

Structural equation modeling on the role of mother expressed emotions as a predictor of vocational identity among adolescents.

Dr. Shammem Akhtar*, Muhammad Mansoor Abbas**

*Assistant Professor, Department of Psychology, Riphah International University, Faisalabad,

**PhD Scholar, Department of Psychology, Riphah International University, Faisalabad,
Pakistan.

Abstract- In mental health 'Expressed emotion' used to denote the intensity of emotional expression within the family context. Intensities of expressed emotion might be high or low, and might be considered 'negative or 'positive. Mother Expressed Emotion' refers to the range of expressed emotion towards the individuals,¹ (Brown, 1985). Adolescents are individuals that are in their next decade of life and face internal struggles or circumstances that might compromise directly their mental health (United Nations, 2017) Where the others factors play the role in perception of occupational motivation and abilities, the home climate is main element which put influences on adolescents. The current study aim was to identify and explore the role of mother expressed emotions and its association with vocational identity. To examine this, study was conducted on 500 mothers and 500 their adolescents from 2022 to 2023 academic year, to measure the mother expressed emotions; parental expressed emotions scale³ (Akhtar & Bano, 2021). was used and vocational identity scale was used for adolescents (Holland et al., 1980).⁴The data was analyzed with regression analysis and structural equation modeling by using SPSS 27 and AMOS 27. Significant positive prediction was found among mother expressed emotions as positive remarks found 20% and warmth found 45% predictor of vocational identity in adolescents, while emotional-over involvement showed -16% significantly negative predictor of vocational identity among adolescents. It was concluded that proposed theoretical model explained that mother expressed emotions are significant predictor of vocational identity and results founded parallel with the previous researches (Gupta & Leong, 2015)

Key words; expressed emotions, vocational identity, positive remarks, warmth, negative comments, hostility, emotional over involvement, adolescents.

I. INTRODUCTION

Vocational identity basically leads to the goals that become helpful for a good career decision making. A strong vocational identity facilitates the persons to perform better at workplace. This phenomenon rooted in different assumptions related to career. As first, it is underpinned in assumptions of constancy of individual features and safe jobs in restricted organizations. Second, it helps in conceptualizes careers as the stable order of stages. Conceptions, like career preparation, vocational identity, career development, and career phases each are helped to calculate people's regulation to work situations, supposing a relatively great constancy of the settings and people's activities (Adăscăliței & 2019).⁶ As children's reach to their adolescent stage and developed, they experience a variety of possible identities in different domains of functioning. In the field of occupation, identity refers to an individual's belief of who would be as a worker, and what type of work would best suit his/her personality (Harrington & O'Shea, 1980).⁷

Parents are the most influential people in their children's lives, they not only shape their children's behavior but also impacts throughout their lives, parents are the initial source for developing a concept of self-worth and help them to learned effective ways for personal growth (Eccles & Wigfield, 2020).⁸ Especially, during the adolescent era of individuals, the influence of parenting has an enduring effects on the behaviors of individuals. Parenting refers to raising a child, not just because of a biological relationship (Craigie, 2012).⁹

Formerly, very fewer studies reported on the relationship between family environment and career development among adolescents, however. Rosenthal (1979)¹⁰ found that vocational aspirations and vocational maturity were positively correlated with family environment. The parent-child relationship is one of the most salient factors that nurture the physical, emotional and social development of the child. It is a unique bond that every child and parent will can enjoy and nurture. This relationship lays the foundation for the child's personality, life choices and overall behavior relevant to the quality of the maternal relationship and the ability to develop a basic sense of trust and endure anxieties were identified¹¹. Lopez (1989) found that mother emotional behavior negatively contributed to vocational identity concerns during late adolescence. Career identity development can be better explained in the light of Marcia's theory (Marcia, 1980) he proposed four statuses of identity regarding the level of exploration on the one side and the commitment to

a particular identity on the other side. Parental support in world exploration means the process of searching for an identity that makes an individual to get influenced by various factors (Akhtar et al., 2022)¹³

Although these studies have confirmed the importance of the determinant of career development and have advanced understanding nature of the relationship between children and parents. At this stage very, young children have awareness of careers development and have better decision power (Seligman, 1988)¹⁴

