .Has there been a change in your general health and wellbeing since COVID-19		$W = 112542138$, $p\text{-value} = 4.122e-13$ (less method) <u>Comment:</u> Non-race discriminated people has lower mean ranks than race discriminated one	Discrimination group on productivity 30. Has your productivity changed since Covid 19? 58. You experienced discrimination on the basis of your background or a personal characteristic		$W = 578338637$, $p\text{-value} = 0.7199$ (2-side method) <u>Comment:</u> This is NO difference of agreement level among discrimination group on productivity
Discrimination group on 60.3. Gender discrimination on wellbeing Q49. Has there been a change in your general health and wellbeing since COVID-19		$W = 163062297$, $p\text{-value} < 2.2e-16$ (less method) <u>Comment:</u> Non-gender discriminated people has lower mean ranks than gender discriminated one			

BOOTSTRAP METHOD

METHODS

Using bootstrap to learn something about the medians (and their difference) of two populations

Procedure:

1. Bootstrap each sample separately, creating the sampling distribution for each median (we use 500 samples for each year here)
2. Calculate the difference between the medians, and create the sampling distribution of those differences. This is the sampling distribution we care about.
3. Once we have that distribution we can establish a confidence interval on that, and report the result.
4. If the confidence interval does not include 0, we can reject the null hypothesis that there is no difference between the medians of the two conditions.

In this case, for 500 bootstrap samples, and $\alpha = .05$, the limits are taken to be those values that represent the 2.5th and 97.5th median differences when the data are sorted from low to high.

RESULTS OF BOOTSTRAP VERSUS MANN WHITNEY

- Questions with obtain median difference = 0 or no difference between medians of 2 years
 - Q18c, q18e, q18f, q18g, 19b, q21h
- Questions with obtain median difference = 1 or there is difference between medians of 2 years
 - q21e, q21g

CONCLUSION:

- ▶ There is a huge difference in bootstrap and Mann Whitney methods
- ▶ While Mann Whitney results, there are difference of mean ranks between 2 groups, bootstrap method results is contracting, there is no difference between median for 2 groups (except for q21e, q21g)

CONCLUSION & RECOMMENDATION

KEY FINDINGS

- According to bootstrap method, most of the questions of job satisfaction, commitment, well-being, leadership are not different for both groups/years
- The mean ranks of agreement about salary and non-monetary of 2014 year is lower than 2020
- The mean ranks of 2014 group about job recognition and skill utilization are higher than 2020
- The mean ranks of 2014 year about engagement is lower than 2020
- The mean ranks of agreement about well-being of 2014 year is lower than 2020
- Employees agreement level on duties and responsibilities are not different of 2 groups, that means, during Covid 19, employees are still clear about their duties and responsibilities (q47e)
- For each year, the classification levels on job satisfaction, leadership, wellbeing and cooperation are different (Kruskal Wallis test)

Y2020 – Covid pandemic

- Mean ranks of non-discriminated people is lower than race/gender discriminated people (Y2020)

