

**Counting down the weeks: Attachment, Savouring, Relationship Satisfaction and
Subjective Wellbeing for members of Fly-in Fly-out Relationships**

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Abstract

Research into mental health and wellbeing in the Fly-in Fly-out (FIFO) sector has predominantly focused on demographic and work-related factors, but there is little empirical evidence on individual difference or underlying psychological factors. Furthermore, while the benefits of close relationships to foster psychological and physical wellbeing are well documented, there are few quantitative studies of FIFO relationships. Savouring, the ability to upregulate positive emotions, has been linked to promoting positive affect, relationship quality and buffering negative effects of stress.

The aim of this study is to take a preliminary look at some of the key psychological factors that have been applied in the broader area of long-distance relationship research, to investigate their relevance to FIFO relationships. This study examines six, relational and subjective wellbeing variables, within the guiding theoretical framework of attachment. Furthermore, the study investigates the relationship of savouring to these outcomes, both independently and in relation to attachment-related anxiety and avoidant attachment.

Hierarchical multiple regression analyses showed that attachment-anxiety is strongly associated with all relational and subjective wellbeing outcomes, while avoidant attachment, once attachment-anxiety was accounted for, was only associated with relationship satisfaction and satisfaction with life. Results showed savouring was not associated with relationship satisfaction, after attachment variables were accounted for, but was found to have a significant relationship with loneliness and subjective wellbeing outcomes.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

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Contribution Block

In writing this thesis, my supervisor identified that savouring is an emerging area of research, the benefits of which had been shown for isolated groups dealing with loneliness, relationship satisfaction, and subjective wellbeing. Following a literature search, I identified attachment style and long-distance relationships as an area of interest relating to relationship satisfaction. Having previously worked in the Fly in Fly out sector, I proposed that this would be a particularly unique and interesting group to apply this research to. My supervisor and I collaborated to generate research questions of interest. I conducted the literature search, completed the ethics application, and wrote the qualtrics survey. I was responsible for all participant recruitment and data collection, data analyses and thesis write-up.

Even though, with age, adults develop the ability to gain comfort from internal and symbolic representations of attachment figures, no one is completely free from reliance of actual others.

- John Bowlby, *Attachment*

Chapter 1: Introduction

1.1. Overview

Fly-in fly-out (FIFO) is a prevalent work arrangement in the Australian resource sector, as most mining operations are located in remote parts of the country (Wilson et al., 2020). Despite several perceived benefits of employment in this sector (including higher than average income (ABS, 2020) and large blocks of time off), this unique style of employment exposes the FIFO workforce and their families to a wide range of stressors, with recognised risks for mental health and relational and subjective wellbeing (Meredith et al., 2014; Parker et al., 2018). Research has shown that there are both demographic and work-related factors that can increase the risk of anxiety, depression, relationship strain, loneliness, and maladaptive coping styles (James et al., 2018; Tuck et al., 2013). For FIFO couples, the work schedule produces a regular physical separation and a sense of living in a “bifurcate world” that can create challenges for the worker and their partner (Lester et al., 2016, p. 3620; Parker et al., 2018).

Despite the known challenges faced by FIFO couples, research on FIFO relationships and associated wellbeing outcomes has remained predominantly underdeveloped and atheoretical (House of Representatives Standing Committee Regional Australia, 2013). Given that stable intimate relationships can foster psychological and physical wellbeing (Diamond et al., 2008), it is important that further theoretically based research into this aspect of the FIFO population is conducted.

Broader research on long-distance relationships (LDR) has conceptualised the separation-reunion cycle of long-distance couples from the theoretical perspective of adult attachment (Diamond et al., 2008; Pistole, 2010). Utilising an adult attachment (Ainsworth, 1967; Bowlby, 1969) framework to contextualise FIFO relationships, this study seeks to

examine whether attachment can provide insight into relationship satisfaction and subjective wellbeing outcomes of members of FIFO couples.

An emerging field of research has identified that savouring, the ability to generate, enhance and prolong positive experiences from positive events, “can upregulate positive emotions and influence positive psychological outcomes” (Bryant & Veroff, 2007; Samios & Khatri, 2019, p. 119). As a coping response, savouring has been found to have benefits for emotionally isolated groups, improving relational and subjective wellbeing (Smith & Hollinger-Smith, 2015). Investigating savouring, within the theoretical framework of attachment, may provide a new and broader understanding of the internal resources that members of FIFO relationships could employ to support and promote relationship satisfaction, happiness and satisfaction with life (Lenger & Gordon, 2019). In turn, this may provide a better understanding of the underlying psychological factors that impact FIFO relationships, leading to a more holistic approach to mental health support in the resource sector.

1.2. FIFO Work Model

The FIFO employment model typically means 12-hour day/night shifts, low-autonomy, repetitive work (Bailey-Kruger, 2012; Wilson et al., 2020) and rosters that generally see workers spend half to three quarters of their time on-site, away from their partners, family and social networks (Peetz et al., 2012). International research suggests that working away from the family unit can lead to family identity issues and conflict over work and family roles, and can negatively impact on relationships, all of which can increase stress and other mental health problems, not only for FIFO workers (workers), but also for their partners (Henry et al., 2013; Shrimpton & Storey, 2021).

1.2.1. FIFO Work Model and Subjective Wellbeing

There are few quantitative studies that have specifically assessed subjective wellbeing in the FIFO population. Wellbeing is the experience of physical and mental health, happiness and prosperity and is often assessed in terms of an eudaimonic perspective, which reflects, amongst other things, an individual's view of close relationships or from a hedonic perspective, being an individual's subjective assessment of their feelings and emotions (affect), and cognitive perception of their overall satisfaction with life (i.e. subjective wellbeing).

The potentially detrimental impact of FIFO work on the mental health and wellbeing of workers has been examined largely through qualitative research, which has identified a number of work-related stressors that impact on mental health and wellbeing. Stressors include the trade-off between financial constraints and job satisfaction, difficulties in adjusting between work and home life and common feelings of isolation and loneliness (Gardner et al., 2018; Torkington et al., 2011).

The limited quantitative studies utilising psychometrically valid instruments to assess wellbeing in the FIFO population show mixed results, with some studies finding workers reported stress levels within measure norms (Kirsch et al., 2013), whereas others showed workers experienced mild anxiety and moderate depression (Tuck et al., 2013). One large-scale Australian study, comprising 1124 participants, found 28% of workers had high to very high psychological distress compared to just 10.8% in the general Australian population, and overall had significantly lower levels of emotional wellbeing than the norm group (Parker et al., 2018). These poorer outcomes, in part, are likely to reflect the demographic features of the FIFO workforce (predominantly male, 24 to 45 years, in labour roles), which mirror the features of groups within society found to have an increased risk of mental health issues and suicide (ABS, 2012; Parker et al., 2018).

Mixed findings were also found in the handful of studies investigating partner mental health. FIFO partners were found to be more stressed, depressed or anxious than non-FIFO partners (Dittman et al., 2016), FIFO workers (Clifford, 2009) and Australian normative ranges (Parker et al., 2018), yet Parker et al. (2018) concluded that while partners experienced high levels of psychological distress, they had comparable emotional wellbeing with the norm group. To date, these mixed results have been left largely unexplained.

