

RESEARCH ARTICLE

# Entrepreneurial Intention Among Children: Findings From School-Going Children Compared With Children at Workplace

Aamar Ilyas

University of Central Punjab, Lahore, Pakistan

aamar.ilyas@ucp.edu.pk

**Abstract:** This research compares the entrepreneurial intention among school-going children and children at work (child labor) who are optimistic about entrepreneurship. Furthermore, we analyze the relationship between personality factors and three perceptual variables of the theory of planned behavior (TPB) with entrepreneurial intentions. We used hand-collected data techniques from school-going children and children at the workplace to investigate the proposed relationships. The in-house survey was conducted in five towns of Lahore city. The convenience sampling technique was used to collect data from 450 school-going children, and the snowball sampling technique was used to collect data from 450 child laborers. The statistical findings show that both school-going children and children at the workplace hold optimistic attitudes toward starting a new venture. During the comparison of these two datasets, we found more significant differences than similarities. However, the intentions of child laborers were more entrepreneurial than school-age children. Moreover, both school-going children and children at the workplace scored above average in three personality traits (optimism, competitiveness, and risk-taking tendency); they predicted higher entrepreneurial intention (EI). Innovativeness also predicted intention for school-going children but not for children at the workplace sample. The findings of this study were based on only one developing nation. It is not generalized to other countries due to cultural variations. In future research, data would be collected from numerous regions, developed or developing nations, improving generalizability. Furthermore, only four constructs of personality traits were used, ignoring social and contextual factors. This study provides new insights for educational policymakers and practitioners. They should develop a comprehensive policy and incorporate entrepreneurship education in our secondary schools to boost entrepreneurial knowledge. Moreover, practitioners may change effective policy reforms to foster the interest of child laborers in entrepreneurship. This study contributes to the child labor and entrepreneurship literature by comparing the entrepreneurial intention among school-going children and children at the workplace. As far as the researchers' experience, there is no empirical evidence in the literature on this unique phenomenon.

**Keywords:** entrepreneurial intention, school-going child, theory of planned behavior, personality traits, child labor, Pakistan

Entrepreneurial intention (EI) is a famous and attractive field; researchers continue to want to know why some people want to start their own business while some do not (e.g., Chantson & Urban, 2018; Galvão et al., 2018; Padilla-Angulo, 2019). Recently, trends to measure EI are growing among different fields of scholars to know how people's intentions vary to start a new venture (Krueger, 2017). Insights about the antecedents of EI could lead to the outline of entrepreneurship education at the university, college, and school levels. Furthermore, findings on EI could also update policymakers to develop an entrepreneurial ecosystem in all institutions and ultimately introduce well-organized programs to accelerate the entrepreneurial culture in our society. This was the primary concern for conducting this study.

The unemployment trend among students has increased in both developing and developed countries due to unprecedented economic disasters (Agolla et al., 2019; Schøtt et al., 2015). To overcome this crisis, governments and public policymakers have been inspired to explore other income generation means (Buli & Yesuf, 2015; Pandit et al., 2018; Kassean et al., 2015), such as self-employment or becoming an entrepreneur. Undoubtedly, entrepreneurship can create new job opportunities, economic development, and new ventures (Jang et al., 2019). Because unemployment is so high, every country encourages people to be entrepreneurs by teaching entrepreneurship courses in colleges and universities (Samydevan et al., 2021), but such courses are not offered in schools.

Numerous studies have been conducted to examine the entrepreneurial intention of university students from various disciplines, such as management, engineering, commerce, business, and medical students (e.g., Fragoso et al., 2020; Turker & Selcuk, 2009; Zhang et al., 2015), higher education institutions (HEI's) students (e.g., Anwar & Abdullah, 2021; Mei et al., 2020), and managers (Karadağ & Şahin, 2021) by using the theory of planned behavior (TPB) but ignored the children, especially school-going children and child labor (children at the workplace). However, child entrepreneurship research gaps and opportunities remain unclear, such as the causes, determinants, antecedents, and outcomes of child entrepreneurship (Ilyas et al., 2020). Research on EI started almost 35 years ago (Liñán & Fayolle, 2015), but little attention was given to the determinants of EI with school-going children (e.g., Cardoso et al., 2018; Bux, 2016;

