

# Association between age of the MSMEs and various activities undertaken by them – An Analytical study of sports goods industry of Punjab

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## ABSTRACT

Since the definition of MSME underwent so many revisions, there must be difference in the experiences of different MSMEs, operating in different eras. That is why there is a need to study the effects of age of the MSMEs (time period since the MSMEs are into business) on other activities of the same. In this paper, the relationship or association of age of the MSMEs is studied with three variables i.e social initiatives taken by the enterprise, percentage of exports done by them or their export performance and subsidies availed by them.

## 1. Introduction

Micro Small and Medium Enterprises, popularly known as MSMEs are the building blocks of any nation. These enterprises are a source of employment generation as well as act as raw material providers to many large enterprises. These enterprises involve relatively a low capital investment when compared to large enterprises also these have proved to be activity contributing in earning foreign currency by being involved activity in exports. As a result, government of India has always tried to provide financial, non-financial assistances to this sector. There have been industrial policy changes overtime and the term small scale industry (SSI) has also undergone several revisions. Thus, earlier the SSI in India was categorised as cottage industry and industry of handicrafts. More precisely, these were termed as Village and Small Industries (also called as rural and cottage industries. Later, these were termed as Small Scale Industries (SSIs) followed by the nomenclature of Small and Medium Enterprises (SMEs) and presently the nomenclature used for such enterprises is termed as Micro Small and Medium Enterprises.

Since the definition of MSME underwent so many revisions, there must be difference in the experiences of different MSMEs, operating in different eras. That is why there is a need to study the effects of age of the MSMEs (time period since the MSMEs are into business) on other activities of the enterprise. In this paper, the relationship or association of age of the MSMEs is studied with three variables i.e Social Initiatives taken by the enterprise, Percentage of exports done by them or their export performance, Subsidies Availed by them.

## 2. Introduction to Sports Goods industry

Indian sports goods industry is more than a hundred years old. The genesis of this industry lies in Sialkot region of Pakistan. Sialkot was a major centre of sports goods industry. But during the partition in 1947, many Hindu Artisans moved to Punjab, India and started living in the region of Batala, Jalandhar, Ludhiana etc. As a result, Jalandhar grew as a hub

of sports goods industry and now ranks first as a sports goods cluster in Punjab, followed by the second largest cluster in Meerut, Uttar Pradesh and the third largest in Gurgaon, Haryana.

Thus, the Indian Sports Industry has witnessed a phenomenal growth over several past decades. After the economic liberalisation in India that took place in 1991, and particularly because of the exposure of global market which is the result of emergence of World Trade Organisation (WTO) in 1995, Indian sports Industry has got a huge customer base in the form of foreign markets and tremendous competition, also, from the same very source.

The present study examines whether the newer firms perform differently from the older firms as there have been many policy changes since the sports goods industry came into existence.

Thus, age of the MSMEs is considered as an important variable and its association is seen with other important variables.

## 3. Review of Literature

Empirical results show that age is one of the important determinants while commenting on export performance of the firms. Also, age is sometimes used as a proxy for experience where the data regarding experience is unavailable (D' Angelo et al, 2013; Di Maria & Ganau, 2014; Majocchi et al., 2005). Thus empirical studies show mixed results regarding **age of the firm and export performance**. Some studies find that age of the firm is positively related to the export performance (Majocchi et al., 2005), others found that age has a negative effect on export performance (Kirpalani & McIntosh, 1980), while some are of the opinion that there is no significant association between age and export performance (D' angelo et al., 2013 ; Ganotakis & Love, 2011).

While reviewing literature for association between **age of the organisation and social security initiatives**, it was found that older firms contribute more towards fulfilling social responsibilities as compared to younger firms. (Badulescu Alina; et al., 2018). Whereas Hossain and Reaz (2007) envisaged that age is not a significant variable that may influence social security initiatives. Thus, there is no compulsion to opt for social security initiatives or CSR activities for the companies. Rather, it is a voluntary step to do something for the society. So, for that matter, age can be considered to have insignificant association between Age of the Organisation and social security initiatives taken by these. Roberts (1992, p. 604), researched that age of the company, besides size and type of Industry is positive and significant determinant of CSR. (Wiklund, 1999) concluded that age of the company does not impact the CSR activities and is insignificant in stating the extent of CSR initiatives taken by organisation.