1.2.2. FIFO work model and relational wellbeing

Relationship satisfaction, defined as a partner's subjective and global evaluation of the positivity of feelings toward one's partner and attraction to the relationship (Funk & Rogge, 2007), is considered to be one of the strongest predictors of both relationship stability and individual psychophysical health and subjective wellbeing (Raffagnino & Matera, 2015). Research has challenged assumptions regarding FIFO and LDR relationships, with some studies indicating divorce rates and satisfaction levels that are comparable to the general population (Diamond, 2019; Dittman et al., 2016). In contrast, Gent (2004) found lower overall relationship satisfaction than scale norms. Similar inconsistencies concerning relationship satisfaction and stability have been seen in the broader LDR literature (Dargie et al., 2015)

Loneliness is the cognitive experience resulting from a discrepancy between one's desired and actual level of social interaction (Perlman et al., 1984). It can be an unpleasant and distressing emotional experience that can vary in frequency and intensity and may be due to an absence of attachment and close romantic relationships (Knoke et al., 2010). Loneliness has been consistently found to be associated with depression, decreased sleep efficiency (Wilson et al., 2020), reduced life satisfaction as well as objective health risk factors (Knoke et al., 2010; Russell et al., 1980).

Qualitative studies highlight that both FIFO workers and partners report feeling isolated and lonely (Shrimpton & Storey, 2021; Torkington et al., 2011). As with wellbeing, there are few quantitative studies investigating loneliness in the FIFO population. Tuck et al. (2013) found 43.4% of workers reported moderate loneliness, and that high loneliness and low social satisfaction and relatedness was strongly associated with psychological distress. A recent study of FIFO partners by Wilson et al. (2020) found 84% of participants experienced moderate to extreme loneliness when their partner was away, compared to 56% when the partner was at home.

The paucity of studies into FIFO couples means that there is little conclusive evidence to draw on, to evaluate the impact of the FIFO lifestyle on relational wellbeing, identifying a significant gap in the FIFO literature, which calls for further theoretically based research.

1.3. Adult Attachment

Attachment theory (Ainsworth, 1967; Bowlby, 1969) is a leading theoretical approach used to interpret interpersonal behaviour and the quality of close relationships (Mikulincer & Shaver, 2007). Individual differences in self-concept and attachment style provides a useful tool to predict the impact of planned relational separations in LDRs (Borelli et al., 2014) and to explain the adaptive or maladaptive strategies employed by partners to restore proximity and maintain relationship quality.

Adult attachment reflects the quality of early childhood relationships and experiences, which shape an individual's cognitive affect schema, or internal "working model" (IWM) about close relationships (Bowlby, 1982). A secure IWM develops when an infant learns that their attachment needs will be met when their primary carer is consistently and sensitively responsive to distress cues (Mikulincer & Shaver, 2007). Infants whose cues are met in an inconsistent way develop a sense that their need for "other" will be rejected, and form an insecure IWM (Mikulincer & Shaver, 2007). These insecure schemas reflect a child's

perceived low sense of self-worth (self) and, or, a sense of distrust or fear of closeness and availability of attachment figures (others) (Bowlby, 1982). Based on the IWMs of self and others, attachment is conceived along two dimensions, attachment-related anxiety and avoidance. Based on the continuous nature of these two dimensions, attachment orientations are modelled on the level of degrees on each variable, rather than a categorical classification on the basis of participants scores (Roisman et al., 2007).

Secure attachment orientations reflect a low anxious and low avoidant attachment, and characterised by individuals who have positive IWMs of self and other (Griffin & Bartholomew, 1994). Individuals who have a secure attachment orientation can deal with stressors and threats in a constructive way and can trust in and accept comfort and support from others (Nielsen et al., 2017). Insecure attachment orientations reflect a high level on one or both the attachment dimensions, with each characterised by distinct prototypic capacities and strategies that drive an individual's cognitive responses and behaviour (Mikulincer et al., 2002).

An anxious attachment style is characterised by low self-worth, fear of rejection and yet a positive view of others, and reflects high attachment-related anxiety and low avoidant (Griffin & Bartholomew, 1994). These individuals use hyperactivating strategies, such as exaggerating needs and vulnerability, or excessive pleasing or closeness, to gain security and validate their self-worth (Mikulincer & Shaver, 2005).

An avoidant attachment style reflects low anxious and high avoidant attachment orientations and relates to a positive or defensive overinflated IWM of self (Mikulincer & Shaver, 2007) and a negative model of others (Griffin & Bartholomew, 1994). To maintain a high sense of self-worth, individuals will deny the value of close relationships and stress the importance of independence (Griffin & Bartholomew, 1994).

A fearful attachment orientation, is characterised by low self-worth and a negative view of others, reflects high levels of both attachment-anxiety and avoidant attachment dimensions (Griffin & Bartholomew, 1994). Individuals with fearful attachment look to others to give them validation to counter low self-worth, but at the same time turn away from forms of intimacy to avoid pain and rejection (Mikulincer & Shaver, 2007).

1.3.1. Attachment, Long-distance Relationship Satisfaction, and Loneliness

An individual's IWMs extend across their lifespan and are drawn upon during adult social interactions and romantic relationships. In adult relationships, the role of an attachment figure is a reciprocal one, where each partner coordinates and adjusts behaviour to meet the attachment cues of the other (Pistole, 2010). Without the reciprocity of the adult attachment bond, the members of the relationship are at risk of feeling isolated, with negative affect and low relationship satisfaction (Pistole, 2010).

Research has demonstrated that romantic relationship quality for individuals characterised by secure attachment is greater than for those with insecure attachment orientations (Hazan & Shaver, 1987), and that securely attached individuals are typically comfortable in expressing distress and seeking proximity (Mikulincer & Shaver, 2005). For proximity to be achieved the partner needs to be responsive (Lee & Pistole, 2012), and in such cases both partners are more likely to perceive and trust that their intimacy is adequately reciprocated (Hadden et al., 2014).

Lee and Pistole (2012) demonstrated that insecure attachment reduces relationship satisfaction, and that the effect is greater for those in long distance relationships. The hyperactivated vigilant state of individuals characterised by attachment-anxiety makes them vulnerable during separations such as long distance relationships (Lee & Pistole, 2012), and exacerbates relational behaviours and negative cognitions about self (Pistole, 2010).

Geographical separation means that increased proximity monitoring and rumination on responsiveness cannot be relieved through daily physical contact (Mikulincer et al., 2002).

Borelli et al. (2014) proposed that insecurely attached LDR partners who have high avoidant attachment may be at greatest risk of negative outcomes from separations.

Conversely, Lee and Pistole (2012) proposed that those with an avoidant attachment style may, in part, enjoy the self-reliance of separation within their relationship, which inadvertently may promote positive affect, and downplay negative thoughts of their relationship.

These underlying principles of attachment provide insight into the variations in findings within the FIFO research. For example, based on attachment style, couples who have a secure bond may have higher relationship satisfaction, but separation, for all attachment orientations, may still activate feelings of stress, negative affect and loneliness, until proximity and their secure base is restored (Diamond et al., 2008; Mikulincer & Shaver, 2003).

Loneliness, from an attachment perspective, is a “preeminent separation protest signal” of secure and insecure attachment styles, that reflects the discrepancy between the perceived and desired level of proximity and responsiveness of attachment figures (Pistole, 2010, p. 117). Research has shown that insecure attachment orientations are one of the primary predictors of loneliness (Akdoğan, 2017) with secure attachment associated with lower levels of loneliness (Bernardon et al., 2011).

1.3.2. Attachment and Subjective Wellbeing

Studies support the view that attachment orientations broadly influence individual experiences of positive and negative affect (Mikulincer & Shaver, 2007). According to attachment theory (Ainsworth, 1967; Bowlby, 1969), positive (e.g. joy, happiness, contentment) and negative (sadness, loneliness, anger) emotions are normative responses to

proximity related activation and deactivation of the attachment system (Mikulincer & Shaver, 2007; Pistole, 2010). Secure attachment has been associated with greater intensity and frequency of positive affect than insecure attachment (Torquati & Raffaelli, 2004). Individuals characterised by insecure attachment experience more extreme negative affect and exhibit a narrower range of emotions, which is consistent with hyperactivating or deactivation strategies related to their attachment style (Torquati & Raffaelli, 2004). Empirical evidence also suggests that securely attached individuals report higher life satisfaction while those with anxious or avoidant attachment styles report lower levels of life satisfaction (Koohsar & Bonab, 2011).