Marques et al., 2012). Adolescence is a perfect life stage to gain knowledge and mature a positive attitude toward entrepreneurship (Peterman & Kennedy, 2003). Almost 50 million students are going to school, and approximately 23 million children are not going to school or have left their education within 5 to 16 years of age. Pakistan holds the second-highest position in the world (Shah et al., 2018). In the previous research, there is no empirical evidence that looks into the kids' plans to start a business. It is widely and common belief that children engage in exploitative and low-paid work as a survival strategy (Khan, 2003; Rahman & Khanam, 2012; Rahman et al., 1999) driven by necessity. Children have no other choice for earning. But in present circumstances, the above situation has been challenged by post-structuralist and neo-liberal theory. Many children participate voluntarily in work (Ilyas et al., 2020). Therefore, this paper fills the research gap in child entrepreneurship using the TPB theory. The goal of this research paper is to use Ajzen's (1991) theory (TPB) and personality factors to look at what makes children who are in school and children who work want to start their own businesses. The second objective of this research paper is to compare the findings of school-going children with those of children at work.

This research paper is structured as follows. The first section is the introduction, and the subsequent section presents the justification of theoretical support and a literature review on entrepreneurial intention. Methodology in section 3, and summaries of findings are discussed in the following section. In the fifth and final section, the conclusion, limitations, practical and theoretical implications of this study, and future directions for scholars, academics, public agencies, and policymakers are talked about.

## Literature Review

The unemployment trend is high among youth that needs a permanent solution to alleviate this problematic situation (Aragon-Sanchez et al., 2017). Undoubtedly, entrepreneurship is considered as a solution to reduce such problems (Miralles et al., 2016). Entrepreneurship is a fascinating professional choice that would be helpful for creating job opportunities for themselves and others. However, Pakistan's total early-stage entrepreneurial activity (TEA) rate is very low at

3.7, compared with the global average index of 12.8 (Bosma et al., 2019).

### ***TPB and its Determinants***

This study is based on the most commonly used Ajzen's (1991) TPB that the individual's intention leads to entrepreneurial behavior. TPB says that the intention to start a new business is based on subjective norms, attitude toward starting a business, and perceived behavioral control. Only intentions are reliable predictors of an individual's planned behavior (Kolvereid & Isaksen, 2006; Krueger et al., 2000). EI is defined by Pillis and Reardon (2007) as "the intention to start a deliberately new business" and select a sensible choice from alternatives (Wilson et al., 2007). Recently, many studies showed a positive relationship between EI and behavior among graduate and postgraduate students. The first test conducted by Krueger et al. (2000) using TPB predicted EI by explaining variances in 78% of French students (Padilla-Angulo, 2019), 74% of Spanish students (Iglesias-Sánchez et al., 2016), 21% to 77% in African nations (Buli & Yesuf, 2015; Chantson & Urban, 2018; Tarek, 2017; Mwiya et al., 2017) and 40% in Pakistan (Shah & Soomro, 2017). The three antecedents affecting behavior through intentions are labeled as personal attitude (PA), subjective norms (SN), and perceived behavior control (PBC).

The first antecedent of EI is personal attitude (Ajzen, 1991), which reflects that an individual has a particular assessment that can be either a positive or negative tendency to become an entrepreneur; a stronger positive attitude leads to positive EI. This relationship was statistically confirmed (e.g., Autio et al., 1997; Bazan et al., 2019) in different studies on consumer behavior, marketing, and psychology.

In TPB, the second precursor of EI is subjective norms that consist of two factors (Ajzen, 1991). The first factor is normative beliefs. People close to the individual (e.g., teacher, spouse, peers, family, and who are important in his life) or group constitute the norms that describe how individuals behave. The second factor is motivation, which means an individual's willingness to perform as expected of close people. Subjective norms represent that if referents have a positive opinion about individuals, it leads to high EI, whereas a negative opinion leads to low EI (see Anwar et al., 2020; Trivedi, 2016; Liñán & Chen, 2009; Ozaralli & Rivenburgh, 2016).

PBC is the final determinant of EI, often referred to as self-efficacy, which reflects an individual's perception or belief in his capacity to execute a particular action (Ajzen, 1991). If the individual has control over their situational factors, they may have a strong desire to carry out their behavior. Even though an individual does not overcome their situational circumstances, they have a low intention to perform a certain behavior. Empirical evidence available in the latest literature that shows a high level of PBC or self-efficacy has considerably predicted high EI (see Anwar & Saleem, 2019; Anwar et al., 2020; Bazan et al., 2019; Roy et al., 2017; Trivedi, 2016). Therefore, we proposed the following hypotheses:

- H<sub>1</sub>: Children who have a positive attitude toward entrepreneurship (at school or in the workplace) will have a higher level of EI.
- H<sub>2</sub>: Children (at school or at work) whose close relatives value entrepreneurial activities more than other professions will have a higher level of EI.
- H<sub>3</sub>: Children (at school or at work) who have high self-efficacy will hold a superior level of EI.

