Section A-Research paper
ISSN 2063-5346

Specific indicators of Suicide Ideation on Rorschach Psychodiagnostics using Exner's Comprehensive System in a sample from Delhi, India

Sonia Puar* and Dr. Dweep Chand Singh**

*Corresponding Author and Phd Scholar, AIBHAS, Amity University Uttar Pradesh, NOIDA Campus.

** Director & Professor (Clinical Psychology), AIBHAS, Amity University Uttar Pradesh, NOIDA Campus.

ABSTRACT

Background: Suicide remains one of the leading causes of death worldwide (World Health Organization, 2019). Every year 703 000 people take their own life and there are many more people who attempt suicide. Suicide assessment is a challenging task and can be masked by the willingness of the client to share information. Projective assessment by Rorschach psychodiagnostics is a relatively nonthreatening task without any right or wrong answers. A patients' interpretations of the innocuous inkblots can provide a glimpse into the patient's way of thinking and interpreting the environment. Suicide constellation given by Exner's Comprehensive System (1993) on Rorschach psychodiagnostics assessment has not been found to be sensitive to different cultures (Wood & Lilienfeld, 1999). Thus, there was a need to find indicators of suicide ideation using Rorschach psychodiagnostics.

Aim: To identify the suicide ideation indicators on Rorschach psychodiagnostics assessment using Exner's Comprehensive System.

Method: Purposive sampling method was used to select 200 individuals with depression with and without suicide ideation from a Delhi based psychiatry clinic. Tools used for assessment were the DSM-5 Level 2 — Depression — Adult measure, The Modified Scale for Suicidal Ideation, and Rorschach Psychodiagnostics assessment in addition to personal information sheet and informed consent.

Results: Specific indicators of suicide constellation different from the established suicide constellation of the Exner's comprehensive system have been found. These (MOR, S, (Ad), VF and Color Shading Blend) may be considered as 'specific' to current sample from Delhi, India.

Conclusion: Different specific indicators of suicide ideation on Exner's comprehensive system (MOR, S, (Ad), VF and Color Shading Blend) have been identified. Similar research may be conducted in different cultures for validation.

Key words: Rorschach Psychodiagnostics, Suicide ideation, Depression

Suicide remains one of the leading causes of death worldwide, according to World Health Organization. Every year, more people die because of suicide than HIV, malaria, or breast cancer−or war and homicide. More than 700 000 people die due to suicide every year. Every year 703 000 people take their own life and there are many more people who attempt suicide. Every suicide is a tragedy that affects families, communities and entire countries and has long-lasting effects on the people left behind. Suicide occurs throughout the lifespan.

While the link between suicide and mental disorders (in particular, depression and alcohol use disorders) is well established in high-income countries, many suicides happen impulsively in moments of crisis with a breakdown in the ability to deal with life stresses, such as financial problems, relationship break-up or chronic pain and illness.

In addition, experiencing conflict, disaster, violence, abuse, or loss and a sense of isolation are strongly associated with suicidal behaviour. Suicide rates are also high amongst vulnerable groups who experience discrimination, such as refugees and migrants; indigenous peoples; lesbian, gay, bisexual, transgender, intersex (LGBTI) persons; and prisoners. By far the strongest risk factor for suicide is a previous suicide attempt.

Stigma, particularly surrounding mental disorders and suicide, means many people thinking of taking their own life or who have attempted suicide are not seeking help and are therefore not getting the help they need. The prevention of suicide has not been adequately addressed due to a lack of awareness of suicide as a major public health problem and the taboo in many societies to openly discuss it. To date, only a few countries have included suicide prevention among their health priorities and only 38 countries report having a national suicide prevention strategy. Increasing community awareness and breaking down the taboo is important for countries to make progress in preventing suicide.

Suicide assessment; Despite decades of research, accurate prediction of suicide and suicide attempts remains elusive. Suicide assessment is a challenging and overwhelming task for even seasoned clinicians.

Rorschach Psychodiagnostics is a non-threatening assessment procedure that reveals individuals unconscious processes and gives interpretation into an individual's personality structure without challenging the individual. Rorschach psychodiagnostics have been used in clinical practice since 1912 and has gained popularity to identify individuals with psychopathological experiences. Though Rorschach psychodiagnostics have been considered to be applicable on variety of population, however culture does influence response pattern.

Thus the present research was conducted to identify most suitable indicators for a Delhi, India based population with depression with suicide ideation.

