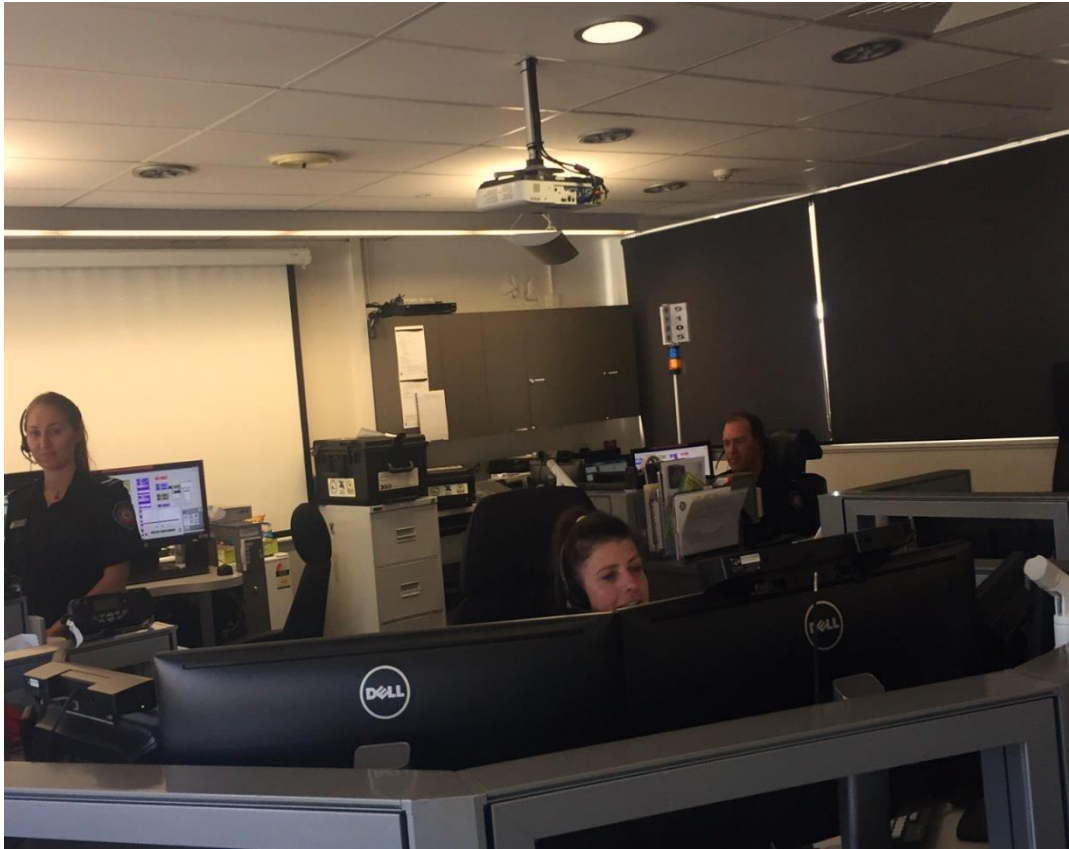# No Ordinary Call

Factors predicting Fire Communication (FireCom) officers job strain & well being

Presented by

Karen Bradley

Queensland Fire & Emergency Services

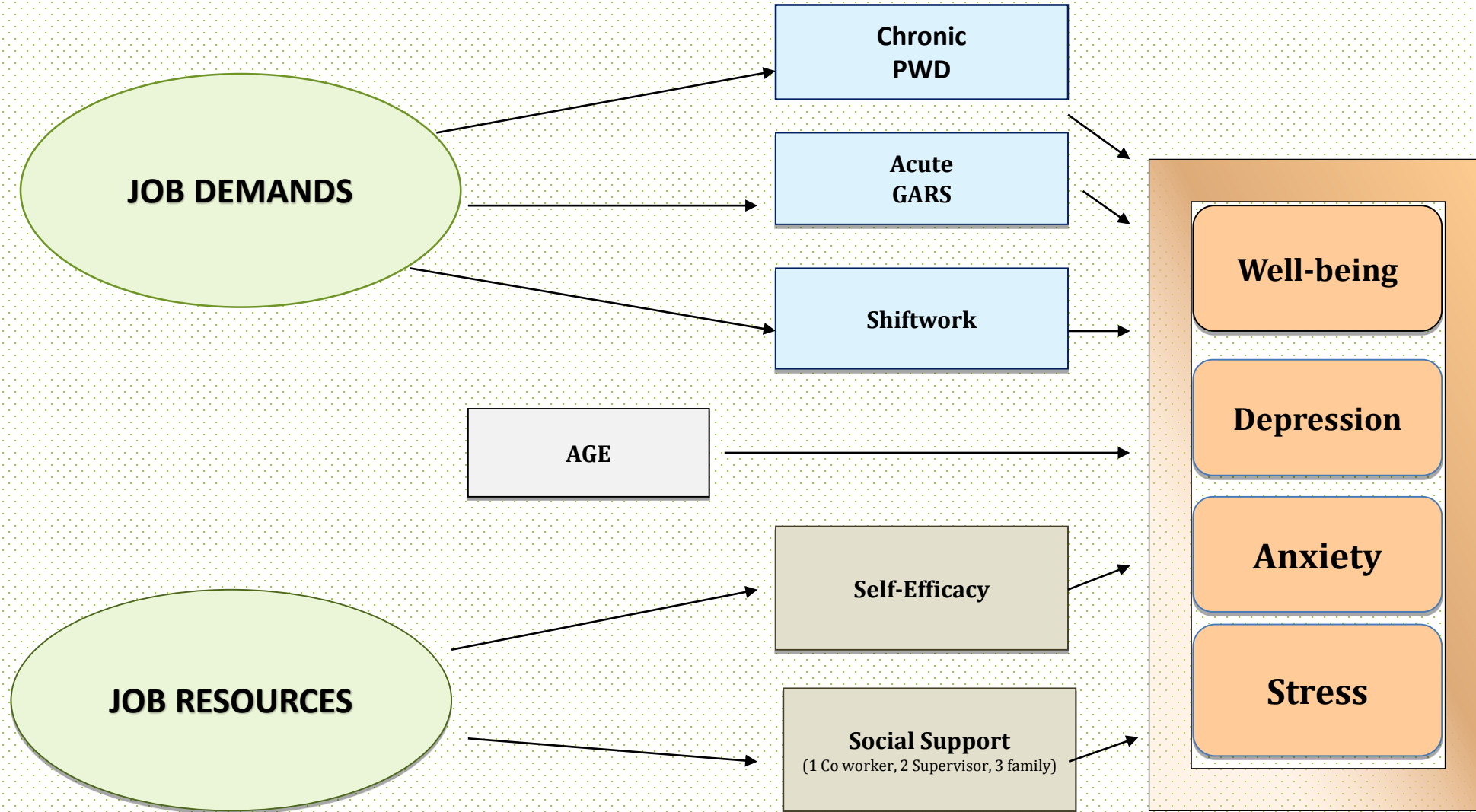# FireCom South Eastern – Southport Fire station

Overview of Research model

Well-being

- **Warwick Edinburg Well-being Scale** (Tennant, et. al., 2007)

- 14 positively worded items.

- E.g. "I've been feeling relaxed"