As noted above, vocational choices can be certainly influenced by family environment and social context. Most of the studies focused on positive outcomes in terms of academic motivation, career decision making and development, life satisfaction and well-being greatly depend on the adolescents' perception of their parents' support (Chávez, 2016).¹⁵

Few researches found with mother expressed emotions and its relationship with youth psychopathology and a study found positive associations between mother's expressed quality of relationship and her child's working memory. As a measure of the emotional climate of the home, most extant studies involving expressed emotions have focused on relations between parents' use of expressed emotions and children's emotional development and regulation Parola & Marcionetti, 2022).¹⁶

Apart from the institutional sources and social network support individuals for vocational guidance, it has noticed that the role of family more specifically parents is extremely relevant (Akhtar & Mughal, 2023) a mother's expression of positive remarks and warmth creates a nurturing environment that empowers a child to explore their interests, pursue their passions, and develop a strong vocational identity with confidence and self-assurance.

II. Methodology

The cross-sectional study conducted in different cities (Pakistan) from September 2022 to June 2023. Ethical research review committee (ERRC) of Riphah International University Faisalabad approved the procedure. The methods and materials included in the current study have been reviewed, permitted, and endorsed by the Board. Four important ethics of individual human rights; self-esteem, skill, responsibility, and integrity were addressed in study (Akhtar et al., 2022).¹⁸ The target population was mothers (any age) and their adolescents whose age range was 12-19 years

with a mean age of 16 years. A sample of 500 mothers and 500 their adolescent recruited by the rule of thumb as 5 to 10 observations on single questions (boys=46% & girls=54%) from the community and educational institutes by using covenant sampling strategy, after getting the educational institutions list from the District Education Office of some cities (Faisalabad, Multan and Muzzafar-garh) 15 educational institutions (8 schools and 7 colleges) were selected. Adolescents approached with permission of the authorities and teachers of 7th to 12th-grade students and graduates. For keeping the ethical standards, only securitized those adolescents whose parents gave the consent to participate in the study. Students were divided in to three groups using the world health organization criterion from 11 years to 13 years and from 17 years to 18 years. The adolescents have clearly instructed about instruments and response choices instructions. Vocational identity scale with demographic sheet was provided and applied on adolescents. Researcher selected only the same mothers of the adolescents and excluded all who were single or divorced and suffered any mental and physical disability. They were approached at their working and convenience place. For measuring the role of mother expressed emotions parental expressed emotions scale was administered on mothers. They were instructed to read the items cautiously while responding. It was informed to the participants that participation will be voluntary, confidentially was assured and ethical consideration maintained by the researchers. Data was analyzed by using SPSS-27 version by applying frequencies, regression analysis and AMOS-27 for structural equation modeling.

III. Results

Structural equation modeling was performed to test the research model. The data was analyzed in four steps; first data cleaning was done by removing missing values, in the second step, descriptive statistical measure was computed for various socio demographic variables. Table 1 formulates for normality analysis that represented the Z score (standard deviations) away from the mean (Schober et al., 2020).¹⁹

The regression analysis was applied to showed predictive relationship among variables. Results revealed that mother expressed emotions of emotional-over involvement 16%, (negatively significant) positive remarks 20% and warmth 45% variations in vocational identity and $p < 0.00$ representatively strong significance (Table2). In the next step measurement model was tested by applying confirmatory factor analysis (CFA). The rotated component matrix determined what the components represent as factors (Table3). For estimating the measurement model confirmatory

factor analysis including factor loading, average variance extracted, Cron-bach alpha, and composite reliability are presented in table (4) (Akhtar & Khan, 2021).²⁰ Then finally a structural equation model (SEM) generated by testing the hypothesis. The depicted model explained three exogenous variables as warmth, positive remarks and emotional over- involvement and one endogenous variable as vocational identity.(figure1)

In Structural equation model root mean square residual (SRMR) and normed fit index (NFI) are the two common measures of determining measurement model fit.in current research both measures have been used to determine the overall model fit. The thresh holds for these measures are $SRMR < 0.05$ and $NFI > 0.85(81)$. The model fit results shows that the SRMR is 0.46 which is less than the threshold criteria, and the estimated NFI is 0.78 which is also appropriate and near to thresh hold criteria. Both these criteria value assure the fitness of the measurement model.