Method

Research Design: Cross-Sectional design

Problem statement: Which responses on Rorschach Psychodiagnostic Inkblot Technique as per Exner's Comprehensive system would predict depression and suicide ideation in the clinically diagnosed patients with depressive disorder, with and without suicidal ideation?

Hypothesis: Responses on Rorschach Psychodiagnostics Inkblot Technique as per Exner's Comprehensive system would predict depression and suicide ideation in the clinically diagnosed patients with depressive disorder, with and without suicidal ideation.

Sample: Sample was taken from psychiatric clinics in Delhi NCR region who met the criteria for depression for at least one year. These were Individuals attending the out-patient clinic of a psychiatric facility, meeting the ICD-10 DCR criteria for mild to moderate depressive episode without somatic and psychotic symptoms, or recurrent depressive disorder current episode moderate or severe without somatic and psychotic symptoms (F32.10, F32.20, F33.10 and F33.20). Any participant that had Severe comorbid medical conditions such as chronic heart disease, stroke, cancer, renal failure, central nervous system injury etc. or comorbid psychiatric illnesses or intellectual disability or Physical and sensory disability or education level less than 10^{th} standard or exposure to Rorschach psychodiagnostics in the last one month were excluded. Finally a 100 participants who had mild-moderate to severe suicide ideation and 100 participants without significant suicide ideation using Miller's Modified Suicide Ideation Scale (1993).

Consent was obtained from all 200 participants, and their details were obtained using personal information sheet. Thereafter, Thereafter, they were assessed for their current depression status using Level 2—Depression—Adult (PROMIS Emotional Distress—Depression—Short Form) (PROMIS Health Organization, 2012) and suicide ideation level was assessed using the modified suicide intention scale (MSIS) by Miller (1991): and Rorschach psychodiagnostics using Exner's comprehensive system (CS) (Exner, 2003).

Results:
Analysis was done using statistical package for social sciences version 23 (SPSS-23). Analysis of descriptive data of the two groups suggest that their mean age was 35 years, and they did not differ on age or gender basis, they all belong to middle and upper middle class, all participants were graduate (up to 15 years of education) and did not have any other comorbid illnesses. Both the groups did not differ in their depression scores also however they had significant difference in suicide ideation score.

Further it was seen that these two groups differ on certain variables of Rorschach psychodiagnostics test suggesting there are specific responses that given by people with suicide ideation. For example, space responses, Were higher in people with suicide ideation as compared to those without suicide ideation.

Table 1: Demographic details of the sample (N=200)

Variable	Depression with Suicide Ideation (DSI+)	Depression without Suicide Ideation (DSI-)	Statistics
	M (SD)	**M (SD)**	
Age in years	35 (12.08)	35 (12.14)	t= 0.146 (p value = 0.88)
	% (n)	**% (n)**	
Gender			
Males	44% (n=44)	40% (n=40)	χ^2= 2.02 (p value= 0.28)
Females	56% (n=56)	60% (n=60)	
APA Depression T score			
• **Mild**	23	40	
• **Moderate**	52	48	
• **Severe**	25	12	
Miller's Suicide Ideation Scale scores			
• **Not Significant**	0	100	
• **Mild-Moderate**	60	0	
• **Severe**	40	0	

Correlation analysis was done using Pearson's correlation method to identify which are the positive correlates of suicide ideation. Table 2 gives these correlation values.

Table 2: Correlation analysis of Rorschach Psychodiagnostics and Suicide Ideation scores

Rorschach Psychodiagnostics Scoring Categories			Symbols of Exner CS	Suicide Ideation by MSIS
Number Of Responses			R	-0.56***
Location		Whole	W	-0.55***
		Common Detail	D	-0.54***
		Uncommon Detail	Dd	-0.54***
		Space	S	0.69***
Developmental Quality		Plus Synthesised	DQ+	-0.36***
		Vague Synthesised	DQv/+	-0.47***
		Ordinary	DQo	-0.32***
		Vague	DQv	-0.08^{NS}
Form Quality		Plus	FQ+	-0.42***
		Ordinary	FQo	-0.53***
		Unusual	FQu	-0.54***
		Minus	FQ-	0.50***
Determinants	Pure Form		F	0.16***
	Movement	Human	M	-0.41***
		Animal	FM	-0.03^{ns}
		Inanimate	m	0.51***
		Active	a	-0.46***
		Passive	p	0.52***
	Chromatic Colour	Form Primary Colour Secondary	FC	-0.54***
		Colour Primary Form Secondary	CF	-0.46***

