

Assessing Psychological Safety: Correlates of a New Scale

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Abstract

This paper examines correlates of a new short measure of Psychological Safety (PS). In all, 408 adults completed a new and an existing five-factor Psychological Safety measure, as well as measures of the Big Five, Work Attachment, Self-compassion, and an IQ test. The two Psychological Safety measures were closely related providing concurrent validity. Correlation analyses and regressions indicated that the three Work Attachment factors (Secure, Avoidant, Anxious) were most closely related to Psychological Safety. Gender, personality (Extraversion, Openness) and intelligence were the most significant factors in the regression onto the total score. Regression onto the five factors indicated the importance of Secure Attachment (positively) and Anxious Attachment (negatively). Implications for the definition and measurement of Psychological Safety are considered. Limitations of the study are noted.

Keywords

Attachment, Psychological Safety, Mutual Trust, Support

1. Introduction

This study is concerned with the construct, convergent and divergent validity of a new short measure of *Psychological Safety* (PS) at work. This area has attracted a great deal of research (Amoadu et al., 2024; Edmondson & Mogelof, 2005; O'Donovan et al., 2020; Sasaki et al., 2022). While the theory can be found in the writings of Carl Rogers and management writers like Kahn (1990), the concept of PS is usually attributed to Edmondson (1999).

The concept has been defined as the “*belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns, or mistakes*”. It is both

an individual and group-shared concept, held by members of a team, that they are safe within the group to conduct many types of interpersonal risk-taking activities. Thus, it can be measured at an individual, group/team, and organizational level (Newman et al., 2017). Further, it is suggested that it is state—rather than trait-like, in that it may vary considerably with work circumstances, though it is conceivable that it has consistent individual difference correlates. That is, some people may seem more sensitive to, and concerned with, safety issues. Perhaps the most important claim in the literature is that PS has a direct relationship with work output measures, like satisfaction and productivity (Kim et al., 2020); that is, PS is an important factor in understanding business success.

Over ten years ago, Edmondson and Lei (2014) noted that most of the research has taken place in specific industry contexts, most notably in healthcare delivery. Further, the “*coherence and amount of the cumulative research suggests that creating a climate of psychological safety should be near the top of the leadership agenda for organizations around the world*” (p. 72). There was, however, little mention of the measurement of the concept.

The concept of PS is made up of facets or factors, though there is no clear definition of what they are. According to Plouffe et al. (2023), PS has various components: the confidence to share knowledge and request feedback without fear of negative (interpersonal risk-taking); mutual trust and respect between team members; the availability of organizational and structural supports, which renders them less vulnerable to resource depletion, insecurity, and defensiveness; understanding personal identity, importance, and security within the team. Indeed, these are the factors in the Psychological Safety Inventory (PSI), one of the few measures in the area.

In a review, Newman et al. (2017) noted:

In the majority of studies we reviewed, psychological safety was the mechanism through which the effects of these supportive environments were transmitted to desirable outcomes, such as increased knowledge sharing, engagement, creativity, innovation, and ultimately performance...psychological safety is a valuable resource, especially important in hazardous work contexts where speaking up and providing feedback is imperative in order to reduce errors and improve safety. (p. 530)

Research on this topic has appeared in a number of papers this millennium (Bienefeld & Grote, 2014; Carmeli, 2007; Chandrasekaran & Mishra, 2012; Ferrère et al., 2022; Nembhard & Edmondson, 2006, 2011; O’Donovan & McAuliffe, 2020a, 2020b; Roussin et al., 2016). There are probably now in excess of 100 published papers looking very specifically at the topic. Indeed, there have been a number of reviews of the literature and meta-analyses of the literature (Dong et al., 2024; Dong et al., 2025; Edmondson & Bransby, 2023; Frazier et al., 2017).

2. This Study

It is often the case that multiple instruments are devised to measure the same psychological concept. There are a number of PS measures (Brown & Leigh, 1996;

Tynan, 2005). A quarter of a century ago, Edmondson (1999) developed the seven-item *Psychological Safety Scale (PSS)*, which evaluates team-level psychological safety as a unidimensional construct reflecting interpersonal risk-taking.

