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Suicide and
Life-Threatening
BEHAVIOR

Psychological risk factors predictive of suicidal distress in men receiving a community-based brief psychological intervention

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Abstract

Introduction: Adaptable community-based approaches for assessment and delivery of suicide prevention interventions for men experiencing suicidal crisis are needed. The lay your cards on the table (LYCT) component of the James' Place Model is a novel therapeutic approach comprised of four sets of card variables that correspond with suicidal risk factors. This study investigated the LYCT in predicting suicidal distress among men.

Methods: Cross-sectional data of 511 men aged 18–69 years (M = 34.59 years; SD = 12.30) collected between 1st August 2018 and 29th July 2021 were assessed to predict suicidal distress measured using the CORE Clinical Outcome Measures (CORE-OM).

Results: From four categories comprising the LYCT, correlational analyses demonstrated that 20 associations emerged as statistically significant (r's = 0.12–0.19). When these were included in regression analyses, effect sizes explained 2%–5% variance in CORE-OM outcomes (R^2).

Conclusion: Use of LYCT is supported for engaging men in the assessment of suicide risk factors and to inform tailoring of intervention delivery to suit the individual needs of men experiencing suicidal crisis.

KEYWORDS
community-based, coproduction, men, suicide, suicide prevention

INTRODUCTION

Suicide remains a significant global public health risk (WHO, 2023), particularly for men, who accounted for approximately three quarters of all suicide deaths in England and Wales in 2022 (Office for National Statistics (ONS), 2023). Risk factors associated with suicide among men are complex and diverse. This is highlighted by a systematic review reporting 68 risk factors associated with male suicide, which can fluctuate across the life course

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(Richardson, Dickson, et al., 2021; Richardson, Robb, & O'Connor, 2021). Additionally, it is widely documented that men are less likely to seek help when experiencing suicidal crisis (Cleary, 2017; Gilgoff et al., 2023; Sagar-Ouriaghli et al., 2019). A host of psychosocial factors have been proposed to account for low rates of help seeking rates among men experiencing suicidal distress. These include greater tolerance of mental distress, subscription to conventional masculine ideals promoting stoicism, self-reliance, and men's reluctance to disclose feelings of emotion and maladaptive coping such as alcohol and drug use (Biddle et al., 2004; Courtenay, 2000; Feigelman et al., 2021; Pirkis et al., 2017; Seidler et al., 2016).

While it may be tempting to characterize men as poor help-seekers, research exploring men's social experience of suicide is accumulating which challenges the perpetuation of the "*men do not seek help*" narrative. For example, 91% of men were found to have contacted front line services, most often primary care (82%), in the period prior to their suicide ranging from 1 week (38%) to 3 months prior to death (49%) (NCISH, 2021). However, just 5% of men in this study were engaged in talk therapies (NCISH, 2021) despite such interventions being equally considered effective among men and women (NHS Digital, 2019). This, along with research examining barriers to engagement in mental health services among men, highlight differences in the expression of mental health problems such as depression among men compared to women (Brownhill et al., 2005). Findings such as these suggest that current mental health service provision lacks sufficient reach among men experiencing suicidal crisis. Improving accessibility to timely suicide prevention for men is vital. Evidence is growing supporting the development of community-based, tailored suicide prevention interventions that are responsive to the social experience of men in suicidal crisis to broaden accessibility and acceptability (Chopra et al., 2022; Hanlon et al., 2022; Seidler et al., 2018; Struszczyk et al., 2019).

Several studies have identified a wide spectrum of biopsychosocial risk factors associated with increased suicide (e.g., Turecki et al., 2019), including those specifically among men (Richardson, Dickson, et al., 2021; Richardson, Robb, & O'Connor, 2021). Overall, the risk factors most predictive of suicidal behavior among men across from both retrospective and prospective studies were alcohol and/or drug use; being unmarried, single, divorced or widowed; and having a diagnosis of depression. Identification of risk factors has proven useful for recognizing drivers of suicide and for supporting dominant theories of suicide that attempt to explain translation of suicidal thoughts and ideation to suicide behaviors (e.g., Integrated Motivational Volitional

theory of suicide (IMV); O'Connor, 2011; O'Connor & Kirtley, 2018).