		Pure Colour	C	0.28***
		Colour Naming	Cn	0.32**
	Achromatic Colour	Form Primary Achromatic Colour Secondary	FC'	.39***
		Achromatic Colour Primary Form Secondary	C'F	0.15***
		Pure Achromatic	C'	.63***
	Shading-Texture	Form Primary Texture Secondary	FT	-0.07^{NS}
		Texture Primary Form Secondary	TF	0.24***
		Pure Texture	T	0.23***
	Shading-Vista	Form Primary Vista Secondary	FV	0.31***
		Vista Primary Form Secondary	VF	0.31***
		Pure Vista	V	0.28***
	Shading-Diffused	Form Primary Diffused Shading Secondary	FY	0.19***
		Diffused Shading Primary Form Secondary	YF	0.36***
		Pure Diffused Shading	Y	-0.02^{NS}
	Reflection	Form Primary Reflection	Fr	0.13***

		Secondary		
		Reflection Primary Form Secondary	Rf	0.01^{NS}
	Form Dimension		Fd	0.23***
	Pair		(2)	-0.48***
Content	Human Content	Full Human	H	-.35***
		Fictional Human	(H)	0.43***
		Human Detail	Hd	-0.03^{NS}
		Fictional Human Detail	(Hd)	.29***
		Human Experience	Hx	0.05^{NS}
	Animal Content	Full Animal	A	0.38***
		Fictional Full Animal	(A)	0.16***
		Animal Detail	Ad	0.17***
		Fictional Animal Detail	(Ad)	0.64***
	Anatomy		An	0.12***
	Art		Art	-0.35***
	Anthropology		Ay	-0.14*
	Blood		Bl	0.38***
	Botany		Bt	.22***
	Clothing		Cg	-0.15***
	Cloud		Cl	0.21***
	Food		Fd	0.20***
	Fire		Fi	0.31***
	Geography		Geo	0.02^{NS}
	Household		Hh	-0.36***
	Landscape		Ls	0.17***

	Nature	Na	0.24***
	Science	Sc	0.30***
	Sex	Sex	-0.07^{NS}
	X-Ray	Xy	0.09^{NS}
Six Special Scores	Deviant Verbalization	DV	0.18***
	Deviant Response	DR	0.18***
	Inappropriate combination	INCOM	0.24***
	Fabulized Combination	FABCOM	0.49***
	Inappropriate Logic	ALOG	0.45***
	Raw Sum Of 6 Special Scores	Rsum6	0.58***
Other Special Scores	Abstract	AB	0.03^{NS}
	Aggressive	AG	0.16***
	Cooperative	COP	0.06^{NS}
	Good Human Response	GHR	-0.17**
	Poor Human Response	PHR	-0.09^{NS}
	Personalization	PER	0.23***
	Morbid	MOR	0.76***
	Preservation	PSV	0.32***
Derivatives	Estimate Actual	EA	-0.52***
		es	0.71***
		Adj es	0.61***
		D Score	-0.70***
		Adj D Score	-0.58***
	Sum Colour	WsumC	-0.49***
	Sum Achromatic Colour	SumC'	0.61***
	Sum Texture	SumT	0.15***
	Sum Vista	SumV	0.63***
	Sum Diffused Shadding	SumY	0.34***
	Color Form Plus Color	CF+C	-0.41***

	Color-Shading Blends		Blends	0.68***
Ratios And Indexes	Affective Ration		Afr	-0.46***
	Human Content			-0.16***
	Isolation Index			0.36***
	Ecocentrism			0.09 NS
	Intellectual Index			-0.16***
	Level 2 Responses		Lv2	0.52***
			XA%	-0.49***
			WDA%	-0.50***
			X-%	0.53***
			Xu%	-0.44***
	Popular		P	-.34***

***Significant at p value 0.001 ** Significant at p value 0.01

Further hierarchical regression analysis was done to predict suicide ideation using the strong positive correlates. It was found that morbid content, space location, fictional animal details, vista primary-form secondary and color shading blend are strong predictors of suicide ideation.