In this study, we first look at the concurrent validity of a new, short measure of PS, which we compare to the PSI. This measure was devised and validated over a long period of time. There are longer versions of the one we used here, but given the fact that both researchers and work clients favour shorter measures, we chose to examine the shorter one (Allen et al., 2022).

We also examine the discriminant validity by assessing the relationship of PS with four sets of variables. *First*, we explore personality, as it is likely that safety perceptions are linked to traits. Thus, we attempt to understand the place of PS within Five Factor personality. Based on an understanding of the five personality factor models, we predict PS is positively correlated with Extraversion (H1) because of the social confidence and skills associated with extraversion, and Agreeableness (H2), because of the trusting nature of high scorers. In contrast, it would be negatively associated with Neuroticism (H3) (low Adjustment) because of the general social anxiety associated with this trait.

Second, we also examine intelligence correlates of PS, as it is a fundamental aspect of all individuals. We did, however, not expect significant correlations (H4), though it is possible that brighter people are better educated and more articulate and hence happier, where appropriate to speak up.

Third, we explore Self-Compassion and its relationship to PS. Neff (2003) conceptualized self-compassion as consisting of three main elements: self-kindness (being kind and understanding towards oneself), common humanity (recognizing that suffering is part of the human shared experience), and mindfulness (observing thoughts and feelings for what they are). We assumed that high scorers would experience more PS (H5).

Fourth, we look at the relationship between PS and the concept of Attachment, which was made famous by Ainsworth et al. (1978) and Bowlby (1979). A central tenet of the concept of Attachment relationship is that the caregiver serves as a “secure base” from which the infant explores his/her environment. Over time, three types of attachment relationships manifest: *secure, avoidant, and anxious*. Attachment theory posits that attachment occurs across the lifespan but is not immutable. A number of different research groups have attempted to devise robust and reliable measures of workplace attachment (Scrima, 2015, 2020).

Neustadt et al. (2011) demonstrated that adult attachment styles have been linked to leadership, trust, satisfaction, performance, and other work-related outcomes (Harms, 2011). There have been a number of recent studies in this area, such as that of Mostafa et al. (2025), who showed that perceptions of abusive supervision induce employees’ attachment insecurity at work (attachment avoidance and attachment anxiety), and thus undermine employees’ service performance. We assume that individuals who are Securely Attached (H6) would report higher levels of PS at work while those who had Avoidant (H7) and Anxious (H8) Attachment patterns would show negative correlations with PS at domain and

facet levels.

3. Method

3.1. Participants

In all, there were 406 participants, of whom 207 were female. Their ages ranged from 20 to over 66 years, with the majority (43%) being between 26 and 35, and 34% being between 36 and 45 yrs. In total, 86% were in full-time work and 11% in part-time work. Overall, 44% were office-based, and 16% were remote workers, with 32% being hybrid workers.

3.2. Questionnaires

BeTalent Psychological Safety (BeTalent, 2025). This is a 20-item measure, with four items measuring each of the five factors: Diverse Thinking ($\alpha = .87$), Respectful Communication ($\alpha = .78$), Meaningful Impact ($\alpha = .80$), Speaking Up ($\alpha = .70$), and Human Connection ($\alpha = .75$). In this study, the total scale $\alpha = .93$.

PSI (Plouffe et al., 2023). This is a 30-item measure with five factors: Interpersonal Risk-Taking, Mutual Trust/Respect, Organisational/Structural Support, Identity and Clarity in Context of Team, and Supportive Leadership. In the original study, the subscales and total scale showed high reliability and correlated as anticipated with other measures of psychological safety, leadership, team climate, organisational perceptions, and organisational support. In this study, the total scale $\alpha = .97$. Subscale reliabilities were: Mutual Trust $\alpha = .93$, Supportive Leadership $\alpha = .93$, Identity Clarity $\alpha = .87$, Structural Support $\alpha = .90$, Risk-Taking $\alpha = .84$.