James' Place is the first community-based suicide prevention center for men in the UK, with qualified therapists delivering a therapeutic intervention called the James' Place Model (JPM) (Hanlon et al., 2022). The JPM consists of approximately nine sessions. The first three sessions of therapy occur over the course of a week and encompass risk management, safety planning, and ensuring the man is engaged in talk therapy. Sessions four to six involve the therapist delivering brief psychological interventions tailored to the individual's needs. Focus of the final three sessions (session seven to nine) is upon relapse prevention and safety planning. The therapist guides the men to reflect upon their progress and the tools developed during therapy to self-monitor their well-being. A further key component of the JPM is the lay your cards on the table (LYCT). Typically, the LYCT component of the intervention is administered at three-time points throughout the JPM therapeutic journey and have been designed to prompt discussion between the therapist and man of suicidal thoughts and beliefs they may be experiencing. Further details of the JPM and service are available (e.g., Chopra et al., 2022; Hanlon et al., 2022; Saini et al., 2020, 2022; Saini, Chopra, Hanlon, & Boland, 2021; Saini, Chopra, Hanlon, Boland, & O'Donoghue, 2021).

Understanding of the archetypical psychosocial risk factor profile presentation of men engaging with suicidal crisis services, and changes of this throughout the duration of their suicidal crisis and subsequent therapeutic intervention is lacking. Existing service evaluations of the James' Place service have focussed upon psychological distress (CORE-OM; Beck et al., 2015) and have consistently shown that the JPM significantly reduces suicidal distress (Chopra et al., 2022; Saini et al., 2020; Saini, Chopra, Hanlon, & Boland, 2021; Saini, Chopra, Hanlon, Boland, & O'Donoghue, 2021). However, less is known about the effect the LYCT intervention has upon clinical outcomes. Clinicians have been found to overestimate anxiety- and depression-related outcomes (Harmon et al., 2007), emphasizing the need for objective evaluation of change during the therapeutic journey. Determining how psychological risk factors associated with men's suicidal crisis across their therapeutic journey change will highlight the differential effect of the JPM upon these factors and the men's subsequent outcomes through the period of their intervention. Findings such as these may inform better tailoring of the JPM to better suit men exhibiting specific characteristics related to their suicidal crisis.

The present study aims to identify risk factors predictive of suicidal distress among men who utilize the LYCT component of the JPM during their therapeutic journey

at James' Place. This will highlight new knowledge in this area as multiple risk factors highlighted by men during therapy will be examined. Data from a community-based suicide prevention service for men will be used to determine the psychosocial risk factors most associated with help-seeking and engagement with suicide prevention services.

MATERIALS AND METHODS

Design

A cross-sectional design was used to extract data of men who received the JPM. Ethical approval was given by Liverpool John Moores University (Ref: 19/NSP/057). Written consent was given by men accessing the service during their initial welcome assessment.

Participants

Data were collected from a cohort of men experiencing suicidal crisis over a 3-year period who had been referred to James' Place between 1st August 2018 and 29th July 2021 ($n = 511$). Referrals of men into the service were received from multiple sources including hospital emergency departments, primary care, universities, or self-referral.

Materials

LYCT comprised materials of this study. The LYCT component of the JPM is comprised of four sets of cards that each resemble a stack of playing cards, called "*what's happening now*", "*how did I get here*", "*keeping the problem going*", and "*how can I get through this*", respectively. Each card within each pack describes either an emotion (e.g., sad and hopelessness), physical sensation (e.g., butterflies and dizziness), situation (e.g., someone is bullying me), or life event (e.g., breakdown of a significant relationship). The LYCT are designed to be administered at specific stages within the JPM. "*What's happening now*" cards are administered during the first three sessions to help the men visualize how they feel and to prompt discussion with the therapist. During sessions four to six, "*how did I get here*" and "*keeping the problem going*" cards are introduced to help men recognize contributory factors to their suicidal crisis. The "*how did I get here*" cards relate to two themes of "*what can I do*" and "*what other people can do*", are delivered during the final three sessions. They

are used to facilitate recognition of the coping strategies, and the support mechanisms men have developed to aid identification of a lapse in their well-being and to prevent relapse.