However, no conclusive evidence could be found regarding availability of subsidies amongst newer and older firms. Thus, there are many subsidies available for MSMEs, but when it comes to sports goods industry, these are only in letter and not in spirit. Thus during the survey, it was administered that due to current changes in policies and imposition of goods and services tax (GST), all subsidies have been put to end, whether it relates to subsidies on exports, subsidy on importing raw material and the like, Thus, the present study will work as an important literature in finding out the association between age of the organisation and subsidies availed by them.

#### 4. Objectives of the study

1. To study the association between age of the organisations and societal contributions made by these organisations.
2. To study the association between age of the organizations and percentage of exports or export performance made by these organisations.
3. To study the association between age of the organizations and subsidies availed by these organisations.

#### 5. Need of the study

Not all enterprises work under same economic Political, Social, Cultural environment. Also, not all enterprises experience same policy changes made by the government. Thus it is of great importance to know, how does policy changes over the years affect the experiences and activities of the organisations.

#### 6. Hypothesis

On the basis of objective 1, the following hypothesis is set:

**Ho<sub>a</sub>** : There is no significant association between age of the organisations and societal initiatives taken by these organisations.

**H<sub>1a</sub>** : There is significant association between age of the organisations and societal initiatives taken by these organisations.

Where, Ho is the Null Hypothesis and H<sub>1</sub> is the alternate hypothesis.

To fulfill objective 2, the following hypothesis is set:

**Ho<sub>b</sub>** : There is no significant association between age of the organizations and percentage of exports or export performance done by these organisations.

**H<sub>1b</sub>** : There is significant association between age of the organisations and percentage of exports or export done by these organisations.

To meet objective 3, the following hypothesis is set:

**Ho<sub>c</sub>** : There is no significant association between age of the organisations and subsidies availed by these organisations.

**H<sub>1c</sub>** : There is significant association between age of the organisations and subsidies availed by these organizations.

### 7. Research Methodology

#### A. Data collection Techniques

The present study examines the sports goods industry of Punjab. The study has been carried out with the help of both primary and secondary sources. The secondary sources include data from various journals, periodicals, websites and databases. The method used for primary data collection is through survey with the help of a structured questionnaire. Personal Interview was conducted and where personal interview was not feasible, responses were obtained through E-mail and telephonic interview.

Survey was conducted on MSMEs in sports goods industry of Punjab, from Jalandhar region, as it is the main hub for sports goods industry.

#### B. Sample Size and Method of Sampling

107 enterprises were selected as the sample size. The method of Sampling was Non Probability Sampling. To be precise, judgmental or purposive sampling and Snowball Sampling was followed. The selected sample was representative of the population and possessed all the attributes that were essential. Snowball sampling method was used where the sample was difficult to locate. Many subjects were surveyed on the basis of referrals from other subjects. During the field study and survey, suggestions from necessary councils like Sports Goods Export Promotion Council (SGEPC), SPORTEX, etc were sought and Industry Association, Policy makers, Experts and Professionals were also surveyed.

#### C. Data Analysis and Interpretation

For the data analysis, the technique that is applied is Pearson Chi Square and Frequency and Percentage Method.

The frequency distribution table shows age of the organization on one side and whether or not they undertake a particular activity on the other. The Age of the organisations are categorized in four ranges/ categories i.e Upto 15 years, 16 to 30 years, 31 to 45 years and 46 years and above. On the other hand, for the variable having dichotomous values - 0 and 1, 1 indicates presence of the attribute (contributing towards societal initiatives and availing subsidies) and 0 indicates absence of the attribute (not contributing towards societal

initiatives and not availing subsidies). In our paper, the responses related to societal initiatives and subsidies availed by the organizations are coded as 0 and 1. The responses related to export performance has been categorized into 5 ranges i.e from 0 to 4, where 0 indicates no or less than 30 percent exports, 1 indicates exports between 31 to 50 percent, 2 indicates exports between 51 to 80 percent, 3 indicates exports between 81 to 100 percent and 4 indicates those organizations that are 100 percent export houses.

A Chi Square test, also written as  $X^2$  test is used to determine whether there is significant difference between the expected frequencies and observed frequencies in one or more categories. Thus, chi squared test is often used as a short form for Pearson's Chi Squared test. (Wikipedia)

**8. Study about association of Age with other variables**

As mentioned earlier, association of age with other variables is studied. To meet the aforesaid objectives, hypothesis are set. These are as follows:

**1. Association of Age of the MSME and societal initiatives taken by them.**

**Ho:** There is no significant association between age of the organisations and societal initiatives taken by these organisations.