Work Attachment (Neustadt et al., 2006). This is an 18-item measure of self-reported attachment orientation at work. We calculated three factors for attachment styles: Secure: “I can count on work colleagues to support me when I need them.” ($\alpha = .70$), Anxious: “I often worry that people will not want to stay on my work team” ($\alpha = .67$), and Avoidant: “I am somewhat uncomfortable confiding in others at work.” ($\alpha = .77$).

Ten Item Personality Inventory (TIPI) (Gosling et al., 2003). The TIPI is a 10-item measure of the Big Five (or Five-Factor Model) dimensions. It is a very widely used short measure of personality, with evidence of both reliability and validity (Furnham, 2008).

Self-Compassion Scale (Raes et al., 2011). This 12-item scale contains the subscales: Self-Kindness (SK), Mindfulness (MI), Common Humanity (CH), Self-Judgement (SJ), Isolation (IS), and Over-Identification (OI); it had an initial Cronbach’s alpha $\geq .86$. It has been translated into various languages. In this study, SK $\alpha = .66$, MI $\alpha = .67$, CH $\alpha = .62$, SJ $\alpha = .69$, IS $\alpha = .63$, OI $\alpha = .73$, total items $\alpha = .83$.

Wonderlic Personnel Test (Wonderlic, 1990). This 50-item test can be administered in 12 minutes and measures general intelligence. Items include word and number comparisons, disarranged sentences, and story problems that require mathematical and logical solutions. It is a short measure of fluid intelligence. The

test has impressive norms and correlates very highly ($r = .92$) with the Wechsler Adult Intelligence Scale (WAIS-R). In this study, we used 16 items from Form A (14, 15, 18, 21, 24, 27, 28, 29, 30, 32, 33, 34, 36, 37, 43, 46). The measure has been used in many studies (Bertsch & Pesta, 2009). In this research, the alpha was ($\alpha = .78$).

3.3. Procedure

Data was collected using Prolific. All procedures were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. All participants were healthy, employed adults who completed anonymous, non-invasive questionnaires, entirely voluntarily. They were always at liberty to stop at any point and not answer any particular questions. Participants were compensated for their time at a minimum of £5/hour. The questionnaire took an average of 25 minutes to complete.

4. Results

4.1. Concurrent Validity

First, we looked at the intercorrelations between Plouffe and the BeTalent Measure (see Table 1).

Table 1. Comparisons between psychological safety measures.

	1	2	3	4	5	6	7	8	9	10	11
1. BT Diverse Th	—										
2. BT Respectful C	.72	—									
3. BT Meaningful I	.75	.60	—								
4. BT Speaking Up	.65	.56	.65	—							
5. BT Human	.74	.68	.65	.62	—						
6. P Risk Taking	.71	.61	.64	.67	.62	—					
7. P Mutual Trust	.79	.76	.73	.61	.75	.78	—				
8. P Structural Supp	.69	.60	.64	.49	.60	.68	.74	—			
9. P Identity Clarity	.62	.58	.68	.53	.53	.69	.74	.71	—		
10. P Supportive Le	.73	.67	.62	.49	.60	.64	.78	.75	.68	—	
11. P PS Mean	.80	.73	.75	.63	.71	.84	.92	.89	.87	.89	—
12. BTPS 20-items	.91	.84	.85	.81	.87	.76	.85	.71	.69	.73	.85

Plouffe and BeTalent total scores had a very strong positive association ($r = .85$, $p < .001$). Both measures' total scores all had high associations with each of the others' factors (all $r > .70$, $p < .001$) - the exception being the relationship between BeTalent's Speaking Up factor and the Plouffe Total Score ($r = .63$, $p < .001$). The weakest association in the group was between BeTalent's Speaking Up factor and Plouffe's Structural Support factor ($r = .49$, $p < .001$).

4.2. Discriminant Validity

Table 2. Descriptive Statistics and Pearson Correlations between study variables.