CONCLUSION & RECOMMENDATION

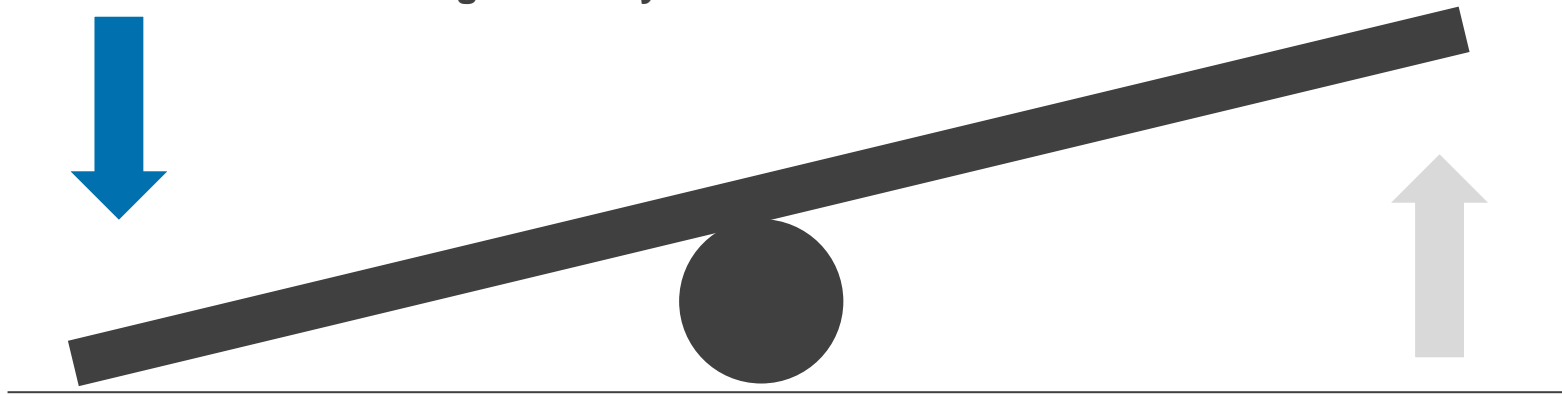
- ▶ The government has shown some success in increasing employee satisfaction level in 2020 that aligns with its strategy in focusing in leadership style
- ▶ The government should focus on increase job satisfaction and skills cultivation
- ▶ The government should focus on vulnerable people
- ▶ To increase the productivity post Covid 19, the government should streamline its businesses and increase employee's internal communication and cooperation

CONCLUSION & RECOMMENDATION

WHAT WE COULD HAVE DONE MORE



- Lack of data on **disability group, minority groups** makes it impossible to analyze and recommend the government on how to **retain talent in this group**
- Lack data on **immediate supervisor**, makes it impossible to measure the impact of line manager on employee satisfaction and **decision making efficiency**



WHAT WE COULD DO MORE

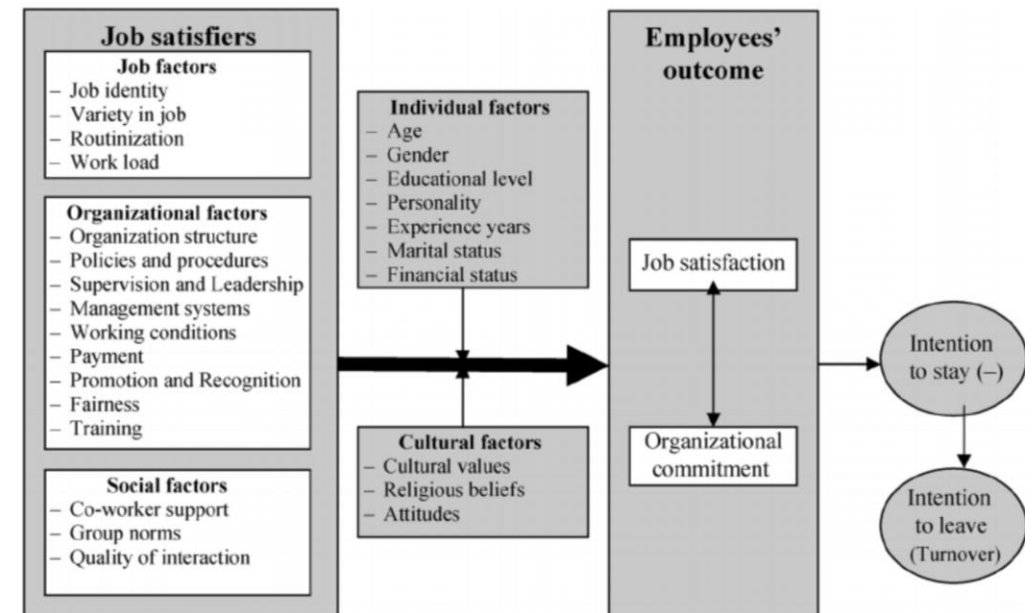
- EFA could be implied to analyze the factors that influence employee satisfaction and engagement

APPENDICES (1)