**H<sub>1</sub>:** There is significant association between age of the organisations and societal initiatives taken by these organisations.

Organisation's age and experience are used as synonyms. Empirically, age is used as a proxy of experience where not much information is available regarding the latter. In our questionnaire, questions regarding social security initiatives or societal initiatives taken by MSMEs were asked. The respondents were asked questions pertaining to social responsibilities/ activities performed by them if any. Social responsibilities included activities like Contribution towards Children Welfare, Working for Upliftment of the poor, Contribution towards Health Care Sector, Promoting Education, Plantation of Trees and other Environmental Initiatives, etc.

Further, Chi square was used as a tool to find out the association between Age of the enterprise and societal initiative taken by them.

**2. Association of Age of the MSMEs and percentage of exports.**

**Ho:** There is no significant association between age of the organisations and percentage of exports done by these organisations.

**H<sub>1</sub>:** There is significant association between age of the organisations and percentage of exports done by these organisations.

In the questionnaire, questions regarding exports were administered. Thus, empirical researches have shown that small firms have also shown an increasing ability to internationalize their business. In this research paper, the association between age of the enterprise and the percentage of exports has been found out by applying Pearson's Chi Square.

**3. Age of the MSMEs and subsidies availed by them.**

**Ho:** There is no significant association between age of the organisations and subsidies availed by these organisations.

**H<sub>1</sub>:** There is significant association between age of the organisations and subsidies availed by these organisations.

In the questionnaire, responses pertaining to subsidies availed by the enterprises were sought. The government has been proposing subsidies for MSMEs since longtime and has been introducing various changes in the same. Recently, there have been policy changes with regards to subsidies like duty drawback, subsidy on imports of raw material, etc.

Pearson Chi square method was used as a tool to find out the association between age of MSMEs and subsidies availed by them.

**9. Findings/ Results of the study:**

As mentioned earlier, the sample size was 107 organisations. The frequency tables show that the organizations that fall under the age category of 15 years or less are 23 in number, number of organizations that fall under the age category of 16 to 30 years are 24, number of organizations that fall under the age category of 31 to 45 years are 23 and number of organizations that of the age of 46 years or above are 37.

**Findings/ Results of the study (objective 1) :** The results are reported in the table 1 and table 2. Table 1 shows the frequency and percentages related to Objective 1 i.e Ho<sub>a</sub> & H<sub>1a</sub>, while table 2 shows the Chi Square and P values related to the same.

Table 1

			Societal Initiatives		Total
			0	1	
AGE	Upto 15 Year	Count	12	11	23
		% within AGE	52.2%	47.8%	100.0%
	16-30 Year	Count	11	13	24
		% within AGE	45.8%	54.2%	100.0%

31-45 Year	Count	11	12	23
	% within AGE	47.8%	52.2%	100.0%
46 Year & Above	Count	10	27	37
	% within AGE	27.0%	73.0%	100.0%
Total	Count	44	63	107
	% within AGE	41.1%	58.9%	100.0%

Table 2 Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.843 <sup>a</sup>	3	.184
Likelihood Ratio	4.974	3	.174
Linear-by-Linear Association	3.743	1	.053
N of Valid Cases	107		

As the table 1 shows, the categories of the Age is shown on the left side in the contingency table and the response in relation to societal initiatives is shown on the right side. The table shows, 11 (47.8 %) out of 23 organisations (total organizations in that age category) which are operating since 15 years or less are involved in Social Responsibility initiatives and 12 (52.2%) organisations that fall under the same age category do not involve in Social Responsibility initiatives. Likewise, 13 (54.2%) of the 24 Organizations (total organizations in that age category) which fall under the age band of 16 to 30 years are involved in Social Responsibility initiatives and 11 (45.8%) organisations that fall under the same age category do not involve in Social Responsibility initiatives. Likewise, 12 (52.2%) out of 23 organisations (total organizations in that age category) which fall under the age band of 31 to 45 years are involved in Social Responsibility initiatives and 11 (47.8%) organisations that fall under the same age category do not involve in Social Responsibility initiatives. Likewise, 27 (73 %) of the 37 Organizations (total organizations in that age category) which fall in the age of 46 years and above are involved in Social Responsibility initiatives

and 10 (27 %) organisations that fall under the same age category do not involve in Social Responsibility initiatives.