Variable	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Gender	.51	.50	—																	
2. Age	22.88	.96	.10*	—																
3. Wonderlic IQ	.71	.20	.78	-.23*	-.02	—														
4. Self-Compassion	3.22	.68	.83	-.02	.08	.01	—													
5. Extraversion	3.75	1.47	.49	.01	.05	-.08	.39**	—												
6. Agreeableness	5.25	1.18	.33	.19**	.096	-.13**	.39**	.22**	—											
7. Conscientious	5.66	1.20	.56	.14**	.07	-.12	.41**	.23**	.47**	—										
8. Emotional Stability	4.91	1.42	.60	-.11*	.06	-.09	.63**	.33**	.42**	.48**	—									
9. Openness	5.28	1.21	.39	.06	.12*	-.01	.38**	.396**	.37**	.37**	.32**	—								
10. Secure Att	4.83	.95	.70	.00	.04	.07	.45**	.39**	.34**	.35**	.38**	.38**	—							
11. Avoidant Att	3.91	1.17	.77	.00	-.11*	-.10	-.42**	-.35**	-.31**	-.23**	-.30**	-.25**	-.43**	—						
12. Anxious Att	3.32	.98	.67	-.08	-.10	-.05	-.27**	-.20**	-.26**	-.34**	-.24**	-.22**	-.24**	.58**	—					
13. Diverse Think	5.31	1.21	.87	.11	-.01	-.13*	.37**	.301**	.37**	.41**	.39**	.36**	.57**	-.30**	-.27**	—				
14. Respectful C	4.96	1.30	.78	.05	.02	-.08	.35**	.25**	.28**	.31**	.37**	.28**	.51**	-.38**	-.28**	.72**	—			
15. Meaningful Im	5.53	1.08	.79	.09	.02	-.04	.37**	.32**	.31**	.40**	.39**	.35**	.50**	-.29**	-.35**	.75**	.600**	—		
16. Speaking Up	5.13	1.14	.69	.04	.09	-.05	.37**	.39**	.27**	.33**	.33**	.36**	.53**	-.41**	-.38**	.65**	.56**	.65**	—	
17. Human Conn	5.094	1.18	.75	.15**	.05	-.09	.31**	.29**	.34**	.35**	.28**	.32**	.57**	-.48**	-.44**	.74**	.68**	.65**	.62**	—
18. PS Total	5.204	1.01	.93	.11*	.04	-.09	.42**	.36**	.37**	.42**	.41**	.39**	.63**	-.44**	-.40**	.91**	.84**	.85**	.81**	.87**

Gender: Male = 1, Female = 2; * $p < .05$.

Table 3. Correlations between psychological safety variables and other variables in this study.

	Gender	Age	Wonderlic	Self-Compass	Extraversion	Agreeable	Conscientio	Emotional Stability	Openness	Secure Attachment	Avoidant Attachment	Anxious Attachment
BT Diverse Thinking	.11*	-.01	-.12*	.37**	.30**	.37**	.41**	.39**	.36**	.57**	-.30**	-.27**
BT Respectful Com	.06	.02	-.01	.35**	.25**	.28**	.31**	.37**	.28**	.51**	-.38**	-.28**
BT Meaningful Impact	.09	.02	-.10*	.37**	.32**	.31**	.40**	.40**	.35**	.50**	-.29**	-.35**
BT Speaking Up	.04	.09	.007	.37**	.39**	.27**	.33**	.33**	.36**	.53**	-.41**	-.38**
BT Human Connection	.15**	.05	-.00	.31**	.30**	.34**	.35**	.28**	.32**	.57**	-.48**	-.44**
PS_Risk Taking	.07	.05	.02	.41**	.35**	.33**	.39**	.34**	.36**	.66**	-.39**	-.37**
PS_Mutual Trust	.09	.03	-.04	.41**	.32**	.39**	.43**	.39**	.36**	.66**	-.42**	-.34**
PS_Structural Support	.08	.02	-.06	.40**	.34**	.35**	.40**	.40**	.32**	.56**	-.35**	-.24**
PS_Identity Clarity	-.00	.03	-.01	.47**	.31**	.31**	.39**	.45**	.29**	.63**	-.34**	-.28**
PS_Supportive Lead	.10*	-.04	-.08	.38**	.28**	.35**	.40**	.37**	.27**	.53**	-.35**	-.19**
Plouffe PS Mean	.08	.02	-.04	.47**	.36**	.39**	.46**	.44**	.36**	.68**	-.42**	-.32**
ZPS 20 Total	.11*	.04	-.05	.42**	.36**	.37**	.42**	.41**	.39**	.63**	-.44**	-.40**

* $p < .05$, ** $p < .01$.