ARTICLES

- [Delivering for Tomorrow: APS Workforce Strategy 2025 \(apsc.gov.au\)](https://www.apsc.gov.au/sites/default/files/2021-02/aps_state_of_the_service_report_2019-20_0.pdf)
- [APSC - State of the Service Report 2014-15](#)
- [The 2020 APS Employee Census Overall Results | Australian Public Service Commission \(apsc.gov.au\)](#)
- [APS00878 - APS Overall \(apsc.gov.au\)](#)
- 2020 APS employee census explanatory guide
- [*APSC - State of the Service Report 2014-15](#)
- [Workforce data | Australian Public Service Commission \(apsc.gov.au\)](#)
- https://www.apsc.gov.au/sites/default/files/2021-02/aps_state_of_the_service_report_2019-20_0.pdf

FRAMEWORK FOR HYPOTHESIS



APPENDICES (2)

Variable	2014		2020	
	Mean	Median	Mean	Median
Gender (Male = 1, Female = 2, Prefer not to say = 0, X = 0)	1.567 ^a	2.0	1.562 ^a	2.0
Age Group (less than 40 = 1, 41-54 = 2, 55 and above = 3)	1.77	2.0	1.79	2.0
Classification Level (Trainee/Graduate/APS = 1, EL = 2, SES = 3)	1.34	1.0	1.351	1.0

Well-being (Never = 1, Rarely = 2, Sometimes = 3, Often = 4, Always = 5)	2014		2020	
	Mean	Median	Mean	Median
36a. I have unrealistic time pressures	1.92	2.0	2.01	2.0
36b. I have a choice in deciding how I do my work	2.68	3.0	2.73	3.0
36f. I am clear what my duties & responsibilities are	3.35	3.0	3.34	3.0
36e. Relationships at work are strained	2.01	2.0	2.15	2.0

General impressions (Agree = 1, Disagree = 2, Strongly agree = 3, Strongly disagree = 4, Neither agree nor disagree = 5)	2014		2020	
	Mean	Median	Mean	Median
My job gives me opportunities to utilize my skills	2.04	1.0	1.87	1.0
I am satisfied with the recognition I receive for doing a good job	2.31	2.0	2.17	2.0
I am fairly remunerated (e.g. salary, superannuation) for the work that I do	2.08	1.0	2.11	1.0
I am satisfied with my non-monetary employment conditions (e.g. leave, flexible work arrangements, other benefits)	1.96	1.0	2.03	1.0
The people in my work group cooperate to get the job done	1.95	1.0	1.93	1.0
In my agency, senior leaders give their time to identify and develop talented people	2.99	4.0	2.72	3.0
In my agency, senior leaders ensure that work effort contributes to the strategic direction of the agency and the APS	2.35	2.0	2.22	1.0
In my agency, communication between senior leaders and other employees is effective	2.51	2.0	2.28	2.0
22a. I feel a strong personal attachment to my agency	2.22	2.0	2.23	2.0
22e. Internal communication within my agency is effective	2.45	2.0	2.25	2.0
22s. I would recommend my agency as a good place to work	2.27	2.0	2.19	1.0
22o. My workplace provides access to effective learning and development (e.g. formal training, learning on the job, e-learning, secondments)	2.12	1.0	1.97	1.0

APPENDICES (3)

2014 recode	2020 Recode
F- "Female" M- "Male" U- "X (Indeterminate/Intersex/Unspecified)"	F- "Female" M- "Male" U- "X (Indeterminate/Intersex/Unspecified)" NS- "Prefer not to say"
1- "Under 40 years" 2- "40 to 54 years" 3- "55 years or older"	1- "Under 40 years" 2- "40 to 54 years" 3- "55 years or older"
1 "Trainee/Graduate/APS" 2 "EL" 3 "SES"	1 "Trainee/Graduate/APS" 2 "EL" 3 "SES"
1 "Agree" 2 "Disagree" 3 "Strongly agree" 4 "Neither agree nor disagree" 5 "Strongly Disagree"	1 "Agree" 2 "Disagree" 3 "Strongly agree" 4 "Neither agree nor disagree" 5 "Strongly Disagree"
1 "Sometimes" 2 "Rarely" 3 "Often" 4 "Never" 5 "Always"	1 "Sometimes" 2 "Rarely" 3 "Often" 4 "Never" 5 "Always"
1 "Yes" 0 "No" 3 "Not Sure" 4 "Would prefer not to answer"	1 "Yes" 0 "No" 3 "Not Sure" 4 "Would prefer not to answer"
Tick/ticked -1 or else 0	Tick/ticked -1 or else 0