### ***Personality Traits***

In literature, many personality traits have been linked with EI. Here, children's personality traits (risk-taking propensity, competitiveness, innovativeness, and optimism) will be examined in relation to their EI in both datasets. The first personality trait is optimism, which is defined as a person who sees the bright side of things and believes that events will turn out well (Seligman, 2006). Almost half of the new startups fail to achieve their objectives (Knaup, 2005). Positive emotions (for example, hope, optimism, and resiliency) are compulsory for startup intentions (Peterson et al., 2009). Young people are more optimistic and have great intentions for entrepreneurial activity (Janssen et al., 2013).

The second trait is innovativeness. It can be defined as every entrepreneur's engagement in the creative thinking process to explore opportunities, generate novel ideas, launch new products or services, create new markets, and turn ideas into value (Chen, 2007; Hisrich

et al., 2008; Gupta et al., 2004). Competitiveness is another personality trait in entrepreneurship research, it leads to convincing new startups. Rauch and Frese (2000) stated that competitiveness is linked with a need for achievement; it has a strong relationship with performance.

The final trait is a risk-taking propensity. It is defined as a person's tendency to avoid risk or take a risk. In literature, the risk-taking tendency is a major attribute of entrepreneurship. A lot of empirical evidence showed that high-risk acceptance had higher EI (Gürol & Atsan, 2006; Hmieleski & Corbett, 2006; Karimi et al., 2017; Zhao et al., 2010). We hypothesize that:

H<sub>4</sub>: School-going children will score higher compared to children at the workplace in the levels of risk-taking propensity, optimism, competitiveness, and innovativeness.

H<sub>5</sub>: Children (in both school and workplace) taking propensity, optimism, competitiveness, and innovativeness will be positively related to their EI.

## Methodology

Questionnaires were administered to children under the age of 16 who were going to public schools for education and who were working at the automobile workshops for employment from five towns of Lahore city (Shalimar, Nishtar, Samanabad, Ravi, and Data Ganj Baksh towns). A convenience sampling technique was used to collect data from 450 school-going children, and a snowball sampling technique was used to collect data from 450 child laborers. Children under the age of 16 are prohibited from working, which is considered illegal in Pakistan (Owens et al., 2014; Fatima et al., 2018). Owners did not disclose child labor to federal and local officials (Ilyas et al., 2020). So, the snowball approach is most acceptable to explore hidden populations like child laborers (Saunders et al., 2016). Eight research associates (RA) were hired and trained according to the guidelines of the International

Labour Organization (ILO). Training content consisted of the selection of the children and how to collect data from children. We also trained RAs (research associates) on how to engage any family members of children (parents or siblings), workplace supervisors, or school teachers during a structured interview with children. RAs have arranged interviews at their homes, schools, or workplaces, where children responded freely. Interviews were anonymous, voluntary, and conducted in the native language of Urdu. In some cases, Punjabi terminology was also used where needed.

## Instruments

First of all, interviewers introduced the “entrepreneur” term to respondents as individuals who open their own workshop or start their own business (e.g., open a bike workshop or start a tailor shop). Previously, a single-item scale was used to measure entrepreneurial intention. However, in the current study, the scale was adopted from famous scholars (e.g., Ajzen, 2006; Aldrich & Martinez, 2001; Choo & Wong, 2006; Fayolle et al., 2006; Krueger et al., 2000; Liñán & Chen, 2009) and slightly modified to fit in the setting of current research. Liñán & Chen (2009) developed an entrepreneurial intention questionnaire (EIQ) and Liñán & Chen (2009) also developed a trendy scale among entrepreneurship scholars to measure entrepreneurial intention (e.g., Anjum et al., 2020; Malebana, 2014; Molino et al., 2018; Miralles et al., 2016; Ismail et al., 2015; Shirokova et al., 2016). Likert scales that ranged from 1 for “total disagreement” to 7 for “total agreement” were used to measure EI of children and its antecedents – namely personal attitude/attraction, subjective norms, and entrepreneurial self-efficacy/perceived behavioral control. Personal attitude/attraction was assessed with three items (e.g., item 2 was “A career as an entrepreneur is attractive for me”), subjective norms with two items (e.g., item 1 was “Do you perceive support for entrepreneurial initiatives in your close environment?”), and entrepreneurial self-efficacy/perceived behavioral control with five items (e.g., item 1 was “I am ready to open a business”). EI, the dependent variable, was measured with six items recommended by Liñán and Chen (2009; e.g., item 4 was “I am determined to create a firm in the future”). Children, both school-going and child laborers, were