Table 2 shows the intercorrelations between most of the variables. **Table 3** presents the descriptive statistics of the measured variables and correlations between them. Women were more likely to score higher on total ratings of psychological safety and higher on human connection. Wonderlic IQ scores were related to only

the Diverse Thinking factor of psychological safety. Self-compassion and all Big Five personality traits were associated with self-reported psychological safety, in the total score and in the factors. Secure attachment was positively related to all psychological safety variables, while anxious and avoidant attachment were all negatively related. Psychological safety factors were intercorrelated to a moderate-to-large extent+.

4.3. Predictive Validity

Table 4 displays the results of six regressions, with the total score of psychological safety and each of its factors as the outcome variable. All other variables in the study (aside from the other psychological safety variable) were analysed as predictor variables. For the regression onto the total score the two most significant predictors were gender and Extraversion suggesting that more socially confident males were more likely to experience psychological safety. There was also some indication that Openness, Intelligence and Self-compassion were marginally significant factors. We were particularly interested in the sub-scale scores. Secure Attachment was the only variable that was a consistent predictor of each psychological safety factor.

Table 4. (a) Regression with the 20-item Psychological Safety measure as the dependent variable; (b) Regression with Diverse Thinking as the dependent variable; (c) Regression with Respectful Communication as the dependent variable; (d) Regression with Meaningful Impact as the dependent variable; (e) Regression with Speaking Up as the dependent variable; (f) Regression with Human Connection as the dependent variable.

(a)					
	Unstandardised <i>B</i>	Standard Error	Standardised <i>B</i>	<i>t</i>	<i>p</i>
Intercept	2.50	.49		5.14	<.001
Gender	.47	.05	.44	9.98	<.001
Age	-.07	.04	-.07	-1.50	.135
Extraver	-.18	.05	-.17	-3.78	<.001
Agreeabl	.03	.03	.04	.88	.378
Conscient	.02	.04	.02	.50	.619
Emot Stab	.06	.04	.07	1.62	.107
Openness	.08	.04	.11	2.15	.032
Self-Comp	.06	.04	.08	1.8	.073
Wonderlic	.16	.08	.08	2.05	.041
Secure Att	-.04	.04	-.04	-1.01	.314
Avoidant	-.00	.08	-.00	-.06	.954
Anxious A	-.29	.19	-.06	-1.56	.119
	<i>R</i> ²			.51	
	Adjusted <i>R</i> ²			.50	
	<i>F</i>			34.379	
	<i>P</i>			<.0001	

Continued

(b)					
Intercept	1.54	.63		2.44	.015
Gender	.17	.10	.07	1.75	.081
Age	-.09	.05	-.07	-1.91	.057
Extrav	.00	.04	.00	.07	.943
Agreeabl	.09	.05	.08	1.75	.081
Conscient	.09	.05	.09	1.78	.076
Emot Stab	.09	.05	.11	1.94	.054
Openness	.07	.05	.07	1.60	.111
Self-Com	.01	.10	.01	.09	.925
Wonderlic	-.65	.24	-.11	-2.70	.007
Secure Atta	.56	.06	.44	9.11	<.001
Avoidant A	.01	.06	.01	.21	.831
Anxious At	-.10	.06	-.08	-1.72	.087
	R^2			.43	
	Adjusted R^2			.41	
	F			24.55	
	P			<.001	
(c)					
Intercept	2.29	.73		3.14	.002
Gender	.18	.12	.07	1.60	.112
Age	-.06	.06	-.04	-.97	.331
Extraver	-.03	.04	-.04	-.73	.468
Agreeable	.02	.06	.01	.26	.793
Conscient	.04	.06	.04	.71	.477
Emotl Stab	.15	.05	.17	2.84	.005
Openness	.04	.05	.03	.68	.498
Self-Comp	-.00	.11	-.00	-.01	.991
Wonderlic	-.12	.28	-.02	-.43	.667
Secure Att	.48	.07	.35	6.82	<.001
Avoidant A	-.18	.07	-.16	-2.75	.006
Anxious A	-.07	.07	-.05	-.93	.355
	R^2			.38	
	Adjusted R^2			.36	
	F			16.62	
	P			<.0001	

