RELATIONSHIP BETWEEN MENTAL PAIN AND IQ OF THE RAG PICKERS: A CORRELATION STUDY

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ABSTRACT

Background: Rag picking is still widespread in Third World countries today, such as in Mumbai, India, where it offers the poorest in society around the rubbish and recycling areas a chance to earn a hand-to-mouth supply of money. In India alone, there are approximately 4 million women in this profession. However, this huge number in no way implies that it is a comfortable profession in any way. Rag pickers come across difficult situations of discrimination, stigmatization, lack of sleep, lack of nutrition and a feeling of shame, embarrassment and guilty as they are exposed to the harsh realities of life. **Objective** To establish relationship between IQ and Mental pain among the rag pickers. **Method:** A total of 15 rag pickers from age group of 14-25 years of Wardha district were randomly selected. They were assessed for their IQ and mental pain with the help of CFIT and OMMP scale respectively and correlation of mental pain and IQ was explored. **Results:** It is evidenced that there is a moderate & strong positive correlation between IQ and Mental Pain, suggesting that higher IQ scores are associated with higher levels of mental pain. (r= 0.8. p < 0.01). **Conclusion:** OMMP and CFIT were found useful in determining the level of mental pain and IQ of the rag pickers. The findings of this study prompt that rag pickers do have IQ levels for vocational training. Vocational training intervention may aid the ragpickers in reducing their mental pain. Further studies are required in this direction.

Keywords

Mental Pain, IQ, Rag pickers.

INTRODUCTION

Rag picker, is a term for someone who makes a living by rummaging through refuse in the streets to collect material for salvage. Scraps of cloth and paper could be turned into cardboard, broken glass could be melted down and reused, and even dead cats and dogs could be skinned to make clothes.[1] The saddest and possibly the most ironic part of their story is that even after rendering this phenomenal service, these women are denied both their dignity and fair remuneration by our society. Worse still, their job is considered menial and they themselves are treated as untouchables by a large section of our society.[2] In India alone, there are approximately 4 million women in this profession. However, this huge number in no way implies that it is a comfortable profession in any way, earning nearly Rs 100-140, enough for the hand-to-mouth survival of her and her family[3].

The saddest and possibly the most ironic part of their story is that even after rendering this phenomenal service, these women are denied both their dignity and fair remuneration by our society. Worse still, their job is considered menial and they themselves are treated as untouchables by a large section of our society. Consider a simple aspect of their livelihood to understand the exploitation that these women undergo every day. A woman collecting 20 kg of waste at a market rate of Rs 8/kg should have been paid Rs 160 ideally. But her collection is weighed at 18 kg and she is offered Rs 6/kg which reduces her returns to Rs 108 only. Imagine – the poor woman loses almost 60 percent of her deserved remuneration, every single day.[4]

The problems faced by ragpickers are multifaceted and require urgent attention. It is essential to recognize their contribution to society and improve their working conditions. Providing education, skill developmnt, and access to healthcare can uplift their lives and break the cycle of poverty. Additionally, creating awareness about waste management and recycling among the public can lead to a more inclusive and supportive environment for ragpickers[20].

NEED OF THE STUDY

Many rag pickers start Rag picking at the age of 4-5 years. In a recent study, 20% of total rag pickers were between of 5-14 years, and 40% of the total dump site waste pickers were children. New Delhi and Mumbai have about 300,000 rag pickers and around 120,000 are under the age of 14. Children as young as 5 works from morning to evening to collect enough trash for sustaining themselves. Rag pickers come from rural areas into huge cities for better living and are unable to find opportunities and end up collecting trash. Many rag pickers live on the street, are homeless and have no access to education or healthcare.[20]

Quality of life of adolescent rag pickers significantly poor and lead to more vulnerability in terms of deprived physiological health and psychosocial wellbeing as results they tends to develop negative cognitive schemas about future. Need to mobilize the community about child rights and change pre-dispositional idea/thoughts regarding rag-pickers, income generating programs should be introduce and make compulsory education for all. As finding reveals that rag-pickers had poor quality of life and high sense of hopelessness not a good indicator for the survival of marginalized section of rag-pickers.[17]

 Looking at this scenario and the living condition of rag pickers it was noticed that maximum rag pickers get into the business of Rag picking at the early ages of their lives leaving them deprived of educational and better occupational opportunities. Through the assessment of their intellectual capacity (devoid of their educational background) and mental pain and with its correlation it will be very easy to understand their level of intelligence and how satisfy are they with the occupation and the living conditions. Later on, what best can be provided to help them for the better source of income and helping this community to live a respectful and better life.