also evaluated for the attractiveness of occupation as an entrepreneur, contrasting other options like public sector and private-sector jobs. Researchers developed this scale with three items and a 6-point Likert scale (1 = very unattractive and 6 = very attractive).

To measure the personality traits (risk-taking propensity, competitiveness, innovativeness, and optimism), a 6-point Likert scale, ranging from 1 = strongly disagree to 6 = strongly agree, was used. Famous scales were adopted to assess personality traits. Rohrmann (1997) introduced the Risk Orientation Questionnaire (ROQ) to measure the risk-taking propensity with five items (e.g., “I do not like to put something at risk, I would rather be on the safe side”); Lynn (1991) introduced the Competitiveness Scale to measure the individuals’ competitiveness with five items (e.g., “I enjoy working in situations involving competition with others”); Mueller and Thomas (2000) used the Jackson Personality Inventory Manual (JPI) to measure innovativeness with eight items (e.g., “I like to experiment with various ways of doing the same thing”); and Scheier and Carver (1992) introduced Life Orientation Test (LOT) to measure the optimism with four items (e.g., “I always look on the bright side of things”). With the help of a bilingual expert, this questionnaire was translated into the native language, and a pilot test was conducted to check the concerns about translation and reliability.

## Results

SPSS and smart partial least square (PLS) software were used for data analysis and to check the validity of the model (Gefen et al., 2000). We used factor analysis of both datasets, and the results show that all items are significantly related to the construct. However, there was one exception in the child laborer dataset. In this data set, one item was supposed to measure innovativeness but was not significantly related to this construct, so this item was eliminated from the analysis. The cumulative variance explained was 58.534% for the school-going children’s data and 63.648% for the child laborer’s data. The scores of Cronbach’s alphas were satisfactory and scales were reliable. The reliability statistics range from 0.72 to 0.83, similar results found in previous studies (e.g., Liñán & Chen, 2009; Anjum et al., 2020; Molino et al., 2018; Shirokova et al., 2016). Table 1 offers the analysis of limited insights of descriptive statistics.

### *Descriptive Statistics – Entrepreneurial Intention and its Antecedents*

Table 2 illustrates the means and standard deviation of EI and its antecedents—PA, SN, & PBC—for both school-going children and children at workplace samples. Interesting findings show that children at

**Table 1**  
*Sample and Demographic Characteristics*

Variables	School-going children	Children at workplace
<b>Age</b>		
Below 11 years old	10	59
11 to 13 years old	175	268
14 to 16 years old	265	123
<b>Level of Education</b>		
Primary or below	-	198
Middle	213	153
Matriculation	237	99
<b>Do your family engage in any business?</b>		
Yes	55	14
No	395	436
<b>Do you have any work experience?</b>		
Yes	27	450
No	423	-

the workplace have a high level of EI (mean 1 = 2.37; mean 2 = 4.13) than school-going children. Statistics show that children in the workplace hold a more positive attitude toward becoming an entrepreneur than school-going children. This figure advocate that school environment and workplace culture may be affected their attitude and change their level of entrepreneurial intention. Children at the workplace also show the role of their family and friends in their entrepreneurial decision. More confident children have a positive attitude toward entrepreneurship.

To better understand the cause of this difference (mean difference significant at  $p < 0.001$  for both school-going children and children at the workplace sample) between positive high and low entrepreneurial intention, we also examined the attractiveness of potential future professional options (see Table 3) for both school-going children and children at the workplace sample. Statistics in Table 3 show that child laborers hold a significantly more favorable posture to

becoming entrepreneurs or self-employed than school-going children.