Continued

(d)					
Intercept	2.82	.59		4.81	<.001
Gender	.12	.09	.06	1.32	.186
Age	-.04	.05	-.04	-.90	.366
Extrav	.04	.04	.05	1.15	.251
Agreea	-.03	.05	-.03	-.54	.589
Conscient	.09	.05	.09	1.84	.067
Emot Stab	.11	.04	.15	2.64	.009
Openness	.08	.04	.09	1.86	.064
Self-Comp	.03	.09	.02	.32	.747
Wonderlic	-.49	.22	-.09	-2.19	.029
Secure At	.39	.06	.34	6.85	<.001
Avoidant A	.07	.05	.08	1.39	.166
Anxious At	-.24	.06	-.22	-4.29	<.001
	R^2			.36	
	Adjusted R^2			.382	
	F			20.11	
	P			<.001	
(e)					
Intercept	2.72	.61		4.45	<.001
Gender	.02	.10	.01	.22	.823
Age	.04	.05	.03	.77	.445
Extrav	.11	.04	.14	2.91	.004
Agreeabl	-.05	.05	-.05	-1.00	.320
Conscient	.04	.05	.05	.91	.365
Emot Stab	.03	.05	.04	.63	.528
Openness	.09	.05	.09	1.92	.056
Self-Com	.06	.09	.03	.59	.557
Wonderlic	-.08	.23	-.01	-.32	.746
Secure Atta	.42	.06	.35	7.03	<.001
Avoidant A	-.05	.05	-.05	-.85	.398
Anxious At	-.23	.06	-.20	-3.94	<.001
	R^2			.38	
	Adjusted R^2			.40	
	F			21.29	
	P			<.001	

Continued

(f)					
Intercept	3.14	.60		5.28	<.001
Gender	.28	.09	.12	3.02	.003
Age	-.04	.05	-.03	-.80	.425
Extrav	.01	.04	.01	.30	.768
Agreeable	.07	.05	.07	1.41	.159
Conscient	.05	.05	.05	1.09	.275
Emot Stab	.00	.04	.00	.00	.997
Openness	.05	.04	.05	1.03	.304
Self-Com	-.11	.09	-.07	-1.24	.214
Wonderlic	-.12	.23	-.02	-.50	.615
Secure Att	.51	.06	.41	8.81	<.001
Avoidant A	-.18	.05	-.18	-3.48	<.001
Anxious At	-.24	.06	-.20	-4.20	<.001
	R^2			.47	
	Adjusted R^2			.45	
	F			28.329	
	P			<.001	

Examining the regressions onto the five factor scores it was apparent that there were clear patterns. First, the predictor variables accounted for around a third (.36) to around a half (.47) of the variance. Second, some of the factors were not significant in any of the facet regressions: age, traits Agreeableness, Openness and Conscientiousness, and self-compassion. Emotional Stability was significant in two of the five regressions and extraversion in one. Third, in each regression Secure Attachment was a significant and positive factor, while in four, Anxious Attachment was a significant and negative predictor.

5. Discussion

All of our hypotheses concerning the correlates of our short PS measure were confirmed. What this study highlighted was the relationship between patterns of attachment at work and PS at the facet level. It appears that these two literatures have developed relatively separately. The former remains anchored in clinical and developmental literature, though there has been an interest in understanding it within work settings (Scrima et al., 2017). The PS literature, though much more recent, is predominantly found in the I/O (industrial/ organizational) work psychology world.

One issue of importance remains the definition and measurement of PS. One question is the components/ facets of PS. If one examines the original definition of PS, presented by Edmondson (1999), it seems two factors from this study ap-

pear to overlap, namely *mutual trust* and *risk-taking*. Indeed, *Identity Clarity* and *Structural Support* seem less relevant. Also, it could be argued that *Identity Clarity* reduces flexibility and organizational citizenship behaviour. It is also worth noting that the PSI total variance explained is much higher than the individual factors, which is a potential risk for common method bias.