As the table 2 shows, at 3 degrees of freedom, the Pearson chi-square value is 4.843 and the p value is 0.184. Since the p value is more than the significance level i.e. .05, we accept the Null hypothesis. Thus, there is no significant association between Age of the organisations and societal initiatives taken by these organisations. Thus we can say that these initiatives are more intention driven rather than number of years these have been into business.

Thus, the results are in taken to the empirical findings of Wiklund (1999) and Hossain and Reaz (2007).

**Findings of the study (objective 2):** The results are reported in the table 3 and table 4. Table 3 shows the frequency and percentage related to Objective 2 i.e Ho<sub>b</sub> & H<sub>1b</sub>, while table 4 shows the Chi Square and P values related to the same.

Table 3

			Export Performance/ Percentage of Exports					Total
			0	1	2	3	4	
AGE	Upto 15 Year	Count	17	1	2	1	2	23
		% within AGE	73.9%	4.3%	8.7%	4.3%	8.7%	100.0%
	16-30 Year	Count	14	3	0	4	3	24
		% within AGE	58.3%	12.5%	.0%	16.7%	12.5%	100.0%
	31-45 Year	Count	11	2	3	3	4	23
		% within AGE	47.8%	8.7%	13.0%	13.0%	17.4%	100.0%
	46 Year & Above	Count	16	7	4	4	6	37
		% within AGE	43.2%	18.9%	10.8%	10.8%	16.2%	100.0%
Total		Count	58	13	9	12	15	107
		% within AGE	54.2%	12.1%	8.4%	11.2%	14.0%	100.0%

**Table 4 Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.849 <sup>a</sup>	12	.542
Likelihood Ratio	13.125	12	.360
Linear-by-Linear Association	2.928	1	.087
N of Valid Cases	107		

As the table 3 shows, the range of the Age is shown on the left side in the contingency table and the response in relation to export performance or percentage of exports is shown on the right side. The table shows, 17 (73.9 %) of the 23 organizations which are operating since 15 years or less have shown export performance equal to zero or less than 30 percent, followed by 1 (4.3 %) organization that have shown export performance that fall in the range of 31 to 50 percent, followed by 2 (8.7 %) organizations that have shown export performance that fall in the range of 51 to 80 percent , followed by 1 (4.3 %) organizations that have shown export performance that fall in the range of 81 to 100 percent and 2 (8.7 %) organizations that state they are involved in 100 percent exports. Likewise, results for the age band 16 to 30 years include 14 (58.3%) organizations out of the total of 24 organisations report exports less than 30 percent or zero, 3 (12.5 %) organizations that have reported export percentage between 31 to 50 percent, No organization (0 %) reported export percentage between 51 to 80 percent, 4 (16.7%) organizations reported the export percentage between 81 to 100 percent and 3 (12.5 %) of the organizations stated that these are 100 per cent export houses. Likewise, results for the age band 31 to 45 years include 11 (47.8%) of the total 23 organizations reported for exports less than 30 percent or zero, 2 (8.7 %) organizations reported for export percentage between 31 to 50 percent, 3 (13 %) organizations reported for the export percentage between 51 to 80 percent, 3 (13 %) reported for the export percentage

between 81 to 100 percent and 4 (17.4 %) of the organizations stated that these are 100 per cent export houses. Likewise, results for the age of 46 years and above include 16 (43.2%) out of the 37 organizations reporting the exports less than 30 percent or zero, 7 (18.9 %) organisations stated the export percentage between 31 to 50 percent, 4 (10.8 %) organizations stated the export percentage between 51 to 80 percent, 4 (10.8 %) organizations stated the export percentage between 81 to 100 percent and 6 (16.2 %) organizations stated that these are 100 per cent export houses.

As the table 4 shows, at 12 degrees of freedom, Pearson chi square value is 10.849 and p value is .542. Since the p value is more than the significance level of .05, we accept the Null Hypothesis, thereby stating that there is no significant association between age of the organisation and percentage of exports done by them.

Thus, the findings are in congruence to the results of the study done earlier (D' Angelo et al. 2013, ganotakis & love, 2011).