1.4. Savouring

Savouring (Bryant, 2003) is the ability to attend to, intensify and prolong positive feelings by bringing one's awareness to, and appreciating, positive experiences (Smith & Bryant, 2016). Positive feelings can be drawn from current experiences (savouring the moment), past experiences (reminiscence) or through the anticipation of future events (anticipation), however, the upregulation of positive feeling (savouring) is generated "in the moment" (Bryant & Veroff, 2007, p. 4). It has been proposed that cultivating one's capacity to savour has a protective effect on psychological adjustment, and can help to alleviate effects of stress (Samios & Khatri, 2019).

Savouring has been shown to behave as an emotion regulation tool that promotes wellbeing and reduces symptoms of distress, including negative mood and depression (Hurley & Kwon, 2012). Savouring promotes subjective wellbeing (Bryant & Veroff, 2007; Philip, 2016) by providing an uplift in positive affect (Hurley & Kwon, 2013) and the dampening of negative affect, and increasing life satisfaction (Hurley & Kwon, 2012; Quoidbach et al., 2010).

Research to date suggests that there are individual differences in the capacity to savour, with women generally exhibiting greater ability to savour than men (Bryant, 2003; Samios & Khatri, 2019). This may be an important factor to consider when investigating populations with a predominantly dominant gender demographic, like FIFO workers, or their partners.

1.4.1. Savouring, Relationship Satisfaction and Loneliness

Until recently relationship science has focused on mitigating negative processes and factors that were detrimental to relationship satisfaction (Lenger & Gordon, 2019). Positive relationship science has started to identify the relevance of positive processes, such as savouring, as a way of promoting relational outcomes (Bryant & Veroff, 2007).

Emerging studies have shown that savouring can benefit relationship satisfaction during times of stress (Samios & Khatri, 2019). Additionally, Lenger and Gordon (2019) found that the component of savouring most relevant to relationship satisfaction was savouring through anticipation. To date savouring hasn't been investigated in FIFO couples, however a theme identified in qualitative studies indicated that planning and anticipating activities with partners for upcoming breaks, was a way to overcome negative feelings and loneliness (Gardner et al., 2018). This suggests prospective savouring could be a coping mechanism employed by FIFO couples, potentially to buffer loneliness. While research into the association between savouring and loneliness is limited, Smith et al. (2019) has demonstrated a link between the two constructs.

1.5. Savouring and Attachment

Correlational research has found an association between attachment styles and savouring, with insecurely attached individuals reporting lower savouring capacity (Goodall, 2015). However, the underlying mechanisms are not well understood. It is proposed that the tendency for individuals with an anxious attachment style to interpret social interactions as

threatening, and their heightened focus on potential threats, may detract from their ability to savour and positive experiences (Palmer & Gentzler, 2018). However, some studies have shown that some coping strategies of anxious and avoidant attachment styles may inadvertently generate a savouring response. For example avoidant strategies of down-regulating negative feelings may unintentionally shift the focus onto positive feelings, and anxiously attached may promote positive experiences in a bid to connect with an attachment figure (Palmer & Gentzler, 2018). Further research is required to better understand the relationship between attachment and savouring.

1.6. Current Study

1.6.1. Justification

Existing research into FIFO workers and partners has clearly shown that this model of employment comes with a range of recognised risks for mental health and relational and subjective wellbeing (Parker et al., 2018). While research has shown the significant benefits of relationships for both physical and mental health outcomes (Pietromonaco & Collins, 2017), very few relational studies have been conducted in the FIFO population, leaving a significant knowledge gap as to how FIFO couples draw on their relationship for support. In addition, while qualitative studies in the FIFO sector commonly find loneliness as an issue identified by workers and partners (Torkington et al., 2011; Voysey, 2012), there is limited quantitative data to support this finding.

To date, support strategies and interventions within the FIFO sector have focused on improving organisational culture and work conditions, but mental health issues continue to be raised as a challenge faced (Henry et al., 2013). It is therefore important to identify other factors that may be impacting wellbeing outcomes (Parker et al., 2018), such as internal psychological characteristics.

From the broader area of long-distance relational science, attachment is considered a key construct to understanding relationship wellbeing, and individual differences in attachment are considered closely related to subjective wellbeing and loneliness (Heffernan et al., 2012). While attachment theory has been applied in relational studies regarding military deployment and other long-distance relationships (Borelli et al., 2014), this theoretical framework has not been utilised in research relating to FIFO couples.

Furthermore, while improvements to site and communication facilities have generated better outcomes for the FIFO community, there is still limited focus on addressing the internal resources that members of FIFO relationships could employ to support and promote wellbeing (Lenger & Gordon, 2019). The area of positive psychology, and in particular savouring, as a potential internal resource to improve positive affect and wellbeing (Bryant & Veroff, 2007), could provide additional information support services that could be integrated into educational and support strategies, to assist FIFO couples who are dealing with FIFO related stressors.

1.6.2. Study Direction

This study will be one of the first to investigate individual differences in attachment, savouring and relationship satisfaction in FIFO couples, and provide a ‘first pass look’ at how these factors are interrelated and associated with subjective wellbeing. Furthermore, within an attachment framework, the study will investigate to what extent, if any, savouring contributes to relational and subjective wellbeing outcomes, which may provide insight into the value of savouring as an internal resource and coping mechanism.

1.7. Aims and Hypotheses

This study aims to determine whether attachment and savouring are associated with the relational and subjective wellbeing, for members of FIFO relationships. In addition, the

study aims to determine to what extent savouring contributes to these outcomes once the influence of attachment is accounted for.

The following hypotheses were tested:

- 1a. Insecure attachment styles (anxious and avoidant) are negatively associated with relationship satisfaction, positive affect and satisfaction with life.
- 1b. Insecure attachment styles (anxious and avoidant) are positively associated with negative affect and loneliness.
- 2a. Savouring is positively associated with relationship satisfaction, positive affect and satisfaction with life.
- 2b. Savouring is negatively associated with loneliness and negative affect.
3. Savouring will contribute a significant amount of additional change to relational and subjective wellbeing outcomes after:
 - a. the variance of attachment-related anxiety is accounted for.
 - b. the variance of avoidant attachment is accounted for.
 - c. the combined variance of anxious and avoidant attachment is accounted for.

Chapter 2: METHOD

2.1. Participants

A total of 165 participants were recruited from the Australian resource sector. Participants were required to be over 18 years, in a cohabiting, romantic relationship of a minimum of 6 months duration, and with one person in the relationship working in the resource sector on a FIFO basis. Participants were removed if they did not meet this inclusion criteria (n=1), completed only demographic information, or completed 3 or less of the 6 measures in the survey (n=21). After screening, a total of 143 participants were included of which 112 were partners of FIFO workers and 31 were FIFO workers. Table 1a. and 1b. provides full details of participant demographics and FIFO employment arrangements.

Table 1a.

Characteristics of participants (N = 143) including age, gender, highest level of education, self-reported health status, and first language.

