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Development and Validation of Conspirational Mentality Scale: Correlates of Conspirational Mentality

Maha Tahir¹, Muhammad Naveed Riaz², Mamoona Khan³

----- ABSTRACT

Keywords:

Conspiracy, Conspirational Mentality, Selfish Gains, External Forces, Revenge Attitude, Paranoid Ideation, Trust in People. The study Investigated the relationship between Conspirational Mentality, trust in people, and paranoid ideation. Due to the unavailability of a standardized tool to measure Conspirational Mentality, the study developed a psychometric scale for Professionals. To achieve these objectives, the study was divided into two phases including the development and validation of the scale and its empirical evaluation. After developing of initial item pools, additional items were generated through the Exploratory Factor analysis (EFA). Data was collected from 500 Professionals consisted on Male (n=239, 47.8%) and Female (n=261, 52.2%) in Sargodha, Pakistan. The analysis indicated that Conspirational Mentality Scale (CMS) contains three factors, including selfish gains, external forces, and revenge attitude. Moreover, hypotheses were supported as Conspirational Mentality has a positive correlation with Paranoid Ideation and a negative correlation with Trust in people. These findings suggested that Conspirational Mentality Scale (CMS) is a reliable and valid measurement tool and it was also proved that due to Consipirational Mentality, Professionals lack Trust in people and become paranoid. Thus, the study has applied significance.

INTRODUCTION

In recent era conspiracies taking popularity and a lot of conspiracy theories were developing politically and socially. Conspiracy theory was an explanation of any significant event, like the sudden death of famous person, terrorists attack, or catastrophe, as resulting from some secret plan made by a powerful organization or a group of powerful individuals. May be in principle this theory was true but usually due to insufficient evidences, facts, rejection of the authorities it was taken as pseudo-assumptions of the people. The belief in conspiracy theories prevailed not only to the advocates of extreme ideologies but also to paranoid and delusional individuals in diverse culture and societies (Raab et al., 2013). The main reason behind conspirational culture was the illogical

¹ Scholar, University of Sargodha (mahatahir44@gmail.com)

² Assistant Professor, University of Sargodha (naveed.riaz@uos.edu.pk)

³ Clinical Psychologist, PIMH Lahore

modernization of social culture and the distrust behind it. The distrust towards the epistemics, their non-empirical evidences, social culture, media and the false information were the main critical points to enhance the conspiracy culture in any state (Aupers, 2012). Many psychologists state that authoritarian personalities were more likely to believe in conspiracies and it provided them explanations for those events over which they cannot exert control (Schwartz, 2013).

Conspiracist ideation was also measured as a differential trait of personality associated with paranoia and delusional thinking (Swami et al., 2011). It should be noted that with the passage of time there was much more increase in the conspiracy believers due to the strong role of the information explained and the predispositions about conspiracy (Uscinski et al., 2016) and these theories were common in almost all populations either individual's level in community or with in world. Conspiracies frequency recommended many influences on the cognition of individuals in modern century (Douglas et al., 2017). It was also proposed that events caused by the conspiracies were more likely to be perceived by the intentional biasness of people having paranoid personalities (Darwin et al., 2011) and concluded that conspiracy mentality is very similar to paranoid ideation as it is known as extreme state of suspiciousness where individuals fear about dangers caused by some external agents (Holm, 2009).

Belief in conspiracy theories was correlated with the lack of interpersonal trust and insecurities which mostly believed by the young people (Douglas et al., 2017) beside this many scales were established to measure the people's trust towards politics and trustworthiness. Literature review depicted that many conspirational mentality scales were developed under a political context, showed suspiciousness and distrust towards the states and proceed the conspiracy theories but the purpose of this study was to develop a first scale of conspiracy mentality which will be used to analyze the Conspirational mentality on the micro level, individual level and deals with the conspiracy on interpersonal relationships under the individual psychology.

METHOD

The study intended to construct a measure of Conspirational Mentality and examined the relationship of Conspirational Mentality with trust in people and paranoid ideation among Professionals. The study was completed in two parts. The Part-I was based on development and validation of scale which was further divided into two phases whereas the Part-II was based on testing the correlational hypothesis.

2.1. Part-I: Scale Development

2.1.1. Phase-I: Development of Conspirational Mentality Scale

The main objective of Phase-I was to develop initial items pool for the scale measuring conspirational mentality among Professionals. The research was completed in the six steps including (1) Literature review and focus group guidelines, (2) Review of Existing Scales on Conspirational Mentality, (3) Focus Group with Professionals, (4) Interview with Subject Matter Experts (SMEs), (5) Content Analysis and items writing and (6) Committee Approach and Development of initial item pool. In the end of this phase 23 items of conspirational mentality were generated.

2.1.2. Phase- II: Empirical Evaluation of Conspirational Mentality Scale

The Phase-II was based on the examination of the validity and reliability of conspirational mentality scale. In this part, factor structure, reliability, normality and validity were established by administering scale on Professionals.