MEASURES

Primary outcome measures

The CORE34 and CORE10 clinical outcome measures (CORE-OM) formed the outcome measure in this study, with the CORE10 replacing the CORE34 measure in the service from September 2020. CORE-OM is a self-report measure routinely administered by therapists during men's first and final session of therapy. The CORE34 is comprised of 34 questions. Respondents are required to rank how they have been feeling over the last week using a 5-point Likert scale ranging from "*not at all*" to "*most of the time*". Four subscales comprise the CORE34; subjective well-being (4 items), problems/symptoms (12 items), life functioning (12 items), and risk harm (six items). An overall score of global distress is calculated by summing the four subscales. CORE10 is a shortened version of CORE34 consisting of 10 questions each beginning with the prefix of "*Over the last week*" followed by statements such as "*I made plans to end my life*" and "*I have felt unhappy*". For both the CORE34 and CORE10 higher scores indicate higher levels of psychological distress. A score of 51 or above on the CORE34 corresponds to the clinically significant range and less than 20 to the nonclinical range. Within the clinically significant range of the CORE34 21–33, 34–50, 51–67, and 68–84 correspond to low-, mild-, moderate-, and moderate-to-severe psychological distress, respectively. Scores of 85 or above indicates severe psychological distress. For the CORE10, a total score of 11 or higher shows the clinically significant range with scores of 11–14, 15–19, and 20–24 corresponding to mild-, moderate, and moderate-to-severe psychological distress, respectively. A score of 25 or more is indicates severe psychological distress.

Data analysis

Data were analyzed using IBM SPSS statistics for windows v28. Descriptive analyses were conducted to identify means, standard deviations, and frequencies of card variable selection from each category of LYCT. Selection of a card was coded as 1 and absence of a card was coded 0. Data met the assumptions of normality linearity, multicollinearity, and homoscedasticity. Outcome variable

of CORE-OM scores is continuous, reliable, and normal. James' Place replaced CORE34 with CORE10 measure in September 2020 to facilitate the administration of the questionnaire at more time points. Therefore, analyses are presented for both CORE34 and CORE10 measures.

Multiple regression was used to assess whether significant "*what's happening now*", "*how did I get here*", "*keeping the problem going*" and "*how can I get through this*" card variables predicted CORE34 and CORE10.

The strength and direction of relationships of each card within each set of LYCT and CORE scores were explored using point-biserial correlational tests. Card variables significant at the bivariate level from each LYCT category were included within multiple regression analyses if they achieved a bivariate significance level of 0.05 or less.

RESULTS

Sample characteristics

Table 1 shows the demographic characteristics for men referred to the James' Place service. Men ranged in age from 18 to 69 years (M = 34.59 years; SD = 12.30). Seventy six percent of men were white British (n = 390) and 11% were of other ethnicities (n = 56). Ethnicity of the remaining sample

$(n = 66)$ is unknown or not coded. At the time of data capture, the service relied upon ethnicity data being recorded by referral services as they did not routinely collate this data. Employment status data showed most men were employed (40.3%; n = 262). Approximately, a quarter of men were unemployed (25.8%; n = 132), while just 2% were a full-time carer (n = 1). Almost half of men reported they were single (49.5%; n = 253), while the fewest number of men were widowed (4%; n = 2). Again, completeness of employment and relationship status data is limited due to missing/unspecified data (15.5% (n = 72) and 102% (n = 20), respectively).

Correlation analyses

Table 2 shows the mean number of cards selected by men from each set of LYCT and their respective standard deviations. Of the four sets of cards, more "*what's happening now*" cards were used by men during therapy than any other set of LYCT (M = 9.96; SD = 11.09) (Table 2). By contrast, "*keeping the problem going*" cards were the least used cards by men (M = 2.06; SD = 3.58).