	N (%) ^a			
	Partners (n = 112)		FIFO Workers (n = 31)	
Age, Mean (SD)	37	(8.78)	39	(10.71)
Gender		(69)	31	(34)
Female	110	(98)	13	(42)
Male	1	(1)	17	(55)
Undisclosed	1	(1)	1	(3)
Relationship Status				
Married/De-Facto	95	(85)	26	(84)
Engaged	10	(9)	2	(7)
Dating	7	(6)	3	(10)
Relationship Length				
6 months - 1 year	3	(2.7)	4	(12.9)
2 - 5 years	19	(17)	6	(19.4)
6 - 10 years	21	(18.8)	5	(16.1)

11 - 15 years	30	(26.8)	7	(22.6)
16 - 20 years	18	(16.1)	3	(9.7)
20+ years	21	(18.8)	6	(19.4)
Children, Yes	82	(73.2)	12	(38.7)
Highest level of education				
School Education	19	(17)	2	(6.4)
TAFE/Certificate/Diploma	41	(36.6)	7	(22.6)
University degree	33	(29.5)	7	(22.6)
Postgraduate qualification	19	(17)	15	(48.4)
State of Family Residence ^b				
ACT	6	(5.4)	0	(0)
NSW	7	(6.3)	2	(1.8)
NT	1	(0.09)	1	(0.9)
QLD	27	(24.1)	6	(5.4)
SA	30	(26.8)	7	(6.3)
TAS	4	(3.6)	2	(1.8)
VIC	7	(6.3)	0	(0)
WA	32	(28.6)	9	(8.0)
Overseas	7	(6.3)	4	(3.6)

^a Values are expressed as total *n* (%), except age which is expressed as Mean (*SD*)

^b Some partner participants have indicated they live in more than one state. ∴ *n* = 121

Table 1b.

Employment characteristics of participants (N = 143) including roster compression and years within FIFO sector.

	<i>N</i> (%) ^a	
	Partners (<i>n</i> = 112)	FIFO Workers (<i>n</i> = 31)
Employment (Partner)		
Full time/Business Owner	39	(38.8)
Part time/ Casual	35	(31.3)
Stay at home parent/	28	(25)

maternity leave				
Student	6	(5.4)		
Unemployed seeking work	3	(2.7)		
Undisclosed	1	(0.9)		
Employment (FIFO Worker)				
Full time			26	(84.1)
Casual			1	(3.2)
Contractor			3	(9.7)
Consultant			1	(3.2)
FIFO Roster Compression				
Low (equal time on/off)	53	(47.3)	13	(42)
High (> time on)	59	(52.7)	18	(58)
Length of time working FIFO ^b				
0 - 1 yr	5	(4.5)	1	(3.2)
>1yr - 5 yrs	32	(28.6)	12	(38.7)
> 5 yrs - 10yrs	32	(28.6)	13	(41.9)
10+ yrs	43	(38.4)	5	(16.1)

^a Values are expressed as total *n* (%)

^b Partners responses relate to the years their FIFO partner has worked in FIFO employment.

2.2. Procedure

Participants were recruited Australia wide via resource industry-body websites and newsletters (AusIMM, GSA, AIG), resource and FIFO social media groups (FIFO Family Matters, Miners Promise, GeoHug, Happiness Co) and snowballing via email and social media posts to industry contacts.

Data was collected using an online survey which was approved by the Human Research Ethics Committee at the University of Adelaide. Participants provided informed consent before progressing to the survey questions. Participants were asked to identify themselves as either a FIFO worker or FIFO partner at the beginning of the survey. Based on their selection, a tailored partner or worker block of demographic questions was presented

relating to factors such as relationship status, education, employment, FIFO roster (see Appendix 1 for the full survey). Noting that the survey was conducted during COVID lockdowns, questions were tailored, where relevant, accordingly. Participants completed six standardized self-report measures assessing the variables under investigation (all instruments are included in Appendix 1).

2.3. Measures

2.3.1. *Adult Attachment*

Attachment was assessed using the Experiences in Close Relationships Questionnaire – Revised (ECR-R) (Fraley et al., 2000). This 36 item measure was scored on a seven point Likert-scale from (1) strongly disagree to (7) strongly agree. The instrument measured romantic attachment along the two dimensions of attachment: anxiety (e.g. “I worry a lot about my relationships”) and avoidant (e.g. “I talk things over with my partner”) (Fraley et al., 2000). Variation in attachment is best modelled on dimensions (Roisman et al., 2007), with participants who score low on both the anxiety and avoidant dimensions typically categorised as having a secure attachment (Fraley et al., 2000). Psychometric evaluations of the ECR_R have shown it to have good internal reliability for both the attachment-related anxiety ($\alpha = .94$) and avoidant attachment (of $\alpha = .91$) dimensions (Sibley et al., 2005).

2.3.2. *Savouring*

The 24-item Savoring Belief Inventory (SBI) (Bryant, 2003) assessed participants beliefs about their capacity to enjoy positive events through anticipating, savouring the moment, or reminiscing (Bryant, 2003). The 12 were positive items (e.g., “I know how to make the most of a good time”) and negative items (e.g., “I don’t enjoy things as much as I should”) were scored on a 7-point Likert-scale ranging from 1 – strongly agree to 7 – strongly disagree. Internal reliability for this measure is good with Cronbach’s $\alpha = .94$ (Bryant, 2003).

2.3.3. *Relationship Satisfaction*

Relationship satisfaction was measured using the Couples Satisfaction Index (CSI-16) (Funk & Rogge, 2007). The measure was comprised of one global item using a 7-point Likert-scale ranging from (0) extremely unhappy to (6) perfect and nine statements relating to relationship strength and satisfaction (e.g., “I really feel like part of a team with my partner”) rated on a Likert scale ranging from (0) – not at all true to (5) completely true; followed by six items rated on a 5-point spectrum between opposing adjectives, (e.g., “interesting and boring, full and empty). Total CSI-16 scores range from 0 to 81. The CSI has good reliability ($\alpha > 0.9$) and can discriminate between participants who are dissatisfied (scores below 51.5) and satisfied with their relationships (Funk & Rogge, 2007).

2.3.4. Loneliness

The revised UCLA Loneliness Scale (UCLA – R) (Russell et al., 1980) is a measure of an individual’s subjective and global view of their feelings of social isolation or sense of loneliness (Russell, 1996). The scale is a 20-item instrument scored on a 4-point Likert-scale from never (1) to often (4). With normative mean scores for males 34.94 (SD 9.49) and for females 35.65 (SD 10.3) (Knight et al., 1988), higher than norm scores reflect greater levels of loneliness (Russell et al., 1980). The UCLA-R has good internal reliability with Cronbach’s $\alpha = .96$ (Russell et al., 1980).

2.3.5. Subjective Wellbeing – Positive and Negative Affect

The 12 item Scale of Positive and Negative Experience (SPANE) (Diener et al., 2009) used six items each to assess positive affect (e.g. happy, contented) and negative affect (e.g. “sad, angry”) (Diener et al., 2009). Items were scored on a 5-point Likert scale from (1) very rarely/never to (5) very often/always with positive affect (SPANE-P) and negative affect (SPANE-N) calculated by summing the respective subscale scores to give a range of 6-30 for each (Diener et al., 2009).

The SPANE has good internal reliability with coefficient alpha's for the positive and negative affect scales of .88 and .89 respectively (Jovanović, 2015).

2.3.6. Subjective Wellbeing - Satisfaction with Life

The Satisfaction with Life Scale (SWLS) (Diener et al., 1985) was included to assesses the cognitive component of subjective wellbeing (Pavot & Diener, 1993a) that is, participants' judgement of their level of satisfaction with their life (e.g., "the conditions of my life are excellent") (Pavot & Diener, 1993b). The SWLS is a 5-item measure using a Likert-scale ranging from strongly disagree (1) to strongly agree (7) (Diener 1985). Total scores were calculated by summing all item scores to give a range from 5 to 35. Scores between 20 to 24 indicate an average life satisfaction for populations in economically developed nations (Diener et al., 2009). The SWLS has good internal reliability of score with a Cronbach's alpha of 0.87 (Diener, 1985).