- Response options – *None of the time; Rarely; Some of the time; Often & All of the time.*

- Over the past 6 months.

Depression, Anxiety & Stress

- **Depression, anxiety & stress scale 21 (DASS; Lovibond & Lovibond, 1995).**
- **Depression scale -** *dysphoria, hopelessness, lack of interest..*
- **Anxiety scale -** *autonomic arousal, situational anxiety…*
- **Stress scale -** *nervous arousal, being easily upset, irritable & impatient…*
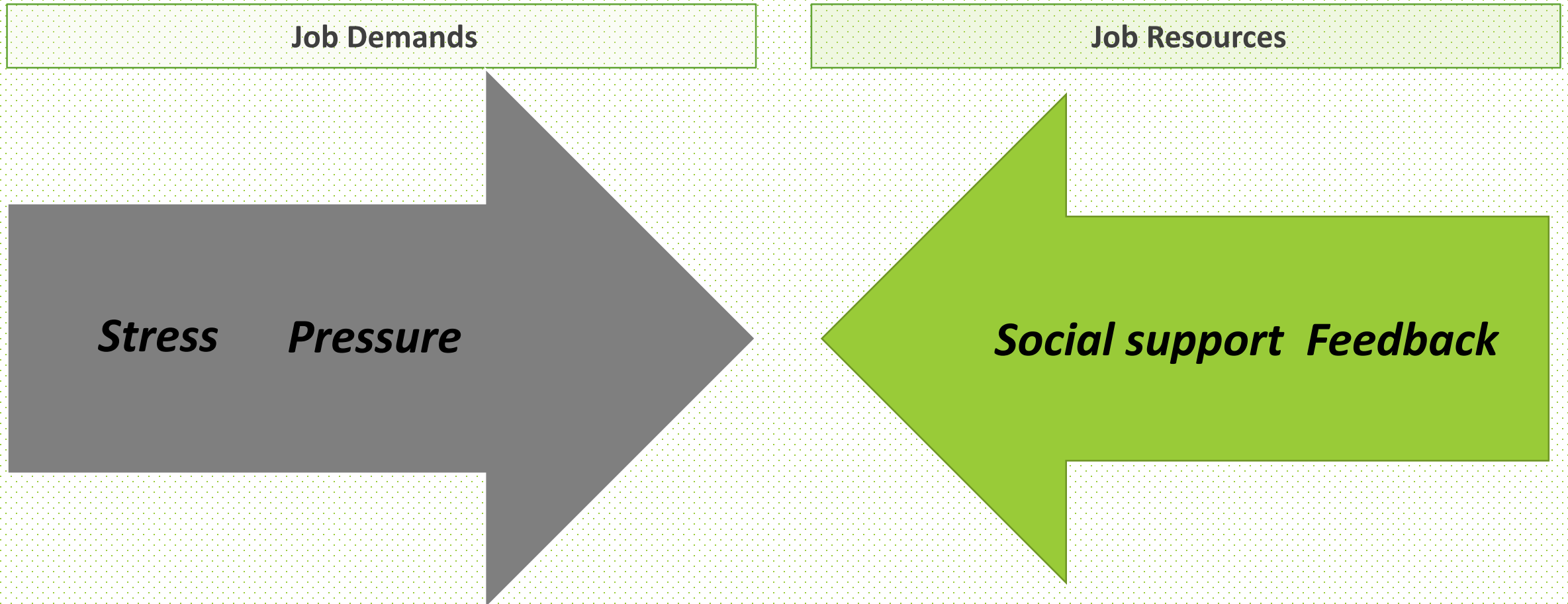- **Over the past 6 months.**