Tables 3 shows the results of significant point-biserial correlation analyses for the card variables of each category of the LYCT component of the JPM and CORE-OM scores (CORE34 and CORE10). Point-biserial correlations

Variable	CORE34 (N = 339)	CORE10 (N = 172)	Total N (%) (N = 511)
Ethnicity			
White British	259 (76.4%)	131 (76.2%)	390 (76.3%)
Other ethnicity	35 (10.3%)	21 (12.2%)	56 (11%)
Missing	45 (13.3%)	20 (11.6)	21 (4.1%)
Relationship status			
Single/Non-cohabiting	167 (49.3%)	86 (50%)	253 (49.5%)
Married	37 (10.9%)	29 (16.9%)	66 (12.9%)
In a relationship	20 (5.9%)	40 (23.3%)	60 (11.7%)
Divorced	6 (1.8%)	2 (1.2%)	8 (1.6%)
Separated	13 (3.8%)	7 (4.1%)	20 (3.9%)
Widowed	2 (0.6%)	0	2 (4%)
Missing	94 (27.7%)	8 (4.7)	102
Employment status			
Employed	120 (35.4%)	86 (50%)	206 (40.3%)
Unemployed	88 (26%)	44 (25.6%)	132 (25.8%)
Students	47 (13.9%)	29 (16.9%)	76 (14.9%)
Self employed	8 (2.4%)	0	8 (1.6%)
Retired	4 (1.2%)	4 (2.3%)	8 (1.6%)
Carer	0	1 (0.6%)	1 (2%)
Missing	72 (21.2%)	0	72 (21.2%)

TABLE 1 Demographics characteristics for men referred to the James' Place service.

TABLE 2 Means and standard deviations of lay your cards on the table sets.

Variable	Mean No. cards/ SD	Cards range (min-max)
What's happening now (WHN)	9.96 (11.09)	0–39
How did I get here (HDIGH)	2.48 (4.13)	0–16
What's keeping the problem going (KPG)	2.06 (3.58)	0–16
How can I get through this (HCIGTT)	3.65 (6.78)	0–25

TABLE 3 Point-biserial correlation coefficient of lay your cards on the table variables.

Variable	Correlation coefficient CORE34	Correlation coefficient CORE10
WHN cards		
I think about killing myself all the time	0.15**	
No-one cares	0.16*	
Humiliated		0.17*
Slow		0.17*
Embarrassed		0.16*
Ashamed		0.16*
I'm not seeing my friends anymore		0.18*
Exhausted		0.17*
I don't want to be here		0.17*
Butterflies		0.17*
HDIGH cards		
I feel overwhelmed by my responsibilities	0.14*	
I can't tell anyone how I am feeling	0.12*	
My friends don't talk to me	0.18**	
I'm struggling to make ends meet	0.12*	
My relationship is not good	0.14**	
I have lived through terrible experiences	0.12*	0.17*
KPG Cards		
I can't sleep	0.12*	
I can't relax		0.19*
HCIGTT cards		
Use of relaxation or mindfulness techniques		0.17*

Abbreviations: HCIGTT, how can I get through this; HDIGH, how did I get here; KPG, keeping the problem going; WHN, what's happening now.

*Significance at 0.05 *(two-tailed). **Significance at 0.01 (two-tailed).

revealed small positive significant relationships across each of the four sets of LYCT, suggesting these risk factors are associated with higher suicidal distress as indicated by either CORE10 or CORE34 scores. The remaining cards within the LYCT component of the JPM were not significantly correlated with the CORE-OM. Multiple regression was carried out to determine if any card variables were predictive of CORE-OM scores. Only card variables showing a significant correlation with CORE-OM scores with a significance level equal to or less than 0.05 were inputted into the regression model. However, results reported at $p < 0.05$ should be interpreted with caution to allow for the possibility of type 2 errors.

Regression analyses

What's happening now card variables predictive of CORE-OM scores

Multiple regression was used to assess whether "*what's happening now*" cards of "*I think about killing myself all of the time*" and "*no-One cares*" predicted CORE34 scores. R^2 for the overall model was 2.7% with an adjusted R^2 value of 2.1%. Both "*I think about killing myself all of the time*" and "*no-one cares*" significantly predicted CORE34 scores (F (2,322) = 4.48, $p = 0.01$). The "*what's happening now*" card "*no-one cares*" did not

make a significant unique contribution in predicting the CORE34 scores (ß = 0.07, $p = 0.24$). However, the "*what's happening now*" card "*I think about killing myself all of the time*" was found to make a significant and unique contribution to variance in CORE34 scores (ß = 0.13, $p = 0.03$).