Table 3: Hierarchical Regression Analysis to Predict Suicide Ideation from Rorschach Psychodiagnostics Exner's Comprehensive System Indicators

Variables	**B**	**95% CL for B**		**SE B**	**Beta**	**R^2**	**Adjusted R^2**
		LL	**UL**				
Step1						.57	.56***
Constant	-0.144	-1.03	.74	0.45			
MOR	3.61***	-3.25	3.96	0.18	0.75***		
Step 2						.65	.65***
Constant	-6.06***	-7.75	-4.36	0.86			
MOR	2.56***	2.15	2.98	0.21	0.54***		
S	3.41***	2.56	4.28	0.44	0.35***		
Step 3						.69	.68****
Constant	-5.01***	-6.64	-3.37	0.83			
MOR	2.08***	1.65	2.50	0.21	0.44***		

S	2.86***	2.02	3.69	0.42	0.29***		
(Ad)	2.23***	1.52	2.95	0.36	0.25***		
Step 4						.71	.71***
Constant	-3.79***	-5.41	-2.17	0.82			
MOR	1.76***	1.35	2.18	0.21	0.37***		
S	2.24***	1.42	3.07	0.41	0.23***		
(Ad)	2.00***	1.31	2.69	0.35	0.22***		
VF	4.40***	2.80	6.00	0.81	0.21***		
Step 5						.73	.73***
Constant	-4.46***	-6.06	-2.86	0.82			
MOR	1.40***	0.96	1.83	0.22	0.29***		
S	1.89***	1.07	2.70	0.41	0.19***		
(Ad)	1.65***	0.97	2.34	0.34	0.18***		
VF	4.32***	2.77	5.87	0.79	0.21***		
Colour-Shading Blend	1.25***	0.70	1.79	0.28	0.18***		

*****Significant at p value 0.001** (MOR-Morbid Content, S-Space Content, (AD)-Fictional Animal Content, VF-Vista Primary Determinant with secondary form, and Blend- Colour-Shading Blend)

The table 3 suggested that six most suitable indicators to predict suicide ideation are morbid responses, space responses, fictional animal content, predominant vista as determinant and color-shading blend response, when we compare these indicators with the suicide constellation given by Exner's comprehensive system it can be seen that the common indicators in Exner's comprehensive system and current findings are morbid responses, space responses, a predominant vista as determinant and colour shading blend responses. Fictional animal content was not mentioned in Exner's findings yet it is found to be significant indicator in current population, this indicator is a specific indicator for current population and may have cultural relevance that may need further exploration.

Discussion:

Assessment suicide has been a challenging and overwhelming experience for healthcare providers, timely identification can save lives of sufferers and prevent mental health burden of the care providers.

The indicators found in present work resonate with previous findings of Exner (2000), people with suicide ideation respond to Rorschach psychodiagnostics cards in specific manner,

providing clues into their ideation, for example, morbid content was found to be the most significant indicator of suicide ideation, individuals who verbalise morbid ideas on the unstructured inkblot card suggest these individuals might be have difficulty imagining neutral or lively phenomena, they have predominance of theme that are destroyed, ruined, broken or dead. This lifeless morbidity is a red flag and should be viewed with caution. If three or more MOR responses are present, it is both a strong indicator of depression and one of several indicators for suicide risk (Exner, 1991, 1993). Similarly, Yaseen, Monlinam Hawes, Barzilay and Galynker in 2019 found that morbid ideation was reported by 87.5% of their participants and associated with lifetime and concurrent levels of suicide ideation. Along with morbid responses, space responses were also found to be predictor of suicide ideation.

White Space (S) responses was also found to be a predictor of suicide ideation. A high number of S responses (three or more) is associated with negativism, difficulty in handling anger, and oppositional tendencies (Exner, 1993, 2003). If S responses are high (three or more) and occur with poor form quality and/or poor primitive movements, a clinician should consider the presence of anger, hostility, and potential acting out (Exner, 1993). Rosso, Camoirano and Schiaffino (2015) found higher levels of hostility, and with more difficulties in coping with frustration in interpersonal relationships in terms of emotional dysregulation with S response since, S responses were associated with more dysfunctional aspects of personality functioning.

Further it was also seen that fictional animal detail ((Ad)) responses were also a significant predictor of suicide intent. Fictional animal detail does not appear in Exner's findings as a predictor of suicide intent and seem to be unique to current population, Beck (1960) suggested that individuals with affective non-responsiveness and emotional delay may produce high number of animal detail responses, which may be common in severe depression cases. Fictional animal detail may have some cultural influence too, as mythological content in India has high mention of fictional animal characters, these culturally leadenness may need to be explored further. Fictional animal content is associated with impairment in reality-testing and thus may suggest lack of appropriate coping skills.