Theoretical Framework – JD-R Model

Job Demands

Job Resources

Stress   Pressure

Social support Feedback

Job Demands

- **Chronic**
  - **Perceived Work Demands Scale (PWD; Boyar, Carr, Mosley & Carson, 2007).**
- **Acute**
  - **Greater Alarm Response System (GARS; QFES, 2016)**
  - **2nd Alarm**

Greater Alarm Response System (GARS)

Incident Type	1st Alarm	2nd Alarm	3rd Alarm
Fire	First Alarm response is as regional mobilisation protocols (2 x pumpers)	4 x Pumper 1 x Control vehicle 1 x Command officer	6 x pumpers 1 x control vehicle 1 x aerial 1 x BA Hazmat 2 x Command officers
Hazmat		3 x Pumpers 1 x BA Hazmat 1 x Control vehicle 1 x Command officer 1 scientific	5 x Pumpers 1 x BA Hazmat 1 x Control vehicle 2 x Command officer 1 scientific

Job Demands – Shift Work

- 4 on / 4 off

- Night shift – 6pm – 8am (14 hours)

- Average over 2 weeks

- < 48hrs in 2 weeks = part time

- >48 hrs in 2 weeks = full time

Job Resources

Social Support

Self-efficacy

Social Support (Caplan et. al., 1980)

Includes subscales:

- ▫ 1. Co-workers

- ▫ 2. Supervisor

- ▫ 3. Spouse & family/friends

The subscales are summed to give overall social support score.

*Additional analysis

The Occupational Self Efficacy Scale (OCCSEFF; Schyns & von Collani, 2002)

- Self Efficacy in the occupational domain.

- 8 items such as "no matter what comes my way in my job, I'm usually able to handle it"

- Responses range from 1 (*not at all*) to 6 (*completely true*).

AGE

Old or Young?

- Over 40

- Under 40

Hypotheses

- **H1. Shiftwork, age and the two types of job demands (acute & Chronic) will negatively predict well-being and positively predict depression, anxiety and stress.**

- **H2. Self-efficacy and social support will positively predict well-being and negatively predict depression, anxiety and stress.**

Regression Analysis

Wellbeing
- Total variance, 32.4%, F (6, 72) = 5.74, $p < .005$
- Age ($β = -.25$, $p = .016$)
- Social support ($β = .43$, $p < .005$)

Depression
- Total variance 29.25, , F (6, 72) = 4.95, $p = .000$.
- GARS ($β = .27$ $p = .015$) and social support ($β = -.47$, $p = .000$)

Anxiety
- Total variance 17.3%, F (6, 72) = 2.50, $p = .029$.
- Job demands ($β = -.24$, $p = .041$)

Stress
- Total variance 29.1%, F (6, 72) = 4.93, $p = .000$
- Job demands ($β = .25$, $p = .020$)
- Social support ($β = -.37$, $p = .003$)

Results

H1. Shiftwork, age and the two types of job demands (acute & Chronic) will negatively predict well-being and positively predict depression, anxiety and stress.

- Higher acute job demands (GARS) was associated with higher levels of anxiety and stress.
- Higher chronic demands (PWD) was a significant predictor of stress.
- Older (>40) reported lower well-being .
- No support for shift work on overall well-being.

H2. Self-efficacy and social support will positively predict well-being and negatively predict depression, anxiety and stress.

- Higher social was associated with higher levels of well-being and lower levels of depression and stress. *Further analysis showed family support to be most important.
- Self efficacy positively predicted well-being.

Bivariate Correlation Table

	Well-Being	Depression	Anxiety	Stress
GARS	-.14	.26*	.20	.26*
PWD	-.01	.16	.27*	.35**
Shiftwork	-.07	.00	.08	.12
Age	-.22*	.21	.24*	.15
Self-efficacy	.26*	.04	.16	.02
Social support	.46**	-.37**	-.09	-.34**

Conclusion

Job Demands

Job Resources

Coffee

Karen.Bradley@qfes.qld.gov.au