"*What's happening now*" cards of "*humiliated*", "*slow*", "*embarrassed*", "*ashamed*", "*I'm not seeing friends anymore*", "*exhausted*", "*I don't want to be here*", and "*butterflies*" were tested in predicting CORE10 scores. R^2 for the overall model was 6.8% with an adjusted R^2 value of 1.9%. Overall, the model was nonsignificant in predicting CORE10 scores ($F(8,152) = 1.38$, $p = 0.21$).

How did get here card variables predictive of CORE-OM scores

Multiple regression was used to assess whether "*I feel overwhelmed by my responsibilities*", "*I can't tell anyone how I'm feeling*", "*my friends don't talk to me*", "*I'm struggling to make ends make*", "*my relationship is not good*", and "*I have lived through terrible experiences*" predicted CORE34 scores. R^2 for the overall model was 4.5% with an adjusted R^2 value of 2.7%. Overall, the model significantly predicted CORE34 scores ($F(6,318) = 2.51$, $p = 0.02$). Only the "*how did I get here card*" variable "*My friends don't talk to me*" made a significant unique contribution in predicting the CORE34 scores (ß = 0.0.13, $p = 0.05$ (0.049)). The remaining "*how did I get here*" card variables did not make a significant and unique contribution to variance in CORE34 scores.

"*I have lived through terrible experiences*" "*how did I get here*" card variable was found to account for 2.9% of the overall model with an adjusted R^2 value of 2.3%. Overall, the model was significant in predicting CORE10 scores ($F(1,159) = 4.8$, $p = 0.03$) with the "*I have lived through terrible experiences*" "*how did I get*" here card variable making a significant and unique contribution to variance in CORE10 scores (ß = 0.0.17, $p = 0.03$).

Keeping the problem going predictive of CORE-OM scores

R^2 for the overall model of "*I can't sleep*" to predict CORE34 was 1.3% with an adjusted R^2 value of 1%. Overall, "*I can't sleep*" significantly predicted CORE34 scores ($F(1,323) = 4.3$, $p = 0.04$), with a significant contribution in predicting the CORE34 scores at the bivariate level (ß = 0.0.12, $p = 0.04$).

In relation to CORE10 score, "*I can't relax*" predicted CORE10 scores. R^2 for the overall model was 3.5% with an adjusted R^2 value of 2.9%. Overall, the model was significant in predicting CORE10 scores ($F(1,159) = 5.79$, $p = 0.02$), making a significant contribution to variance in CORE10 scores at the bivariate level (ß = 0.0.19, $p = 0.02$).

How can I get through this predictive of CORE-OM scores

None of the "*how can I get through this*" card variables were found to significantly predict CORE34 scores. However, it was found that the "*how can I get through*" this card variable of "*use relaxation/mindfulness techniques*" predicted CORE10 score. R^2 for the overall model was 3% with an adjusted R^2 value of 2.4%. Overall, the model significantly predicted CORE10 scores ($F(1,159) = 4.83$, $p = 0.03$), with a significant contribution in predicting the CORE10 scores at the bivariate level (ß = −0.0.17, $p = 0.03$).

Table 4 summarizes four regression analyses with significantly correlated card variables from each set of cards ("*what's happening now*", "*how did I get here*", "*keeping the problem going*", and "*how can I get through this*") and CORE34 and CORE10 scores.

DISCUSSION

Summary of findings

The purpose of this study was to determine the predictive utility of the novel LYCT component of the JPM on suicide distress outcomes, recorded using CORE-OM. Multiple regression results confirmed the "*what's happening now*" card "*I think about killing myself all of the time*" made a unique, significant contribution to variance in CORE34 outcome scores. No "*what's happening now*" cards predicted CORE10 outcome scores. The "*how did I get here*" card, "*My friends don't talk to me anymore*", significantly predicted CORE34 scores, while "*I have lived through terrible experiences*" *significantly* predicted CORE10 scores. Of the "*keeping the problem going*" cards, "*I can't sleep*" and "*I can't relax*" predicted the CORE34 and CORE10 scores respectively. None of the "*how can I get through this*" cards significantly predicted CORE34 cores, but "*use of relaxation/mindfulness techniques*" significantly predicted CORE10 outcomes.