IV. Discussion and Conclusion

Result showed that adolescents whose mothers expressed their emotions in the form of warmth and positive regards having a clear and secure understanding of one's career goals, abilities, educational interests, and personal values. It has been concluded that positive emotions should be practiced by mother so that their adolescents can be grow positively.

The outcome of current research indicated that vocational identity in adolescents significantly and positively influenced by parental styles of warmth, positive remarks and emotional- over-involvement. Previous literature also provides related researches as in one study explore that how does perceived parenting and psychological needs relate to identity development and psychosocial adjustment in 12th grade students (Blum & Ribner, 2022).²¹

Findings suggest that mother expressed emotions is a protective factor for career decision-making. For doing so in current study structural equation model has been applied which together, which explain 0.43 of the variances; how-ever the total variance explains 0.65 that is slightly better for appropriate acceptance of hypothesis. Mother expressed emotions predict direct predictor of vocational identity in adolescents. In the same way the results reveled that emotional over

involvement, positive remarks and warmth shows $0.00 < 0.001$, significant predictor of vocational identity in adolescents.

This is in line with previous research showing that the adolescents' perception of their parents as need-supportive relates to experiences of basic need satisfaction (Delvecchio & Salcuni, 2016).²² which, in turn, associate with higher confidence in proactive exploration and commitment making and with the experience of greater well-being during critical career transitions (Cordeiro, 2018).²³ Results of earlier studies conformed the findings of current research that adolescents whose mothers expressed their emotions in the form of warmth and positive regards having a clear and secure understanding of one's career goals, abilities, educational interests, and personal values. Previously these kind of study found with the role of teachers emotional support in career counseling (Haerens, 2015)²⁴ It has been concluded that positive emotions should be practiced by mother so that their adolescents can be grow positively. More over in current study only positive emotions are studied with the vocational identity of adolescents. In further studies negative expressed emotions of mothers can be measured with other influencing variables of adolescents.

Table-1: Normality Statistics for Variables of the Study (N=500)

Variables	Mean	Median	Skewness		Shapiro-Wilk		Kurtosis		
			Statistic	SE	z.value	Sig.	Statistic	SE	z.value
PEE	107.03	108.00	-.121	.109	1.11	.002	-.577	.218	2.64
VI	18.91	17.99	-.729	.108	6.60	.000	-.162	.218	0.78

Table 2: Summary of linear Regression Analysis, Mother Expressed emotions (emotional over-involvement, positive remarks and warmth) as a predictor of vocational identity in adolescents (N=500)

Variables	R	R ²	ΔR^2	F	P
Expressed Emotions of Mothers as predictor of vocational identity					
Emotional over-involvement	0.40	-0.165	0.164	98.73	0.00 ^b
Positive remarks	0.45	0.204	202	127.25	0.00 ^b
Warmth	0.67	0.452	0.451	410.49	0.00 ^b

Table-3: Factor Loading of Mother expressed emotions scale and vocational identity after Varimax Rotation (N=500)

Sr. #	Item No.	Warmth I	PSR (II)	EOI (III)	VI (IV)
1	7	0.91			
2	42	0.91			
3	8	0.88			
4	9	0.88			
5	29	0.88			
6	41	0.86			
7	40	0.80			
8	20	0.67			
9	9		0.81		
10	3		0.80		
11	7		0.79		
12	10		0.77		
13	6		0.74		
14	5		0.96		
15	14			0.89	
16	8			0.81	
17	2			0.80	
18	13			0.79	
19	6			0.77	
20	10				0.96
21	16				0.89
22	11				0.85
23	15				0.82
24	18				0.77
25	19				0.76
26	13				0.81
27	14				0.74
28	17				0.69
29	15				0.67