**Regression Analysis**

A hierarchical regression test was used to test the hypotheses (see Table 4). The first three hypotheses ( $H_1, H_2, H_3$ ) explain the influence of antecedents on EI and provide evidence for the application of TPB theory to entrepreneurial intention in school and workplace culture or environmental context. Exploratory factor analyses were performed for both datasets and results indicate that scales were unidimensional, fully supporting the theoretical model. Therefore, a reliability analysis was conducted for each dataset. The range of Cronbach’s alphas was above the accepted threshold. Age, the control variable, was included in model 1. Age had a positive impact on EI in the sample of school-aged children

**Table 2**

*Means and Means Difference for EI, PA, SN, and PBC*

Samples	EI		PA		SN		PBC	
	Mean( $\bar{x}$ )	S.D( $\sigma$ )	Mean( $\bar{x}$ )	S.D( $\sigma$ )	Mean( $\bar{x}$ )	S.D( $\sigma$ )	Mean( $\bar{x}$ )	S.D( $\sigma$ )
School-going children (1)	2.37	.87	3.89	1.07	2.85	1.09	3.53	1.05
Children at workplace (2)	4.13	1.23	4.46	1.20	3.41	1.15	4.31	1.17
$\Delta (1)-(2)$		$p < 0.001$		$p < 0.001$		$p < 0.001$		$p < 0.001$

*Note:* EI: entrepreneurial intention; PA: personal attitude; SN: subjective norms; PBC: perceived behavioral control

**Table 3**

*Attraction to Potential Professional Options*

All items on believed, what is your level of attraction to following career options?	School-going children Mean ( $\bar{x}$ )	Children at workplace Mean ( $\bar{x}$ )
Find a job in the private sector on a fixed salary	2.15	3.49
Find a job in the public sector on a fixed salary	4.76	1.87
Self-employed on contract basis	3.01	3.64
Start/open your business/workshop (As an entrepreneur)	3.02	4.52

(= 0.147, P 0.05). In model 2, three variables (PA, SN, and PBC) were entered. For the school-going children's sample, 58% of changes in explaining the entrepreneurial intention (adjusted R<sup>2</sup>). All three independent variables were observed to have a highly significant impact on EI at  $p < 0.01$  level with the biggest influence of perceived behavior (PBC) control on EI ( $\beta = 0.321$ ,  $P < 0.01$ ) than the other two PA and SN variables ( $\beta = 0.239$ ,  $P < 0.01$ ;  $\beta = 0.251$ ,  $P < 0.01$  respectively). For children at workplace, 44% changes in explaining the entrepreneurial intention (adjusted R<sup>2</sup>). All three independent variables were observed to have

a highly significant impact on EI at  $p < 0.01$  level. Personal attitude (PA) had a greater influence on EI (= 0.387, P 0.01) than the SN and PBC variables (= 0.303, P 0.01; = 0.379, P 0.01, respectively). Thus, H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub> are supported. Consequently, children at workplace have more entrepreneurial intentions than school-going children.

#### **Descriptive Statistics – Personality Traits and EI**

Table 5 displays the standard deviation, mean, and mean differences in personality traits. These values were assessed to verify H<sub>4</sub>. Children at the workplace have a higher level of optimism, competitiveness, and

**Table 4**

*Impact of PA, SN, and PBC on EI*

	School-going children		Children at workplace	
	Model 1	Model 2	Model 1	Model 2
<b>Dependent variable</b>				
EI				
<b>Control variables</b>				
Age	0.121**	0.045*	0.147**	0.061*
<b>Independent variables</b>				
PA		0.239***		0.387***
SN		0.251***		0.303***
PBC		0.347***		0.379***
R <sup>2</sup>	0.036**	0.590***	0.086**	0.445***
Adjusted R <sup>2</sup>	0.031	0.581	0.080	0.436

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$  and \* $p < 0.1$

**Table 5**

*Standard Deviation, Means, and Mean Differences in Personality Traits*

Samples	Innovativeness		Optimism		Competitiveness		Risk-taking	
	Mean ( $\bar{x}$ )	S.D( $\sigma$ )	Mean ( $\bar{x}$ )	S.D( $\sigma$ )	Mean ( $\bar{x}$ )	S.D( $\sigma$ )	Mean ( $\bar{x}$ )	S.D( $\sigma$ )
School-going children (1)	3.15	0.87	3.76	0.81	3.89	1.07	2.85	0.91
Children at workplace (2)	3.10	1.05	4.35	0.87	4.46	1.20	3.41	1.15
$\Delta (1)-(2)$		$p < 0.001$		$p < 0.001$		$p < 0.001$		$p < 0.001$

risk-taking tendency. Conversely, school-going children scored higher in innovativeness personality traits. Moreover, we tested an independent *t*-test to compare the means of personality traits between school-going children and workplace children on entrepreneurial intention (see Table 6). T-test results show that being more innovative, optimistic, and willing to take risks are important traits for entrepreneurs in both cases.