2.2. Part-II: Testing of Correlation Hypothesis

In the Part-II, it was hypothesized that "conspirational mentality will be positively correlated with paranoid ideation in Professionals" and "conspirational mentality will be negatively correlated with trust in people in Professionals". In order to validated the Conspiracy Mentality Scale and to test the hypothesis, three scales were administered on the Professionals.

2.3. Participants

The present study was based on cross-sectional survey research design and Purposive sampling technique were used. Participants of the present study was consisted of Professionals (*N*=500). Data was collected from the different colleges and University of Sargodha; older Professionals' data was collected from the homes.

2.4. Instruments

Along with Conspiracy Mentality Scale (CMS), Two standardized instruments including General Paranoia Scale (Fenigstein & Vanable, 1992) and Trust in people Scale (Levi & Stoker, 2000) were used for the construct validation of CMS.

2.4.1. General Paranoia Scale

This scale was developed by Fenigstein and Vanable (1992). The main purpose of this scale was to assess the paranoia beliefs in the population. This scale was comprised of 20 items with the Likert response rate ranging from "1(not at all applicable to me) to 5(extremely applicable to me)" on the poles. Scores ranges from 20 to 100 items where higher score indicates strong paranoid ideation

and lower score shows the week ideations. The Cronbach's alpha of this scale was 0.84 which explained higher reliability of the scale.

2.4.2. Trust in people

A 3-item questionnaire designed to measure individuals' general level of trust toward other people. The three items were first used in the 1964 post-election study but reused by Levi and Stoker (2000) for measure the judgment of trust in governments and politicians in 2000. Each of the three items provides a dichotomous choice and score ranges from 0 to 3. One of the two choices was the high trust response and the other was considered the low trust response. For better understanding of participants, Trust in people scale translated into Urdu language and three steps were followed as; i) backward translation ii) forward translation and iii) reconciliation

2.5. Procedure

The researcher personally provided a brief introduction to Professionals regarding the importance, implication and objectivity of the study and motivated them to participate in the study. Researcher insured them regarding to confidentiality of data. Informed consent was taken in written from Professionals. Researcher guided the participants whenever needed without leading the answers. Data analysis was done on the SPPS-22 software and tests applied in this research were; Exploratory Factor Analysis and Pearson Correlation.

RESULTS

3.1. Table 1: Frequency and percentage of participants

Demographic characteristics	n	%	
Gender			
Men	239	47.8%	
Women	261	52.2%	
Age			
21-30 years	431	86.2%	
31-40 years	45	9.0%	
41-50 years	14	2.8%	
51-65 years	10	2.0%	
Birth order			
First born	116	23.2%	
Second born	117	23.4%	
Last born	98	19.6%	
Only child	18	3.6%	
Other born	151	30.2%	
Family system			
Nuclear	266	46.8%	
Joint	234	53.2%	
Residence			
Urban	343	68.6%	
Rural	154	30.8%	

3.2. Table 2: Factor structure of Conspiracy Mentality Scale

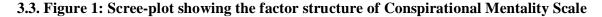
Items	Factor-I	Factor-II	Factor-III
Item 6	.73		
Item 9	.67		
Item 5	.63		
Item 7	.61		
Item 10	.55		
Item 19	.46		
Item 1	.39		
Item 15	.33		
Item 20		.75	
Item 11		.56	
Item 22		.54	
Item 8		.34	
Item 21		.39	
Item 2			.70
Item 17			.50
Item 18			.48
Item 13			.47
Eigen values	3.50	1.66	1.34
Percentage variance	20.59%	9.74%	7.85%
Cumulative percentage	20.59%	30.33%	38.18%

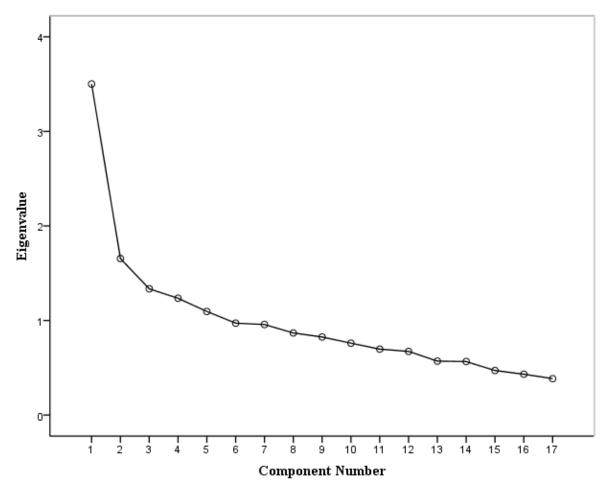
Note. Factor-I = Selfish Gains; Factor-II = External forces; Factor-III = Revenge attitude

Table 2 shows Factor Structure of the CMS which indicated that there were three types of Conspirational Mentality; Factor-I was Selfish Gains, Factor-II was External Forces and Factor-III was Revenge Attitude. Similar to Exploratory Factor Analysis (EFA) these three factors were extracted by using Principal Component Analysis. Initially, EFA was carried out with 23 items out of which 17 items were retained and further divided into factors. All the three Factor's loading were greater than .30 magnitude and therefore items were appropriate to retain under Kilne's (1993) criterion of extraction of the items. All the items were also extracted on the basis of eigen value criteria in which values greater than 1.00 were satisfactory; Factor-I have 3.50, Factor-II have 1.66 and Factor-III has 1.34 eigen values which were satisfactory for extraction.