Figure-1

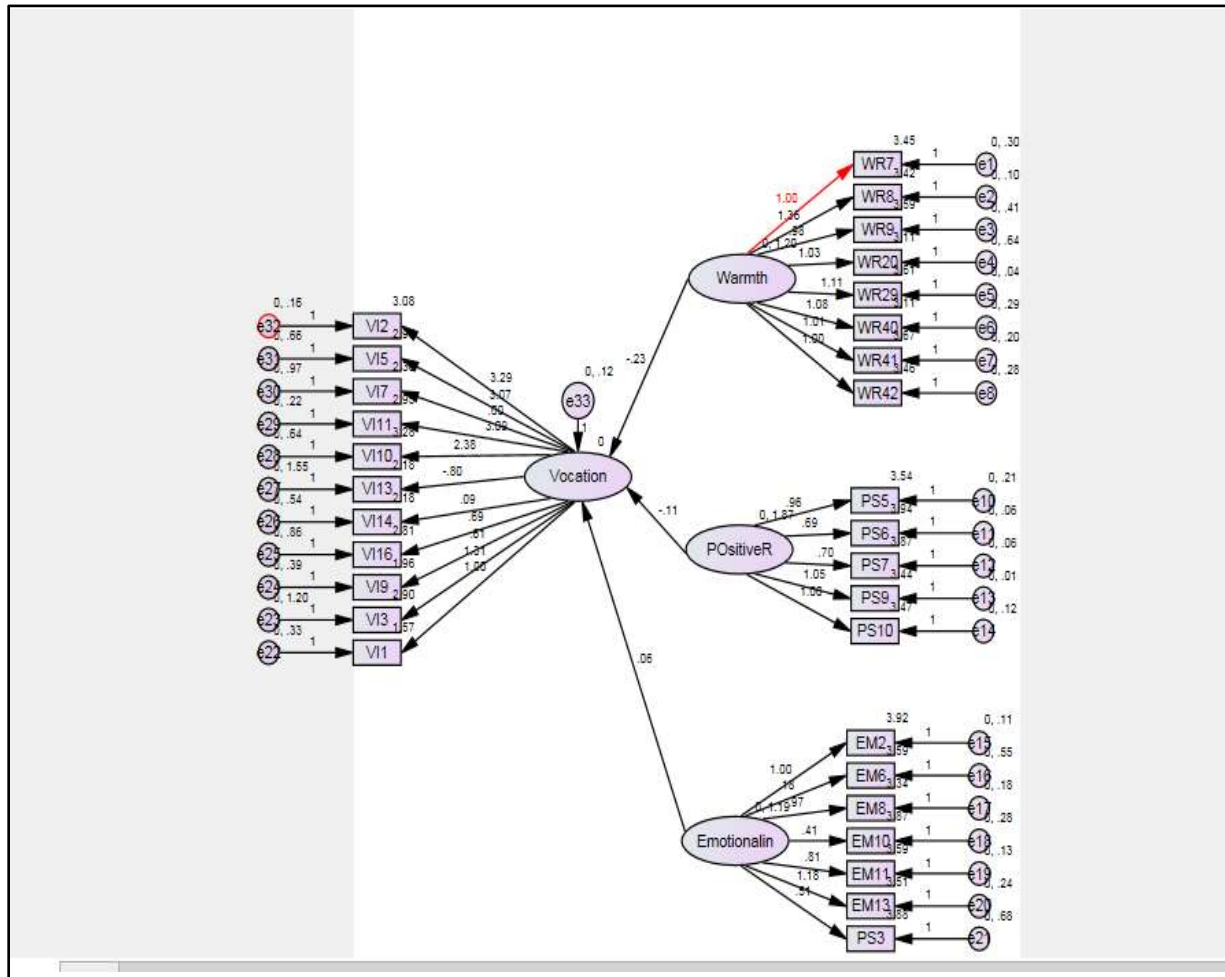


Figure 1 structural equation modeling for the mother expressed emotions and vocational identity in adolescents

Table-4: Improved Model Fit Indices for mothers expressed emotions and vocational identity (N=500)

CMIN/DF	CFI	RMSEA	SRMR	NFI	TLI	P Value
35.279	0.719	0.46	0.56	0.75	0.80	.000
0.50	0.87	0.041	0.040	0.835	0.852	.000

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AUTHORS

First Author – Dr. Shammem Akhtar, PHD, Assistant Professor, Department of Psychology, Riphah International University, Faisalabad,

Second Author – Muhammad Mansoor Abbas, PHD, Scholar, Department of Psychology, Riphah International University, Faisalabad, Pakistan

Correspondence Author – Muhammad Mansoor Abbas,