Interpretations of findings

Principally the findings affirm the significant role of psychological factors in the emergence of suicidal distress among men, highlighting how the focus of these change

TABLE 4 Multiple regression model coefficients for significantly correlated WHN, HDIGH, KPG, and HCIGTT card variables against CORE34 and CORE10 scores.

Predictor	CORE34			CORE10		
	B	**SE**	**β**	**B**	**SE**	**β**
WHN variables						
I think about killing myself all the time	6.01	2.82	0.13*			
No-one cares	4.14	3.54	0.07			
Humiliated				1.19	1.31	0.09
Slow				0.55	1.35	0.04
Embarrassed				−0.12	1.33	−0.01
Ashamed				0.21	1.28	0.02
I'm not seeing my friends anymore				1.14	1.33	0.08
Exhausted				0.23	1.25	0.02
I don't want to be here				0.75	1.22	0.07
Butterflies				1.22	1.26	0.09
	$F(2, 322) = 4.48*$, Ad$R^2 = 0.02$, $R^2 = 0.03$					
HDIGH variables						
I feel overwhelmed by my responsibilities	2.9	3.52	0.06			
I can't tell anyone how I am feeling	1.06	3.88	0.02			
My friends don't talk to me	10.21	5.17	0.13*			
I'm struggling to make ends meet	4.01	4.3	0.07			
My relationship is not good	4.04	3.67	0.07			
I have lived through terrible experiences	−2.65	4.38	0.06	2.31	1.05	0.17*
	$F(6, 318) = 2.51*$, Ad$R^2 = 0.03$, $R^2 = 0.05$			$F(1, 159) = 4.8*$, Ad$R^2 = 02$, $R^2 = 0.03$		
KPG variables						
I can't sleep	5.06	2.44	0.01*			
I can't relax				2.37	0.99	0.19*
	$F(1, 159) = 4.8*$, Ad$R^2 = 0.02$, $R^2 = 0.02$			$F(1, 159) = 5.79*$, Ad$R^2 = 0.03$, $R^2 = 0.04$		
HCIGTT variables						
Use relaxation/mindfulness techniques				−2.22	1.01	−0.17*
				$F(1, 159) = 4.85*$, Ad$R^2 = 0.02$, $R^2 = 0.03$		

Abbreviations: HCIGTT, how can I get through this; HDIGH, how did I get here; KPG, keeping the problem going; WHN, what's happening now.

*p < 0.05.

as men progressed through the JPM, adding further support for prominent theories of suicide such as the IMV model (O'Connor, 2011; O'Connor & Kirtley, 2018) and IPT (Joiner Jr. et al., 2009). For example, each significant risk factor predictive of suicidal distress corresponds with components featured within the IMV model, which provides an ideation-to-action framework to explain the development and transference of suicide risk through three distinct phases (i.e., premotivational, motivational, and volitional phases) (O'Connor, 2011; O'Connor & Kirtley, 2018). The *"I have lived through terrible experiences"* card captures the potential impact of biopsychosocial background and triggering events (e.g., negative/stressful life events and early life adversity) that poses an individual more susceptible to suicide risk (O'Connor &

Kirtley, 2018). Premotivational factors are conceptualized to influence suicide risk by exerting their effects upon components described in the motivational and volitional phases. Theoretically *"my friends don't talk to me anymore"* encompasses social support and thwarted belongingness, which features as a motivational moderator within the IMV model with the capacity to strengthen or attenuate the strength of the entrapment and suicide ideation/intent relationship (O'Connor & Kirtley, 2018). Therefore, use of theoretical models of suicide such as the IMV model could guide the appraisal of individual suicide risk and adapt intervention delivery among men within community-based therapeutic settings to deliver nuanced, targeted brief psychological therapy to address specific areas driving an individual's suicidality (Sandford et al., 2022).