AIM OF THE STUDY

The aim of this study is to assess the relationship between IQ and Mental pain of the Rag pickers.

MATERIALS AND METHODS
Study Design and Setting

This was a non-experimental correlational study conducted at an NGO working among the Rag pickers in Wardha. The study was conducted after prior permission from concerned ethical committee of the college and the President of the NGO to make the Rag pickers of that community as participants, from 17-07-2023 to 22-07-2023. Total 20 participants were screened through simple random sample technique for the eligibility, and 15 participants were recruited for the study to achieve a significance level of 0.05 with a power of 0.95[6].

Method

The study is approved by the Institutional Ethics Committee of Datta Meghe Institute of Medical Sciences (deemed to be University), Wardha). Informed consent in written was taken from Rag pickers who were willing to participate in the study. Based upon inclusion criteria investigator selected 15 participants from rag pickers community located at Wardha. Mental pain and IQ of participants were assessed using OMMP and CFIT respectively. Before administering the tests, participants were properly explained so as to how to solve the test effectively. The OMMP and CFIT were successfully administered to the participants for 3 consecutive days. The recruitment process is shown in Figure 1.

Sampling Criteria

Inclusion Criteria: -

- Rag pickers of urban and rural slums of Wardha Districts.
- Both genders included in the study.
- Age between 14-25 years.
- Those who were willing and cooperating to participate in the study.

Exclusion Criteria

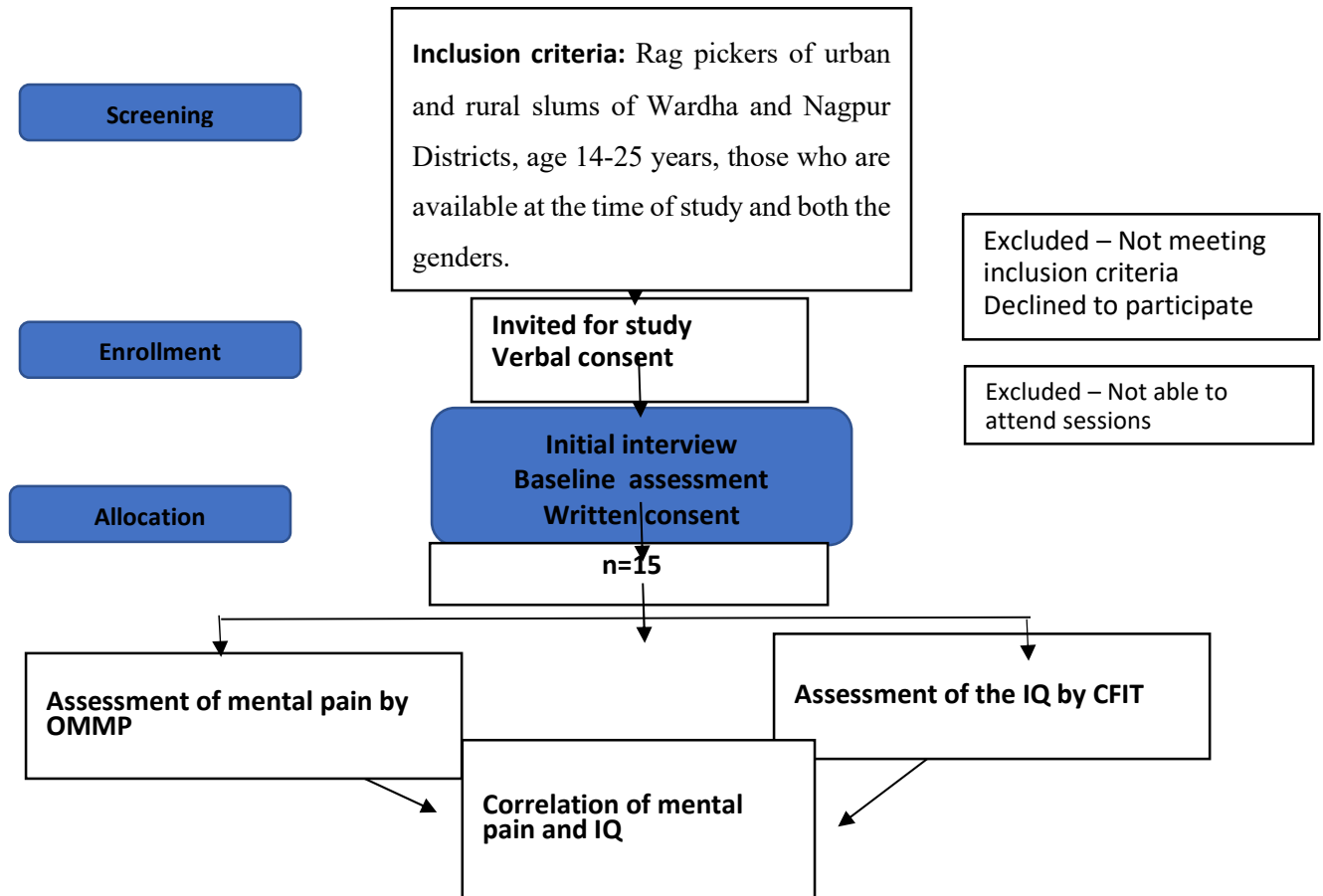- Those who are suffering with any learning disability.