Chapter 3: RESULTS

3.1. Quantitative Data Analyses

Quantitative data analyses were conducted using SPSS Statistics® Version 27.

Pearson's correlation analyses were used to examine the bivariate relationships between variables. In testing hypothesis 3, hierarchical multiple linear regressions (regression) were used to investigate whether savouring contributes a unique amount of influence on the outcome variables, after the variance contributed by the attachment predictors (anxious and attachment) are considered.¹

3.1.1. Data Screening and Power Analysis

Prior to analysis the dataset was screened for missing values, outliers and invalid values. Using box plots, outliers were detected in 2 of the 6 standardised measures, however these values were retained, as on inspection they were seen to be related to actual individual differences existing in the population.

To determine whether all participants could be included as one group in the analyses, independent t tests were conducted to compare partner and worker responses on each instrument. While significant difference between partners and workers was seen on the avoidant attachment scale $t(141) = 2.328 P < .05$, there were no significant correlations for the worker avoidant attachment and the other variables, suggesting that the differences between groups is likely a function of a small worker dataset ($n=31$), rather than real differences between the worker and partner groups. Visual inspection of the scatter plots showed that while the correlations were not of similar magnitude, the pattern of data between partners and workers was similar, and the worker data points all fell within the 95% confidence intervals,

¹ In this and following chapters, “significant” should be read as statistically significant.

of the partner group. Based on these results, the partner and worker data were combined for analyses.

Frequencies, descriptive statistics, and Cronbach's alpha for each of the instruments are presented in Table 2. Cronbach's alpha for each measure was greater than the recommended standard of $\alpha > .70$, indicating that the internal consistency reliability for each psychometric measure was acceptable for these analyses (Nunnally, 1978).

The data was screened for normality of the variables by inspection of histograms, quantile-quantile (Q-Q) plots, skewness and kurtosis, and Kolmogorov-Smirnov (K-S) tests. The K-S tests were significant and several of the histograms suggested that some scores deviated from a normal distribution. Indicative of normal distribution the skewness and kurtosis values for most of the measures clustered around zero (Field, 2013). These results, in conjunction with review of Q-Q plots and the 5% trimmed means indicating minimal deviation from the total sum of means scores, suggest the normality assumption was satisfied (Cronk, 2002).

The normality of residuals and non-linearity assumptions for multiple regression analysis were assessed. A visual inspection of histograms of standardised residuals, normal probability-probability plots and relevant scatterplots showed low levels of deviation from normality in all. Scatterplots to assess homoscedasticity of residuals were generally evenly distributed indicating this assumption was met (Baron & Kenny, 1986). Pearson's correlations indicated that all independent variables had significant medium associations with dependent variables (Table 3).

Several demographic covariates were screened for potential correlations with outcome variables but were confirmed to have minimal effect on model outcomes and thus were not included in regression models.

An a priori power analysis (G*Power software package) confirmed that the study sample size ($n=131$) was sufficient to detect an effect size > 0.1 , with power of .80 and $\alpha = .05$, for regression with four predictors (Faul, 1992).

Table 2

Descriptive statistics for each variable, and Cronbach's Alpha of Scales

Measure	n	Mean	SD	Score Range		α
				Actual	Possible	
Attachment (ECR-R)						
Attachment-anxiety	143	2.74	1.271	1-6	1-7	0.94
Avoidant Attachment	143	2.51	1.017	1-5	1-7	0.92
Savouring (SBI)	143	5.33	0.957	3-7	1-7	0.95
Relational Wellbeing						
Relationship Satisfaction (CSI-16)	143	60.99	16.912	3-81	0-81	0.97
Loneliness (UCLA)	131	41.5	12.536	21-74	20-80	0.94
Subjective Wellbeing						
Affect						
Positive Affect (SPANE -P)	131	21.62	4.435	11-30	6-30	0.92
Negative Affect (SPANE-S)	131	15.95	4.389	6-28	6-30	0.86
Satisfaction with Life (SWLS)	131	24.52	7.366	6-35	5-35	0.93
Valid N (listwise)	131					

Note: n = number of participants; SD = Standard Deviation; α = Cronbach's alpha score; ECR-R = Experience of Close Relationship Scale; SBI = Savouring Beliefs Inventory; CSI = Couples Satisfaction Index; UCLA = UCLA Loneliness Scale; SPANE = Scale of Positive and Negative Experience; SWLS = Satisfaction with Life Scale

3.2. Interrelationships between Attachment, Savouring and Outcome Variables

Table 3 details the Pearson's bivariate correlation results between attachment, savouring and outcome variables. Correlations show that the attachment variables have a moderate positive relationship with each other. It also shows that these variables each have medium, negative correlations with savouring. In other words, higher anxious or avoidant attachment scores are associated with lower savouring.

3.2.1. Attachment, Relationship Satisfaction, Loneliness and Subjective Wellbeing

Consistent with hypothesis 1, significant negative correlations were seen between anxious and avoidant attachment and relationship satisfaction, positive affect, and satisfaction

with life. Loneliness and negative affect were positively correlated with anxious and avoidant attachment (Table 3).

3.2.2. *Savouring, Relationship Satisfaction, Loneliness and Subjective Wellbeing*

Confirming hypothesis 2 there were significant positive correlations between savouring and relationship satisfaction, positive affect and satisfaction with life. A significant negative correlation was seen between savouring and loneliness and savouring and negative affect (Table 3).

Table 3.

Pearson's bivariate correlations of study variables.

Measure	n	1	2	3	4	5	6	7	8
1. ECR-R (Anx)	143	--							
2. ECR-R (Avd)	143	.558***	--						
3. CSI	143	-.610***	-.679***	--					
4. SBI	143	-.446***	-.478***	.443***	--				
5. UCLA	131	.637***	.461***	-.483***	-.575***	--			
6. SPANE (PA)	131	-.575***	-.440***	.498***	.591***	-.659***	--		
7. SPANE (NA)	131	.529***	.303***	-.392***	-.434***	.581***	-.769***	--	
8. SWLS	131	-.599***	-.491***	.606***	.532***	-.659***	.668***	-.579***	--

*** p< 0.001 level (2-tailed)

Note: n = number of participants; ECR-R = Experience of Close Relationship Scale - (Anx = Anxiety subscale, Avd = Avoidant subscale); SBI = Savoring Beliefs Inventory; CSI = Couples Satisfaction Index; UCLA = UCLA Loneliness Scale; SPANE = Scale of Positive (PA) and Negative (NA) Experience; SWLS = Satisfaction with Life Scale

3.3. Hierarchical Multiple Linear Regression

Hierarchical regressions were used to test hypothesis 3 and results are shown in Tables 4, 5 and 6. Research has shown that both dimensions of attachment are significant predictors for these outcome variables, but that they can influence some variables differently.

Hence both attachment predictors were investigated independently and then together. The correlations matrix shows that for all outcome variables, except CSI, attachment-anxiety had stronger correlations than avoidant, so for the combined model, anxious was inserted in step one and avoidant in step two. As this study is looking at the change in variance between the total attachment variance and savouring, this order was not reversed for the CSI regression.

3.3.1. Predictor Variables - Attachment-Related Anxiety and Savouring

Confirming hypothesis 3a, regression analyses demonstrated that savouring contributes significant variance to each outcome variable after the variance contributed by attachment-anxiety is removed (Table 4).