Furthermore, we executed a Pearson correlation to examine the differences in the strength of relationships (see Table 7; e.g., innovativeness and entrepreneurial intention) for both school-going children and children at workplace samples. All personality traits are positively related to entrepreneurial intention in school-aged children ( $r = 0.215$ , competitiveness  $r = .275$ , and risk-taking  $r = .317$ ) and children in workplace samples ( $r = .407$ , competitiveness  $r = .285$ , and risk-taking  $r = .395$ ). Innovativeness is the only trait not related ( $r = 0.09$ ) to the EI of children at the workplace. Consequently, hypothesis 5 is partially supported.

Finally, linear regression analysis was performed for both data sets to determine the effects of personality traits on EI. The impact of the innovativeness trait on EI was deemed insignificant. Therefore, we removed this variable from the model and repeated the linear regression analysis (see Table 8). The findings reveal that three personality traits—optimism, competitiveness, and risk-taking tendency—predicted EI for both school-going children and children at workplace samples. Innovativeness also predicted intention for school-going children but not for children at the workplace sample.

### Discussion and Conclusion

The objective of this research paper was to check whether the TPB can predict the EI of school-going children and children at the workplace. The findings completely support the TPB as a model for predicting

**Table 6**

*T-tests*

Personality traits	School-going children EI			Children at workplace EI		
	Mean Yes	Mean No	t-value	Mean Yes	Mean No	t-value
Innovativeness	4.21	3.45	1.831*	4.11	3.77	2.487*
Optimism	4.31	3.98	2.755**	4.45	3.15	7.060**
Competitiveness	3.75	3.57	1.245	3.85	3.65	0.869
Risk-taking	4.17	4.05	3.794**	4.28	3.68	6.606**

*Note:* \*\* $p < 0.001$ ; \*  $p < 0.005$

**Table 7**

*Correlations Between Entrepreneurial Intention and Personality Traits*

Personality traits	School-going children Correlation (r)	Children at workplace Correlation (r)
Innovativeness	0.108*	0.09 (ns)
Optimism	0.215**	0.407**
Competitiveness	0.275**	0.285**
Risk-taking	0.317**	0.395**

\*\* $p < 0.001$ ; \*  $p < 0.005$ ; ns non-significant



**Table 8***Linear Regression Model for Both Samples*

	School-going children		Children at workplace	
	$\beta$	(P)	$\beta$	(P)
Dependent variable				
Entrepreneurial intention				
Independent variables				
Innovativeness	.10	.008	-	-
Optimism	.18	.000	.26	.008
Competitiveness	.12	.009	.21	.005
Risk-taking	.16	.004	.22	.000
R <sup>2</sup>	0.33***		0.38***	
Adjusted R <sup>2</sup>	0.38***		0.36***	

\*\*\*p &lt; 0.001

the EI of children in Pakistan. Our results are fully supported by previous studies (see Aragon-Sanchez et al., 2017; Do Paco et al., 2011; Marques et al., 2012; Xu et al., 2016) that also investigated the EI of Grade 12 students using TPB, which showed that the EI of secondary class students was predicted by perceived behavioral control, social norms, and personal attitudes. Furthermore, the findings agree with those of other researchers who have found that EI can be accurately predicted by perceived behavioral control, attitude toward entrepreneurship, and subjective norms (Chantson & Urban, 2018; Mahmoud & Muharam, 2014; Al-Shammari & Waleed, 2018). The study sought to compare the EI among school-going children and children at the workplace (child labor), which is optimistic about entrepreneurship.

Furthermore, to analyze the relationship between personality factors and three perceptual variables of the TPB with EI, we concluded that EI among school-going children and children at the workplace is high and promising. During the comparison of these two data sets, we found more significant differences than similarities. Both school-going children and children at the workplace showed comparatively positive EI. However, the intentions of child laborers were more geared toward starting their own businesses than school-age children. There are many causes for this discrepancy among both datasets. Our educational

system might be an important cause for this discrepancy in school-going children's attitudes. Entrepreneurship education is considered an effective means and approach to promoting entrepreneurial culture, but there is no effective policy to offer entrepreneurship education at the school level in Pakistan.