Figure 1. CONSORT style study flowchart

Instruments and Outcome Measures

The measurement tools were socio-demographic data and two primary outcome measure: Mental pain using Orback & Mikulincer Mental Pain Scale (OMMP) consists of 44 sentences, each sentence has a score ranging (1-5) indicates strongly disagree and strongly agree respectively[6]. and IQ using Culture Fair Intelligence Test (CFIT) where Scale 2 form A of the test was used[11]. Secondary outcome measure was correlation of Mental pain and IQ by using correlation coefficient. All the data were obtained directly by the researcher.

Reliability

CFIT: Entirely satisfactory internal consistency of the general score (Cronbach's alpha .80), slightly lower, but satisfactory nevertheless of the part A (Cronbach's alpha 0.77 – 0.81 depending on the sample).

OMMP: The OMMP-24-P showed acceptable levels for internal consistency and test–retest reliability. Confirmatory factor analysis indices supported the five-factor model. OMMP-24-P factors were positively correlated with measures of stress, anxiety and depression, negatively associated with quality of life.

Statistical Analysis

The demographic characteristics of the participants in the study were analyzed using SPSS version 24.0[13] with gender, education, marital status, living with, religion, locality, family type, if they have already completed any vocational and skill training program, if gone through IQ assessment previously and availing any govt scheme were taken into consideration. The correlation coefficients Pearson correlation (r) was used to analyze the correlation between mental pain and IQ.

RESULTS

Participant's Demographic Characteristics

The frequency and percentage of baseline demographic characteristics of participants is shown in Table 1.

Table 1. Demographic data analysis of rag pickers (n=15)

S. No.	Demographic Characteristics	Frequency	Percentage
1.	GENDER Female Male	 0 15	 0% 100%
2.	EDUCATION Secondary Graduation	 13 2	 86.7% 13.3%
3.	MARITAL STATUS Married Unmarried	 0 15	 0% 100%
4.	STAYING WITH Family	 15	 100%
5.	RELIGION Hindu Christian	 10 5	 66.7% 33.3%
6.	LOCALITY Urban Rural	 13 2	 86.7% 13.3%
7.	MONTHLY INCOME >5000/- 5000 -10,000/- 10,000 – 15,000/-	 12 1 2	 83.3% 6.7% 13.3%
8.	FAMILY TYPE Nuclear Joint	 12 3	 66.7% 33.3%

9.	HAVE ALREADY COMPLETED ANY VOCATIONAL AND SKILL TRAINING PROGRAM		
	Yes	2	13.3%
	No	13	86.7%
10.	GONE THROUGH IQ ASSESSMENT PREVIOUSLY		
	Yes	0	0%
	No	15	100%
11.	AVAILING ANY GOVT SCHEME		
	Yes	0	0%
	No	15	100%

Primary Outcomes

Table 3 Correlation between IQ and Mental Pain

		IQ	Mental pain
IQ	Pearson Correlation (r)	1	.800**
	P-value		<0.01*
	N	15	15
Mental Pain	Pearson Correlation	.800**	1
	P-value	<0.01*	
	N	15	15

The Correlation between mental pain and IQ of the rag pickers

The correlation coefficients Pearson correlation (r) provided the direction of the relationship between two variables: IQ and Mental Pain: Pearson Correlation (IQ vs. Mental Pain): 0.8. p- < 0.01. Interpretation: In the study group, there is strong positive correlation (approximately 0.8) between IQ and Mental Pain, this indicates that as IQ scores increase, mental pain tends to increase at higher proportion. **Fig. 2**