Table 4.

Results of hierarchical regression with attachment-related anxiety and savouring as predictor variables.

Predictor	Outcome Variables			
	Relationship Satisfaction ¹		Loneliness ²	
	ΔR^2	β	ΔR^2	β
Step 1 (Constant)	.372***		.405***	
Attachment-Anxiety		-.610***		.637***
Step 2 (Constant)	.036**		.116***	
Attachment-Anxiety		-.515***		.480***
Savouring		.213**		-.374***
Total R^2	.408***		.521***	
n	143		131	

Predictor	Subjective Wellbeing Outcome Variables					
	Positive Affect ²		Negative Affect ²		Satisfaction with Life ²	
	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1 (Constant)	.331***		.280***		.358***	
Attachment-Anxiety		-.575***		.529***		-.599***
Step 2 (Constant)	.149***		.055**		.096***	
Attachment-Anxiety		.397***		.421***		-.456***
Savouring		.425***		-.258**		.340***

Total R^2	.479***	.335***	.454***
n	131	131	131

Note: * $p < .05$ ** $p < .01$ *** $p < .001$; ¹ $n=143$, ² $n=131$

For relationship satisfaction the regression model accounted for a significant 41% of the variance, with savouring accounting for a small, but significant 3.6% of additional variance $\Delta F(1,140) = 8.604, p < .01, \Delta R^2 = .036$. Standardised beta values show that attachment-anxiety was the stronger predictor and that savouring had a small but significant association with relationship satisfaction, $\beta = .231, t(140) = -2.933, p < .01, pr^2 = .06$.

The regression model for loneliness showed significant effect of attachment-anxiety and savouring, which together accounted for 52% of variance in loneliness, with savouring contributing 12% of the additional variance in the model $\Delta F(1,128) = 30.886, p < .001, \Delta R^2 = .116$. Standardised betas show attachment-anxiety is only moderately stronger than savouring as a predictor of loneliness (Table 4). Savouring showed a significant association with loneliness, $\beta = -.374, t(128) = -5.56, p < .001, pr^2 = .194$, indicating that, the additional variance contributed by savouring, represents a significant 19% of the unaccounted variance in loneliness.

Regression models for the subjective wellbeing outcome variables show savouring contributes variance of 15% to the explained variance in positive affect, 6% to the variance in negative affect, and 10% to the variance in satisfaction with life. Standardised betas show savouring is the stronger predictor for positive affect, however, for negative affect and satisfaction with life variables, attachment-anxiety is stronger. After the variance of attachment-anxiety is accounted for, savouring has a significant association with all subjective wellbeing outcome variables, contributing to the unaccounted variance by 22% for positive affect, 7.6% of negative affect and 15% to satisfaction with life.

3.3.2. Predictor Variables - Avoidant Attachment and Savouring

Consistent with hypothesis 3b, analyses confirmed that savouring significantly contributed a unique amount of variance of each outcome variable once the variance of avoidant attachment was taken into account (Table 5).

Table 5

Results of hierarchical regression with avoidant attachment and savouring as predictor variables.

Predictor		Outcome Variables			
		Relationship Satisfaction ¹		Loneliness ²	
		ΔR^2	β	ΔR^2	β
Step 1	(Constant)	0.46***		0.213***	
	Avoidant Attachment		-0.679***		0.46***
Step 2	(Constant)	0.018*		0.166***	
	Avoidant Attachment		-0.605***		0.247**
	Savouring		0.153*		-0.46***
Total R^2		0.479***		0.379***	
n		143		131	

Predictor		Subjective Wellbeing Outcome Variables					
		Positive Affect ²		Negative Affect ²		Satisfaction with Life ²	
		ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	(Constant)	.194***		.092***		.241***	
	Avoidant Attachment		-.440***		.303***		-.491***
Step 2	(Constant)	.190***		.110***		.117***	
	Avoidant Attachment		-.211**		.129		-.311***
	Savouring		.493***		-.374***		.387***
Total R^2		.384***		.202***		.358***	
n		131		131		131	

Note: * $p < .05$ ** $p < .01$ *** $p < .001$; ¹ $n=143$, ² $n=131$

For relationship satisfaction the overall regression model accounted for a significant 48% of the variance, with savouring adding a significant 2% of unique variance to the model $\Delta F(1,140) = 4.881, p < .05, \Delta R^2 = .018$. Standardised betas show avoidant attachment was the

stronger predictor, and that savouring had a small but significant association with relationship satisfaction, $\beta = .153$ $t(140) = -2.209$, $p < .05$, $pr^2 = .033$

Savouring added a significant amount of influence on loneliness, accounting for 17 % of additional variance $\Delta F(1,128) = 34.192$, $p < .001$, $\Delta R^2 = .166$ after avoidant attachment was controlled for. Standardised beta values show that avoidant and savouring have equal strength in predicting loneliness. Savouring has a significant moderate negative association with loneliness, $\beta = -.460$ $t(140) = -5.85$, $p < .001$, $pr^2 = .211$.

Analyses for subjective wellbeing outcome variables, found that savouring contributed unique amounts of variance of 19% to a total variance of 38% in positive affect, 11% of a total variance of 20% in negative affect and 12% to a total variance of 36% in satisfaction with life. Standardised beta values show that for positive and negative affect, savouring is a slightly stronger predictor than avoidant attachment, while for satisfaction with life, avoidant attachment is the stronger predictor.

3.3.3. Predictor Variables - Anxious and Avoidant Attachment, and Savouring

Hierarchical regression was used to examine whether savouring significantly contributed a unique amount of variance to each outcome variable, after the variance contributed to the variables by attachment-anxiety and avoidant attachment were partialled out. A summary of results for each outcome variable is provided in Table 6, and shows the change in variance with each step, the total variance accounted for overall model, and standardised beta values for each predictor variable.

The regression model for relationship satisfaction showed a significant effect of attachment-anxiety contributing 37% in step 1, and avoidant attachment contributing an additional 17% variance, in step 2, to relationship satisfaction respectively (Table 6). With the effect of anxious and avoidant attachment accounted for, savouring did not contribute a statistically significant amount of variance to the model ($p = .235$).

The overall regression model for loneliness, accounted for a significant 52% of variance, however only anxious attachment and savouring significantly contributed to this total variance, accounting for 40% and 10% respectively. Standardised beta values show that attachment-anxiety is a stronger predictor of loneliness than savouring. Savouring has a significant moderate negative association with loneliness, $\beta = -.367$ $t(128) = -5.17$, $p < .001$, $\Delta r^2 = .417$.

The overall models for the subjective wellbeing outcome variables found that savouring contributed 13% of the total 48% variance in positive affect, 6% of a total variance of 34% in negative affect and 7% to a total variance of 46% in satisfaction with life. Avoidant attachment had no significant effect on positive or negative affect but did contribute a significant additional influence of 3.4% to satisfaction with life. Standardised beta values show that for all subjective wellbeing variables, attachment-anxiety is the stronger predictor.

Anxious and avoidant attachment also had a smaller but significant effect on all variables, except avoidant attachment on negative affect. After the variance of anxious and avoidant attachment are partialled out, results show that savouring has a significant association with all subjective wellbeing outcome variables, with the increase of variance for each variable contributing to 20% of the unaccounted variance in positive affect, 8% of the unaccounted variance in negative affect, and 11% of the unaccounted variance of satisfaction with life.

Savouring did not have a significant effect on relationship satisfaction once the variance for both anxious and avoidant attachment were taken into account, which disconfirms part of hypothesis 3c. Savouring does have a significant effect on loneliness and subjective wellbeing variables after both anxious and avoidant attachment are partialled out, confirming hypothesis 3c for these 4 variables.