The significance of the "*what's happening now*" card, "*I think about killing myself all the time*" in predicting suicidal distress is unsurprising as an inclusion criterion of James' Place is that men are actively experiencing suicidal crisis. According to the IMV model, suicide ideation arises during the motivational phase due to feelings of defeat and/or humiliation that engender entrapment (O'Connor, 2011; O'Connor & Kirtley, 2018), which can be perceived as either internal (i.e., arising from own thoughts and feelings) or external (i.e., from external situations) (Gilbert & Allan, 1998; O'Connor & Portzky, 2018). While card variables relating to defeat, humiliation, and entrapment did not significantly predict suicidal distress, the "*how did get here*" cards of "*my friends don't talk to me anymore*" and "*I have lived through terrible experiences*" and "*keeping the problem going*" cards of "*I can't relax*" and "*I can't sleep*" did significantly predict suicidal distress. On the surface, these findings appear partially inconsistent with the IMV model as it posits a defeat/humiliation and entrapment pathway to suicide ideation and intent (O'Connor & Kirtley, 2018). However, it is important to note that men who took part in this study had been accepted to receive the JPM. Subsequently, there is a strong likelihood they had begun to receive strategies to maintain their safety as they embarked upon the JPM (e.g., safety planning). It is possible these strategies may have dissipated the prominence of some risk factors. While further research would be required to confirm this supposition, the findings support research highlighting the complex interplay of risk factors that drive suicidal distress among men (e.g., Richardson, Dickson, et al., 2021; Richardson, Robb, & O'Connor, 2021) and the need for tailored interventions to address the unique vulnerabilities and needs of men experiencing suicidal crisis (e.g., Seidler et al., 2018). Furthermore, they add support to the use of evidence-based models of suicide such as the IMV model to inform the clinical assessment of suicidal risk and delivery of targeted suicide prevention intervention to individuals (Sandford et al., 2022).

The findings of the "*how did I get here*" card "*my friends don't talk to me anymore*" in predicting suicidal distress contributes additional support to the key protective role men's friendship and peer group has in mitigating risk of suicide among men (Richardson et al., 2022). Past research has shown that levels of social support distinguish between men and women with suicidal ideation only versus suicide attempt (with or without suicide ideation) (Richardson et al., 2022). Specifically, higher levels of social support were associated with reduced risk of suicide attempt among men (Richardson et al., 2022). In relation to the present findings, the relevance of "*my friends don't talk to me anymore*" in

predicting suicidal distress suggests men were experiencing loss and/or rejection within their social support network. Recent qualitative research offers further insights into the mechanisms underpinning the buffering effects of peer social support for men. For example, Richardson, Dickson, et al. (2021) findings highlight the importance of social connectedness and value from others has among men who have attempted suicide and during their recovery. In particular, the potential role friends/family have in broaching men's mental health needs with them since men reported they had recognized their mental health needs but struggled to seek help independently (Richardson et al., 2022). While Seidler et al. (2023) findings suggest that friendship provides a source of distraction allowing men to channel their attention away from their suicidal distress (Seidler et al., 2023). Supporting men to develop and sustain social connectivity with peers to reduce social isolation proffers a therapeutic approach to reduce suicidality (Seidler et al., 2023).

Inability to relax and sleep (i.e., "*I can't relax*" and "*I can't sleep*"), and "*use of relaxation/mindfulness techniques*" were identified through the "*keeping the problem going*" and "*how can I get through this*" cards to be a significant predictor of suicidal distress respectively. While it would be expected that "*use of relation/mindfulness techniques*" would predict reduced suicide, identification of this card with "*I can't relax*" and "*I can't sleep*" cards underscore the significance anxiety and inability to sleep has upon suicidality. For example, sleep problems, including insomnia, have been associated with suicidal thoughts and behaviors including suicide deaths (Littlewood et al., 2017; Liu et al., 2020). Another study found one hour of lost sleep was associated with increased risk of suicidal thoughts and behaviors (Winsler et al., 2015). A recent systematic review and meta-analysis examining sleep disturbance as a risk factor for suicidal thoughts and behaviors reported small-to-medium and medium pooled effect size of 41 included studies (Liu et al., 2020). It has been posited that the relationship between sleep dysregulation and suicidality is mediated by defeat and entrapment (Littlewood et al., 2016; Russell et al., 2018). However, little is known about the short-term impact of sleep dysregulation upon acute risk of suicide (Liu et al., 2020). Nevertheless, the present study findings indicate a significant and sustained effect of sleep disturbances, accompanied by feelings of inability to relax, upon suicidal distress among men receiving the JPM as they progressed through the clinical pathway. From a therapeutic perspective, this knowledge could inform delivery of brief psychological intervention that can effectively modify these risk factors of suicide among men.