Moreover, both school-going children and children at the workplace scored above average in three personality traits (optimism, competitiveness, and risk-taking tendency); they predicted higher EI. Innovativeness also predicted intention for school-going children but not for children at the workplace sample. An important reason for this dissimilarity is that child laborers learn only technical skills and gain hands-on practice; they learn only daily routine tasks that are executed on the workstation where they are employed. No doubt, innovation is an important factor in creating new value for stakeholders. Innovation can include product, manufacturing process, and technology innovation to minimize the cost of production (Brouwer & Kleinknecht, 1999). Innovation led to new ideas, valuable and effective products for end users, recognition, and the creation of new opportunities (Emami & Dimov, 2017). Children at work have entrepreneurial and technical experience, and they easily adopt innovative attitudes. This study fills important research gaps for scholars to study how to boost entrepreneurial intention in both children

(school-going and children at the workplace) and what the motives to work are other than education. Also, developed and developing countries can do a nationwide survey to find out the EI of their children.

### ***Implications for Policymakers and Practitioners***

The findings are notable, promising, interesting, and suggest numerous implications for practitioners and policymakers tasked with combating child labor and stimulating entrepreneurial culture in institutions, especially at the school level. Furthermore, findings concluded that EI among school-going children and children at the workplace is high. According to Bosma et al. (2019), there is no effective policy to offer entrepreneurship education at the school level in Pakistan. In Pakistan, policymakers paid more attention to university-level students than to school-level students. The first implication is regarding the introduction of entrepreneurship education and the effective implementation of such courses at the school level. Educational policymakers should develop a comprehensive policy and incorporate entrepreneurship education into our secondary schools to boost entrepreneurial knowledge. In the United States, entrepreneurship education has been integrated into secondary-level schools' curricula, with 42 states offering it in K-12 and 18 states offering it in higher secondary schools (Junior Achievement USA, 2015).

Findings show that children in the workplace have a higher EI than school-going children. The second implication is based on findings and involves building a technical department and teams that train the children who work in different sectors (vocational education) and teach formal education for two to three years. This activity may reduce child labor. The findings provide practical implications for the government to improve joint innovation practices to boost innovativeness through local workshops and automobile firms. For example, learn how to fix the problem of a bike with formal education. The findings of this study would provide awareness to develop more realistic entrepreneurial programs or schemes that lead children to be entrepreneurial. Usually, it is considered that children are engaged in work due to a lack of interest in education, poverty, lack of parents' education, or lack of formal jobs. But this shows that children at the workplace have more EI than school-going children. Therefore, practitioners may change

effective policy reforms to foster the interest of child laborers in entrepreneurship.

### ***Limitations and Future Direction***

This research paper is not without limitations, like other studies in the entrepreneurial intention domain. The literacy rate in Pakistan is very low at 58% as compared to other countries (Abbas & Hussain, 2021), and child labor in Pakistan is also a critical concern (Ahmad et al., 2020). The first limitation of this study is that the data was collected from the developing nation of Pakistan. The literacy rate is low, and the unemployment rate and child labor practices in Pakistan are high, but in developed countries, these statistics are acceptable due to cultural differences. Empirical evidence in the literature shows that cultural variation influenced EI (e.g., Tsai et al., 2016; Torres & Augusto, 2018). Therefore, the findings of this study cannot be generalized to all nations due to cultural variations. In the future study, data can be collected from numerous regions, developed or developing nations, that may improve the generalizability.

The second limitation is that only four constructs of personality traits were used but ignored the children's entrepreneurial personality and contextual factors. Researchers should include entrepreneurial personality traits (for example, locus of control, need for achievement), risk propensity, entrepreneurial self-efficacy (Zhao et al., 2005), and contextual factors (for example, children's family exposure, political or economic conditions, and cultural variation) in future studies.

Future studies will introduce relevant variables in this EI model and evaluate the moderator effect on this relationship, such as child labor experience, parent's support, teacher's support, parental divorce, and parents' death. Future researchers can improve on this model by comparing it to other countries and using different theories, such as the self-perception theory.

### **Declaration of Ownership**

This report is my original work.

### **Conflict of Interest**

None.

## Ethical Clearance

This study was approved by our institution.

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