Scattered plot for study participants
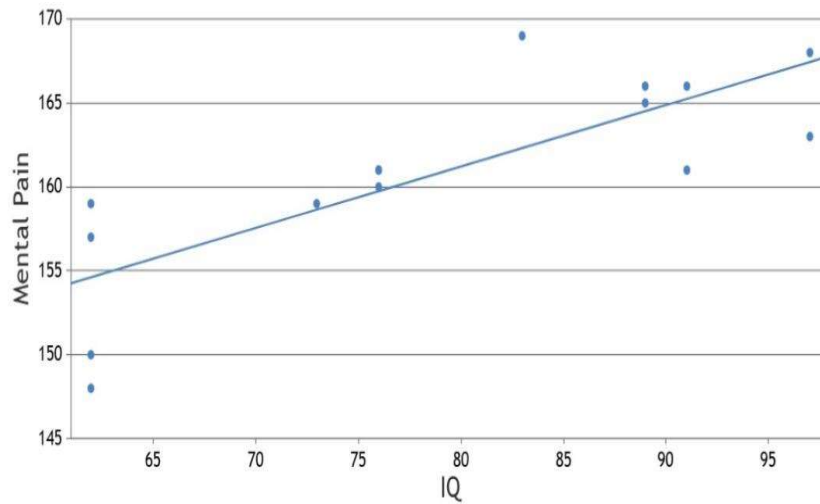
Fig. 2: Relationship between Mental pain & IQ of rag pickers

In the study population, there is a strong positive correlation between IQ and Mental Pain, suggesting that higher IQ scores are associated with higher levels of mental pain.

DISCUSSION

The present study establishes the correlation between mental pain and IQ of the rag pickers. In this study, it is evident that there is a strong positive correlation between IQ and Mental Pain, suggesting that higher IQ scores are associated with higher levels of mental pain of the rag pickers. Mental Pain can be a strong trigger for acquiring in new skills. Hence the correlation of mental pain and IQ is done as a baseline data.

The present study findings are supported by the findings reported by -

Dr. Manoti Barki (2013) in his study on perception of rag pickers towards their education among the child rag pickers found that 52% of children held positive perception towards education as necessity. These children felt that like all basic need, education is also must. Further, 58% believed that education is necessary for everyone as it helps in acquiring reading and writing skills while 50% were of the opinion that it helped in securing a good/respectable job.[19]

Balu Natha Mote et al (2016) in his study examined the health status, occupational and environmental health hazards among rag-pickers working in dumping ground. The study shows, rag-pickers suffer from physical as well as mental ill health and low job satisfaction. The reason for engaged in such kind of work is due to not having other skills and easy or daily income.[15]

B. Suresh Lal et al in their study reported that ultimate solution to the problem of rag pickers is by providing them awareness and through social organizations to help develop a sense of society belonging and provide them with the tools to reintegrate into society in a friendly way. This agenda focuses on three pillars of action. First, it means investing their intellectual capabilities, second enabling them to acquire skills, reskill and upskill thirdly by supporting them through the various transitions they will face over their life course.[14]

LIMITATIONS OF THE STUDY

The limitations of this study are that it was only limited to the ragpickers belonging to 14-25 years of age. The population of rag pickers was found scattered which made data collection even more challenging. It was a single site small sample pilot study. The demographics differ in different geographical areas.

CONCLUSION

In this study, findings reveal that there is a strong and positive correlation between mental pain experienced and IQ of the rag pickers. The results of this study are encouraging and appear to support the view that a vocational and skill training programs based upon the correlation of mental pain and IQ can be useful in breaking the cycle of rag picking in the families and community of the rag pickers and if this training program is based upon the understanding of intelligence and mental pain then it becomes more convenient and rational to choose which skill training program is best for any specific individual. Further studies with larger sample size and better skill training programs are needed to confirm the effectiveness of vocational and skill training program. Findings of the study also support that vocational and skill training program need to be planned for rag pickers to reduce their mental pain. Vocational training can promote job placement opportunities for rag pickers. The findings of this study will have implications on NGOs, and government agencies and authorities to work more effectively working among rag pickers. A multi-site interventional study is recommended for reducing the mental pain of rag pickers.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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