Table 6.

Results of hierarchical regression with attachment-related anxiety and avoidant attachment and savouring as predictor variables.

Predictor		Outcome (Dependent) Variables			
		Relationship Satisfaction ¹		Loneliness ²	
		ΔR^2	β	ΔR^2	β
Step 1	(Constant)	0.372***		0.405***	
	Attachment-Anxiety		-0.61***		0.637***
Step 2	(Constant)	0.166***		0.015	
	Attachment-Anxiety		-0.336***		0.552***
	Avoidant Attachment		-0.491***		0.15
Step 2	(Constant)	0.005		0.101***	
	Attachment-Anxiety		-0.315***		0.468***
	Avoidant Attachment		-0.464***		0.026
	Savouring		0.08		-0.367***
Total R^2		0.543***		0.521***	
n		143		131	

Predictor		Outcome (Dependent) Variables					
		Positive Affect ²		Negative Affect ²		Satisfaction with Life ²	
		ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	(Constant)	.331***		.28***		.358***	
	Attachment-Anxiety		-.575***		.529***		-0.599***
Step 2	(Constant)	.02		0		.034**	
	Attachment-Anxiety		-.479***		.526***		-0.472***
	Avoidant Attachment		-.170*		.007		-0.225**
Step 2	(Constant)	0.129***		.06**		.07***	
	Attachment-Anxiety		-.384***		.461***		-0.402***
	Avoidant Attachment		-.030		-.089		-0.121
	Savouring		.416***		-.283***		0.307***
Total R^2		.48***		.34**		.463***	
n		131		131		131	

Note: * $p < .05$ ** $p < .01$ *** $p < .001$; ¹ $n=143$, ² $n=131$

Chapter 4: DISCUSSION

4.1. Overview

This study is one of the first quantitative examinations of individual differences in attachment and savouring for members of FIFO relationships. The project explored the relationship of these predictive factors on relational and subjective wellbeing and found moderate to strong relationship with all outcomes, supporting the theory that attachment is an important theoretical framework to use to interpret and relationship satisfaction and affect in FIFO couples (Mikulincer & Shaver, 2007).

Additionally, the study examined to what extent savouring influenced these factors once the impact of attachment was considered. The results suggest that savouring did not significantly contribute to relationship satisfaction but was found to influence loneliness and subjective wellbeing factors.

4.2. Attachment, Savouring and Relationship Satisfaction

Consistent with attachment and relational literature (Lee & Pistole, 2012), this study provides evidence that lower attachment-anxiety and avoidant attachment is associated with higher relationship satisfaction. Avoidant attachment was shown to have a stronger negative association with relationship satisfaction than attachment-anxiety. This is consistent with Vollmann et al. (2019), who suggested that partners with high level of avoidance may downplay the value of relationships, while those with an anxious attachment style could still value the positive aspects of their relationship.

Preliminary results suggest that savouring had a moderate association with relationship satisfaction. However, once the influence of anxious and avoidant attachment was controlled for, there was no significant interaction between savouring and relationship satisfaction. While these results are in contrast to previous research, which suggested

savouring is positively associated with relationships satisfaction, (Lenger & Gordon, 2019; Samios & Khatri, 2019) it is noted that the scope of those studies did not extend to consider the relationship within the context of attachment.

4.3. Attachment, Savouring and Loneliness

In line with current research, both attachment factors were found to be positively associated with loneliness, with attachment-anxiety shown to be a stronger predictor (Akdoğan, 2017). The strength of attachment-anxiety was further highlighted in analysis which controlled for attachment-anxiety, followed by the inclusion of avoidant attachment, which resulted in no additional influence on loneliness. These results may reflect the notion that anxiously attached may exaggerate the disparity between their desired level of connection and actual level of social interaction, thereby intensifying the feeling of loneliness, whereas avoidantly attached may downplay the need for connection and feelings of loneliness and instead socially withdraw (Akdoğan, 2017).

Savouring was found to be negatively associated with loneliness, in that people with a higher capacity to savour reported lower levels of loneliness. However, attachment-anxiety was still the stronger predictor compared to savouring. Once attachment factors were controlled for, savouring still provided a significant contribution of influence on loneliness. This is an important finding given there is limited evidence on the direct link between savouring and loneliness (Smith & Bryant, 2017). It is also relevant in the context of the FIFO population, as loneliness is often reported as key stressor, and identifying factors that could potentially buffer the impact of loneliness is important (Parker et al., 2018). While this study was underpowered to investigate potential moderator effects between attachment, savouring and loneliness, this would be a beneficial line of enquiry for future studies.

4.4. Attachment, Savouring and Subjective Wellbeing

4.4.1. Positive Affect

As hypothesised, anxious and avoidant attachment were both negatively associated with positive affect, with preliminary results suggesting attachment-anxiety has strong association and avoidant attachment a moderate association. However, once attachment-anxiety is partialled out, avoidant attachment did not provide any additional significant influence to positive affect. This is in line with previous research that shows, people with a high anxious attachment style approach daily interaction with high distress and low positive affect, whereas high avoidant attachment use deactivating strategies that decrease happiness and react with less joy and love to positive experiences (Mikulincer & Shaver, 2005; Sheinbaum et al., 2015)

As expected, savouring had a significant positive association with positive affect with higher savouring resulting in higher positive affect. This likely reflects the mechanism of savouring to upregulate positive emotions (Bryant & Veroff, 2007). While independently savouring is seen to have a strong association with positive affect, within the attachment framework this becomes a moderate relationship with attachment-anxiety the stronger predictor.

Taking attachment-anxiety into account, savouring contributed a significant amount of influence on positive affect. Given that attachment-anxiety has a negative association, and savouring has a positive association, investigating whether attachment may moderate the relationship between savouring attachment-anxiety and positive affect would be valuable. While this study was underpowered to investigate this further, these findings support work by Palmer and Gentzler (2018) who found that for those with high attachment-anxiety, positive affect was improved after savouring non-impersonal events. Given results for this FIFO cohort show savouring is a moderate predictor of positive affect, further research in this

direction looking at the different types of savouring, could inform potential intervention and support strategies to promote happiness and positive outcomes.

4.4.2. *Negative Affect*

Consistent with attachment literature attachment-anxiety was found to have a stronger positive association with negative affect than avoidant attachment (Mikulincer & Shaver, 2005). Further evidence of this was shown, once attachment-anxiety was controlled for, resulting in avoidant attachment providing no additional amount of influence. This reflects the findings by Mikulincer and Shaver (2007) who showed people with high avoidant attachment typically avoided amplification of negative affect by dampening or denying their negative feelings. Conversely people with a high anxious attachment style were sensitive to cues of negative affect, ruminating on potential threats and keeping negative feelings active in their mind (Mikulincer & Shaver, 2005).

Preliminary results suggest savouring has a negative association with negative affect and is a stronger predictor of negative affect than avoidant attachment. Controlling for both anxious and avoidant attachment, savouring predictor influence is reduced, but it does still contribute a small, but significant influence on negative affect. This result, while in line with previous findings, is not completely consistent with research that shows stronger savouring can reduce depressive symptoms (often linked to negative affect) and dampen negative affect (Hurley & Kwon, 2012).

Understanding the underlying factors of negative affect may be particularly important within the FIFO population as negative affect has been linked to depression and anxiety (Du Plessis & Guse, 2017), which studies have shown the FIFO population to be of increased risk (Parker et al., 2018). Borelli et al. (2014) highlights the importance of looking at negative outcomes in the context of attachment in long distance relationships. They demonstrated the vulnerability of highly avoidantly attached partners, particularly when isolated and without

support, to have reduced capacity to regulate negative affect in the face of overwhelming stressors (Borelli et al., 2014). Studies that look to potentially link high and low attachment, coping strategies and negative affect, could assist the development of education to promote adaptive coping strategies for the FIFO community, such as seeking support rather than withdrawing from support networks.