Strengths and limitations

A major strength of this study is that reported data relates to men accessing a community-based therapeutic suicide prevention center in the UK which was collated while they were actively experiencing suicidal crisis. As such, the study sample represents a high-risk subpopulation for suicide. Obtaining data while men are experiencing suicidal crisis is important for shedding understanding of the real-world psychological risk factor profile of men experiencing suicidal crisis. This is important for informing development of effective suicide prevention policy and interventions. The findings add support for assessing individual risk factors of suicide when adapting intervention delivery of the JPM to suit the individual needs of men experiencing suicidal crisis. Additionally, administration of the LYCT component at specific points during the therapeutic journey further enlightens understanding of the complex interplay of psychological risk factors associated with suicide and how these may change through the trajectory of suicidal crisis. As such LYCT provides James' Place therapists with a picture of how different drivers of a man's suicidal crisis fits together and what it means to them as an individual. Lastly, the LYCT component of the JPM has allowed a comprehensive range of risk factors and their impact upon men's suicidality during delivery of the JPM to be considered in this study.

Limitations of this study mean that the results should be interpreted with caution. Reported data relates to men accessing the James' Place service, therefore wider generalisability of the results is unknown. However, it is important to note that the James' Place service is currently undertaking an ambitious expansion which will significantly increase the reach to men living across England by 2026. Psychological predictors of CORE-OM outcomes were restricted to data routinely collected by James' Place via the LYCT. The effect sizes reported within the regression models are not large as shown by the levels of variance accounted for in the regression models (typically between 2% and 5%), although these are beta weights and are thus robust from multiple predictors. Also, LYCT data were found to be incomplete for some cases. For example, data were often recorded for one or two sets of LYCT for men. Whereas for other cases, no LYCT data were reported at all. Understanding of the conditions under which the LYCT component may be administered is needed to understand fidelity in implementation of the JPM.

Future research

The data revealed some inconsistency in delivery of the LYCT component of the JPM with some men receiving each set of cards, others receiving one or two sets, and others no sets. Emphasis within the JPM is placed upon coproduction of therapy with the individual, allowing therapists to adapt the model to address each person's needs. It is feasible that therapists make a clinical and/or a coproduced decision with each individual man to omit specific or all sets of LYCT during the therapeutic process. Future research should seek to understand the acceptability of the JPM both from the perspective of therapists and men. This could offer insights into facilitators and barriers to delivery of the LYCT.

Of note was the significant effect sleep problems had upon suicidality as men progressed through the JPM. This indicated a potentially enduring, yet modifiable risk factor for men seeking suicide prevention support within a community-setting. Little remains known of the role of sleep problems upon acute suicidal crisis (Liu et al., 2020). Future research should seek to examine the impact of sleep dysregulation upon suicidality among men within a community-based suicide prevention setting to enhance understanding of its clinical implications in the assessment and prevention of suicide among men within community-settings.

CONCLUSION

Understanding the risk factors experienced by men in suicidal crisis and how these determine intervention response can inform the development of targeted and effective suicide prevention interventions which are sensitive to the challenges experienced by men when seeking help for suicide. The findings of this study support exploration of psychological risk factors using the LYCT component of the JPM. Use of LYCT during the therapeutic journey contextualizes the drivers of suicide an individual presents with and how these may fluctuate as an individual progresses through the JPM. This information informs adaptation of the JPM to suit individual needs.

CONFLICT OF INTEREST STATEMENT
The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT
Research data are not shared.

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