All of three factors were also extracted by using Direct Oblimum rotation method because the factors were theoretical independent. Besides of eigen values, scree plot was also used to make the

final decision and considered more appropriate method (Reise et al., 2000). The cumulative variance explained by the model is 38.18% in which Factor-I explained 20.59 %, Factor-II explained 9.74 % and Factor-III explained 7.58% variances in the factors. The three-factor solution obtained from Exploratory Factor Analysis was theoretically appropriate as well as empirically supported.





The scree plot confirmed the appropriate factor structure of the Conspirational Mentality Scale in three dimensions. All the factors were extracted on the bases of Eigen Values which are greater than 1.

Table 3 shows that values of skewness and kurtosis was less than +1 and -1, which indicated that data were normally distributed (Brown, 1997). On the other hand, Zero Pearson correlation proposed that selfish gain, external forces, revenge attitude, CMS and paranoid ideation shows significant positive correlation with each other but trust in people indicated significant negative correlation with all the scales except selfish gains.

3.4. Table **3:** Psychometric properties of variables

Variable	es	M	SD	Alpha	Potential	Actual	Skewness	Kurtosis	1	2	3	4	5	6
1.	Selfish gains	24.22	6.77	.726	8-40	8-45	.05	20	-	.36**	.51**	.89**	.04	.49**
2.	External forces	16.49	3.75	.725	5-25	5-25	10	22		-	.41**	.67**	02	.34*
3.	Revenge attitude	12.33	3.20	.705	4-20	4-20	11	07			-	.75**	02	.40*
4.	Conspirational mentality	53.05	10.84	.746	23-115	18-82	06	.44				-	24**	.52*
5.	Trust in people	4.64	.68	.702	3-6	3-6	20	08					-	15*
6.	Paranoid ideation	62.03	11.64	.794	20-100	33-100	.20	.01						-

^{**}p<.01.

DISCUSSION

In recent years, psychologists had made significant understanding of factors which lead people to conspiracy mentality. Those factors were like personality traits such as openness to experience (Swami et al., 2011), distrust (Egger & Bangerter, 2007) low agreeability (Swami et al., 2011), narcissism (Cichocka et al., 2006) and Machiavellianism (Douglas & Sutton, 2011) were associated with conspiracy belief. Conspiracism was common in modern society and widely prevailed within the normal population and associated with biased reasoning of events. In conspirational thinking suspiciousness and negatives beliefs were collaborated (Brotherton & French, 2014).

The study was consisted of two parts, In Part-I the scale was constructed in two phases which were completed through different steps and Exploratory Factor Analysis was applied on item pools which resulted in 17 items model which were loaded with varying magnitudes. Bartlett test of Sphericity and Kaiser-Meyer-Olkin measure of Sample was used to evaluate whole factorability of matrix. Bartlett test was notable and important ($\chi^2 = 1352.973$, df = 136, p < .001) explained data properly distributed to have an evaluated potential factor structure. For factorability the value of Kaiser-Meyer-Olkin measure of sampling adequacy was .73 which was satisfactory.

Similarly, alpha reliability coefficients were computed for the establishment of internal consistency of CMS and for a reliable behavioral measure, the reliability coefficient must be at least .70 or greater (Klein & Fiss, 1999). CMS shows .74 alpha reliability which was satisfactory for the scale. Thus, the EFA, normality analysis, reliability analysis, and correlational analysis confirmed that it is reliable valid measure of Conspirational Mentality for Professionals.

In Part-II correlation hypothesis were tested and those scales were also used for the establishment of construct validity of Conspirational Mentality Scale. The construct validity was further divided into two parts including convergent validity and divergent validity (Schotte et a., 1997), whose correlations were computed.

Moreover, it was anticipated that "conspirational mentality will be positively correlated with paranoid ideation in Professionals". Thus, the hypothesis was supported in the study. It was evident from the social researches that individuals with conspirational mentality had more tendency to believe in conspiracies and had a generalized distrust against the people and the societal groups which were appeared as powerful to them (Beyond, 2015).

The hypothesis that "conspirational mentality will be negatively correlated with trust in people in Professionals" was supported in the study. It was also evident from the past researches that

conspirational beliefs were correlated with the paranormal beliefs (Barron et al., 2014). Thus, sufficient evidences confirmed that Conspirational Mentality Scale is construct valid instrument.

Conclusion

The study examined the association of conspirational mentality with trust in people and paranoid ideation in Professionals. Due to the unavailability of the scale for measuring conspirational mentality, firstly a standardized scale was developed. Afterwards, the Conspirational mentality has positive association with paranoid ideation and inverse relationship with trust in people in Professionals. The findings shed light on the fact that due to the conspirational mentality Professionals have suspiciousness thinking and they do not trust in people.

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