4.4.3. *Satisfaction with Life (SWL)*

In line with previous research, anxious and avoidant attachment had a negative relationship with satisfaction with life, indicating that higher attachment is associated with lower satisfaction with life (Waring et al., 2019). Controlling for attachment-anxiety, shows avoidant attachment does contribute a significant but small amount of additional influence, and indicates attachment-anxiety is the stronger predictor of satisfaction with life.

The results of this study suggest savouring has a positive relationship with satisfaction with life. Controlling for attachment, savouring contributes significant additional influence on satisfaction with life, and while attachment-anxiety is the strongest predictor, savouring is a stronger predictor than avoidant attachment. While research between the relationship of savouring, attachment and satisfaction with life is limited, these findings are consistent with extant research (Smith & Bryant, 2017).

4.5. Summary of Findings

This study has provided a preliminary look at the relationship between attachment, savouring and relational and subjective wellbeing factors for members of FIFO relationships. All but one of the hypotheses tested were confirmed, demonstrating that savouring is an important predictor for all of these variables except for relationship satisfaction. These results highlight the importance of researching these variables within an attachment framework, and the potential of savouring acting as an internal resource to promote positive affect, reduce negative affect and loneliness, and improve overall satisfaction with life and wellbeing.

With respect to members of FIFO couples, these findings contribute to the new research direction for this sector identified as necessary by government and industry bodies (Parker et al., 2018), to identify any links between environmental and demographic factors, and wellbeing outcomes.

4.6. Strengths and limitations

This study contributes to the emerging quantitative literature within the FIFO sector, and extends it beyond the FIFO worker. As one of the first studies, to the author's knowledge, to look at savouring within this population, it provides a new and unique understanding to the underlying individual psychological characteristics that relate to participants relational and subjective wellbeing. While the current study sample was not randomly selected, it did draw a diverse range of participants with respect to their residential location across Australia and from both onshore and offshore FIFO workforces.

Several limitations were identified for this study, which need to be considered when interpreting the current findings. The self-report nature of the questionnaire means that there is potential for participant's responses to have certain biases, such as social desirability bias, particularly as the data relates to sensitive personal relationship information. The sample may also incorporate an aspect of self-selection, that is, that participants who value the importance of relationships have chosen to participate, and so may have higher levels of relationship satisfaction, savouring and positive affect, which could impact on the correlations observed.

The cross-sectional nature of the study and the sample size limits conclusions being drawn with respect to establishing causation of effect between variables. While participants from different states and different FIFO backgrounds participated in the survey, the sample was not randomly selected, therefore results obtained cannot be interpreted to approximate the broader FIFO population. Studies with larger sample sizes or experimental research

design is needed to confirm these findings and better understand the factors that influence outcomes.

Furthermore, despite efforts to recruit a balance of workers and partners, only a small number of workers participated in the study, which prevented analyses between groups. While the survey allowed for couples to connect surveys with their partner, few participants chose this option. By simplifying this option in the survey and using a unique anonymous identifier rather than email addresses, more participants may have elected to do this. By linking partners' surveys, analyses of dyadic interpersonal relationships between partners could have been investigated from both an attachment perspective and an interpersonal savouring perspective. A balance of workers and partners comparison analyses between the groups could allow for a better understanding of attachment and loneliness in relation to work- or home- bound partners.

4.7. Future Research

The focus of this study was to look specifically at psychological factors relating to FIFO relationships, however these factors do not occur in isolation. While further studies into psychological factors is needed to fill this gap in FIFO research, it is also important that future studies look to link these factors with environmental factors. Therefore, theoretically based, quantitative research that incorporates both psychological factors and work-related factors is important to develop a holistic view of the relationship between the FIFO work model and mental health and wellbeing (e.g. Cooke et al., 2018; Dittman et al., 2016).

The FIFO work model creates environmental changes not only for the worker, but also the homebound partner. It can create a situation where the homebound partner has to take on a much larger share of the home life responsibilities (Dittman et al., 2016), which, given under 4% of this study's participants were unemployed, often means this increased responsibility is in addition to their own work or carer workloads. Extending the findings of

this study, future investigations may look at the relationship between attachment, coping strategies (e.g. savouring) and relationship and wellbeing outcomes, in relation to these increased environmental pressures. A longitudinal study, investigating these relationships, throughout the FIFO roster cycle, could provide further insight into whether it is the change in environmental factors, or individual psychological factors that contribute the most influence on any related changes of wellbeing outcomes.

This study measured savouring by looking at an individual's capacity to savour. While this provided several findings of interest, it did not establish a significant link between savouring and relationship satisfaction. Experimental research relating to attachment, savouring and relationship satisfaction has started to focus on the specific area of relational savouring (Borelli et al., 2014). Relational savouring refers to savouring positive interpersonal, relational experiences. This research has had mixed results, with some evidence showing that attachment can impact on the benefits of savouring, dependant on whether the intervention was interpersonal and non-interpersonal savouring (Borelli et al., 2014). This avenue of research could qualify whether the lack of association found between attachment and savouring in this study was related to either, the type of savouring assessed, or attachment style, or potentially both factors. This line of enquiry could determine whether savouring, or relational savouring could act as an internal resource to promote relationship satisfaction.

Government studies into FIFO wellbeing have called for more theoretical based research to be conducted (Henry et al., 2013). While attachment theory is a key theoretical framework used to understand close relationships and individual outcomes, there are several other theoretical frameworks that have been applied to better understand long distance relationships, that could be applied to FIFO research. Two such theories include Sigman (1991) theory on relational continuity construction, and Fredrickson (2001) broaden and build theory.

Researching FIFO relationships through the lense of Sigman's (1991) theory of continuity, could provide insight into how partners define relationships as continuous beyond the moments of face-to-face interaction with each other, by employing relationship maintenance behaviours (Merolla, 2010). These behaviours relate back to the concept of proximity to attachment figures, closely connecting relationship behaviours as a way to develop mental representations of attachment figures and in turn provide the perception of proximity and sustained connection (Mikulincer et al., 2002).

The broaden and build theory (Fredrickson, 2001) has important implications with respect to savouring and positive outcomes, not only with respect to subjective wellbeing, but also relates to the development of enduring personal resources, relating to physical, intellectual and social outcomes. This theory could be applied to research relating not only to FIFO relationships but all members of the FIFO population.

4.8. Conclusion

The current study was the first to look at attachment and savouring within the context of FIFO relationships. Looking at these findings from a broader perspective, this work adds to the literature on long distance relationships, attachment, and savouring. Most importantly, it has identified that attachment is a relevant theoretical framework to utilise when investigating FIFO relationships. The study also provided support for the benefits of savouring for these workers and partners showing that higher savouring was related to lower levels of loneliness, enhance positive affect, and promoted satisfaction with life. This suggests that further investigation into the potential benefits of savouring, as an internal resource or coping mechanism, is warranted.

The next steps in the evolution of FIFO research are, to connect and understand the interaction of psychological factors with work-related factors, and to understand the underlying processes and coping mechanisms utilised to effectively adapt to FIFO stressors.

This will provide the relevant knowledge to explain which variables differentially influence the different components of relational and subjective wellbeing. In turn, the knowledge gained in this study, combined with current and future research, may inform employee assistance or induction programmes, or community support groups to develop strategies to help improve the wellbeing of all members of the FIFO community.

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APPENDIX 1