It was interesting that neither sex, age, nor intelligence was consistently related to PS at the domain or facet level, though there was some evidence that females had higher scores than males on a few facets. Whilst it might be assumed that these variables would be related to safety and perceptions of “psychological danger” (i.e., younger, more inexperienced people feeling more threatened), there seems to be very little evidence of this. This raises the question of the utility of individual trait assessment for group settings over relational ones, which may be more context-specific.

What was also clear, at least from the multiple regressions, was that several of the traits we measured were weakly related to PS, though the correlations did indicate some association. These included Self-Compassion, Agreeableness, Openness and Conscientiousness. It is no surprise that Emotional Stability was a significant predictor in a number of the regressions as it is associated with instability, moodiness and anxiety: anxious people are less inclined to feel safe and speak up. Similarly, Extraverts who are more socially confident and more likely to feel secure in social settings

Perhaps the major clear finding from this study was the relationship between the PS facets and the three attachment styles. What was striking was that in five of the six regressions, the Secure Attachment at Work variable was by far the strongest correlate. It has been established that people with Secure Attachment patterns can and do develop and maintain strong, happy, and healthy relationships across a wide variety of settings: home, work, and leisure. Evidently, the opposite is true of those insecurely attached (Avoidant and Anxious), who may therefore be particularly sensitive to issues in the workplace. This suggests that in all work environments securely attached individuals would experience more aspects of PS than those who were either Avoidant or Anxiously attached. In this sense, people come to work with a particular propensity for experiencing PS

Three questions arise from this study. The *first* is the extent to which a person’s work attachment style is a relatively immutable trait that transfers within work settings and, as such, largely determines their feelings of PS. It was argued by the originators of the attachment style literature that these interpersonal patterns of attachment are established early in life and relate to many relationships the person has throughout their lifetime, but that they are indeed open to change; they are not immutable. However, that process is far from simple or easy.

The *second* is whether the same work environment is perceived quite differently by workers in terms of PS. In this sense, the perception of the PS environment is at least as much a function of personality as it is a product of interaction patterns in the environment. Hence, there are individual differences in percep-

tions about safety: the same psychological work-space is experienced quite differently by people as a function of their personality.

The *third* is, what interventions are best for those who feel unsafe, and what are their consequences for those who do feel safe and the business as a whole? Presumably, the first step is to identify those who feel most unsafe and the reasons for their perceptions. Furthermore, it seems a good idea to monitor the PS of the organisation at regular intervals, attempting to determine what the drivers of change are. Equally, given the importance of attachment, it may be wise for an organisation to assess all staff to get an indication of where problems might arise.

Like all studies, this one had limitations. We were restricted mainly to short self-report variables with all their well-known limitations in terms of internal reliability, bias and impression management. We also note that the alphas/correlations for the personality measure were low, but not unusual for the 10-item scale which is extensively used. The Alpha for the Anxious Attachment scale was .67 which is below the usually acceptable cut-off point of .70. Further, there is some doubt about the factor structure of the attachment measure we used and whether the two measures, Avoidant and Anxious attachment can be clearly distinguished. This has been highlighted by previous research with this measure. Hence, it may be more parsimonious to differentiate more simply between Securely and Insecurely Attached.

We also had no details of the type of work a person did, nor the details of their environment. It is abundantly clear that some working environments are much more aggressive and hostile than others where issues of safety are ignored. They may attract and select people who are less concerned with PS. On the other hand, some working environments are highly sensitive to PS issues which they believe to be major factors in the success of the organization.

In this sense, this can be considered a pilot study with the issues explored worthy of replication and further research.

In conclusion, this study aimed to examine the correlates of a new short scale of PS. In doing so it highlighted the association between the concept of attachment and PS, which has not been emphasized in the previous literature. It suggests that those involved in trying to increase a sense of PS in a particular workplace may consider determining an individual's work attachment profile to get a clearer understanding of how and why they tend to feel unsafe at various levels.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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