**Findings of the study:** The results are reported in the table 5 and table 6. Table 5 shows the frequency and percentage related to Objective 3 i.e Ho<sub>c</sub> & H<sub>1c</sub>, while table 6 shows the Chi Square and P values related to the same.

**Table 5**

			Subsidies Availed		Total
			0	1	
AGE	Upto 15 Year	Count	23	0	23
		% within AGE	100.0%	.0%	100.0%
	16-30 Year	Count	17	7	24
		% within AGE	70.8%	29.2%	100.0%
	31-45 Year	Count	21	2	23
		% within AGE	91.3%	8.7%	100.0%
	46 Year & Above	Count	28	9	37
		% within AGE	75.7%	24.3%	100.0%
Total		Count	89	18	107
		% within AGE	83.2%	16.8%	100.0%

**Table 6 Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.839 <sup>a</sup>	3	.020
Likelihood Ratio	13.335	3	.004
Linear-by-Linear Association	2.827	1	.093
N of Valid Cases	107		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 3.87.

As the table 5 shows, the range of the Age is shown on the left side in the contingency table and the response in relation to subsidies availed is shown on the right side. The table shows, all the 23 (100 %) organizations which are operating since 15 years or less have stated that they have not availed any subsidies. Whereas, 17 (70.8%) organisations out of 24, falling under the age band of 16 to 30 years also state that they have not availed any subsidies, followed by 21(91.3%) organisations out of 23 falling under the age category of 31 to 45 years that state they have not availed any subsidies. Likewise, 28 (75.7%) organisations out of 37, having an age of 46 years or above stated they have not availed any subsidies. In total, 89 organisations out of 107 have stated that they have not availed any kind of subsidies or there is non- availability of any kind of subsidies.

The table shows that at 6 degrees of freedom, the value of Pearson chi square is 9.839 and the p value is .020. Since the p value is less than the significance level of .05, the Null hypothesis is rejected. Thus, it is found that these exists a significant association between age of the organisation and the subsidies availed.

Thus, the finding can be considered as a novel finding in a way because, during literature review no conclusive evidence of the same was found. Therefore it was seen that the current policies led to reducing the subsidies to almost zero, which means, the younger firms (which have just become operative in several years) did not have access to subsidies, whereas the older firms (operating since long) relatively experienced and availed subsidies at some point of time.

**10. Conclusion**

Sports Goods Industry is over 100 years old now. In these 100 years, tremendous policy changes related to economic, political, social, cultural aspects are witnessed. Every enterprise may have different experiences regarding these policies because some must be operating when the policies on exports, incentives, subsidies, etc are stringent while some must have operated when the environment was very comfortable for them. Thus, age of the enterprise becomes an important variable to be discussed. In the study the association of age of the organisations with the other factors like social initiatives taken by them, export performance/ percentage of exports done by them, subsidies availed by them has been studied. The following conclusions have been drawn from the study:

1. There is no significant association between age of the organisations and societal initiatives taken by them. This means, it does not matter whether the organisation is a new enterprise or is into business since many years. What it takes to contribute towards social initiatives is the desire of the enterprise. Since they have taken so much from the society in the form of natural and other resources -Using them, polluting them, depleting them, etc, it becomes essential to know whether these are paying the society back? This means, an enterprise which is into business for years may not feel the need to contribute towards society and a newly found business enterprise may have a vision to contribute effectively towards various social initiatives like Contributing towards Children Welfare, Working for the Upliftment of the poor, Contributing towards Health Care Sector, Working for Old Age people, Promoting Education, Planting Trees, other Environmental Initiatives etc.
2. No significant association has been seen between age of the organisations and the percentage of exports or export performance made by them. Generally, there is a notion that organisations which are into the business for relatively more years, may be contributing increasingly towards exports. But, this is not the case in our study. It was found that some organisations which were of recent origin could contribute effectively and more in terms of percentage when compared to older firms. Thus, age is not a criteria to judge an organisation over exports percentage.
3. There is a significant association seen between age of the organisation and the subsidies availed by them or subsidies available to them. To confirm on non-statistical evidence also, during the survey, the entrepreneurs stated that now, there is no subsidy available for them. Earlier, subsidies related to imports on raw material, duty drawback, subsidies on exports and the like were available. But due to recent changes in government policies, including Goods and Services Tax (GST), all kinds of assistance has been stopped. Thus, newer firms have experienced almost zero subsidy availability while older firms have availed the subsidies in several years.

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