Vista responses (V) responses created by depressed patients indicate a deep level of self-critical introspection (Exner, 1993). Stutterers also produce more pure V responses (Light & Amick, 1956), as do alcoholics (Buhler & LeFever, 1947), reflecting then painful self-criticism that usually occurs in these patient groups. V responses have also been suggested as an index of suicidal risk and are an important part of Exner's Suicidal Constellation (Exner, 1991, 2003). Similarly V responses with form secondary was found to be higher in people with suicidal intent in the current sample, suggesting V responses should also be considered as risk and respond appropriately.

The color-shading blend (combining color with C′, Y, T, F, V) implies concern with painful, irritating, confusing emotional experiences, and it is associated with the protocols of depressives. Exner and Wylie (1977) found a moderate correlation with attempted suicide. Accordingly, this blend was included as one of several variables in Exner's (1993) Suicide

Constellation. Petot (2002) found that the main variable differentiating suicidal children from both the non-suicidal depressives and the anxious is the amount of Color-Shading Blends, thus suggesting significance of color-shading blend as a high risk indicator.

Though none of these signs (MOR, S, VF, (Ad) and color-shading blend) other than morbid responses (MOR) have shown value of as single predictor in the present analysis, these variable together suggest a strong risk for suicide ideation and thus should raise a red flag for clinicians to respond appropriately.

Conclusion:

The current findings suggest that indicators of suicide ideation though similar yet are different for current population than those found by Exner's in his suicide constellation. Thus, further research would help in understanding which variable would be more suitable in other population, however, for the current sample from Delhi, India, following variables, MOR, S, (AD), VF, and colour shading blend, were most significant predictors of suicide ideation and thus should be considered with psychological promptness when seen in a protocol of a client.

References:

Beck, S. J. (1960). The Rorschach experiment: Ventures in blind diagnosis.

Buhler, C., Lefever, D., & Welty. (1947). A Rorschach study on the psychological characteristics of alcoholics. *Quarterly Journal of Studies on Alcohol*, *8*, 197–260.

Cooper, J. E., & World Health Organization. (1994). Pocket guide to the ICD-10 classification of mental and behavioural disorders: With glossary and diagnostic criteria for research: ICD-10/DCR-10. American Psychiatric Pub.

Exner Jr, J. E. (1991). *The Rorschach: A comprehensive system: Interpretation, Vol. 2*. John Wiley & Sons.

Exner Jr, J. E. (1993). The Rorschach: A comprehensive system: Basic foundations, Vol. 1. John Wiley & Sons.

Exner, J. E. (2003). *The Rorschach: A comprehensive system* (Vol. 1) (4th ed.). John Wiley & Sons.

Exner Jr, J. E. & Wylie, J. (1977) Some Rorschach Data Concerning Suicide, Journal of Personality Assessment, 41:4, 339-348, DOI: 10.1207/s15327752jpa4104_1

Light, B. H., & Amick, J. H. (1956). Rorschach responses of normal aged. *Journal of Projective Techniques, 20,* 185-195.

Miller, I. W., Norman, W.H., Bishop, S. B., & Dow, M. G. (1986). The Modified Scale for Suicidal Ideation: Reliability and validity. Journal of Consulting and Clinical Psychology, 54, 724-725.

Petot, D. (2002). Rorschach characteristics of depressive children with suicidal ideation. *Rorschachiana*, *25*(1), 163-174.

PROMIS Health Organisation (2012). Level 2-Depression-Adult Measure Short Form. APA Publishing.

Rorschach, H. (1921). Rorschach ink blot test. Huber, Berne, Switzerland.

Rosso, A. M., Camoirano, A., & Schiaffino, G. (2015). Are individuals in Rorschach nonpatient samples truly psychologically healthy? Data of a sample of 212 adult nonpatients from Italy. Rorschachiana, 36(2), 112–155.

World Health Organization (2021). Suicide worldwide in 2019: global health estimates.

Yaseen, Z.S., Molina, N., Hawes, M., Barzilay, S. and Galynker, I. (2019), Suicide Risk and Emotional Responses to Thoughts of Death: The Response to Morbid Ideations Questionnaire. Suicide Life Threat Behav, 49: 1209-1219. https://doi.org/10.1111/sltb.12520