

# Awareness and Knowledge of Physiotherapy as a Career Option among High School Students: A Survey Study

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## ABSTRACT

**Background:** Physiotherapy is one of the oldest components of the closely integrated group of allied health professionals. The period of Pre-adulthood lays down the stepping stone of their career for many because of the decisions. Information about various occupations and professions is an important factor when making one's future choice. Understanding students' Awareness and knowledge of Physiotherapy is essential for informing interventions aimed at promoting informed career decision-making among youth.

**Aim and Objectives:** To determine the extent to which high school students are aware of the field of Physiotherapy, and to determine the percentage of students considering pursuing a career in Physiotherapy.

**Methodology:** Based on the inclusion and exclusion criteria, 150 high school students were selected using Convenience Sampling. The self-administered questionnaire was used as an outcome measure. Data was analyzed by entering data into SPSS version 26 and descriptive analysis was done with the help of pie charts and bar diagrams.

**Results and Conclusion:** The results of the Study revealed that 46% of Students were Familiar with Physiotherapy. The Percentage of Students who considered Physiotherapy as a Career Option in the

Medical field were 82% but, 63.3% were not aware of the eligibility criteria or entering a Physiotherapy degree program. However, 79.3% agreed that Physiotherapy is effective in reducing Pain. In summary, this study has highlighted the limited Awareness and knowledge of Physiotherapy as a career option among high school students in Fatehgarh Sahib District.

**Keywords:** High School, Students, Physiotherapy, Awareness, Career Option

## INTRODUCTION

Indian Association of Physiotherapists describes Physiotherapy as a Physiotherapeutic system of Medicine, which includes examination, treatment, advice, and instructions to any person preparatory to or for the purpose of or in connection with movement dysfunction, bodily malfunction, physical disorder, disability, healing and Pain from trauma and disease, and physical and mental conditions using physical agents (1). Physiotherapy is a Professional Healthcare discipline that works closely with physicians and other Healthcare Professionals (2). Physiotherapy career is a gratifying craft, especially one that involves extended grounding and an official refinement (3).

As the preliminary field origins of actual Physiotherapy as a professional group antecede to Per Henrik Ling known as the

Father of Swedish Gymnastics who founded the Royal Central Institute of Gymnastics (RCIG) in 1813 for soft tissue manipulation and Exercise (3). Sweden's National Board of Health and Welfare gave formal authorization to Physiotherapists in 1887 (3).

The foundation of Physiotherapy was laid in India in 1952 following a major epidemic of poliomyelitis in Mumbai & soon in 1953 the first School & Center for Physiotherapy was established in Mumbai as a joint collaborative project of the Government of India, State Government & then the Bombay Municipal Corporation (BMC) with technical support by World Health Organization (WHO) (Choudhary, 2019) (3).

In the Indian education system, students pursue the Physiotherapy course after their Higher secondary course. The higher secondary course has various branches of studies. The students from science background are eligible to pursue Health courses such as Medicine, Physiotherapy & Nursing (4).

The period of Pre-adulthood lays down the stepping stone of their career for many because of the decisions (3). When an individual makes a career choice, therefore, it is intended to be a long-standing decision and should be given much thought, consideration, and careful planning. Individuals vary with regard to the time at which they make career choices (2).

## **MATERIALS & METHODS**

### **STUDY DESIGN**

The survey study was conducted among 150 high school students from both Private and Government Schools. The Participants were informed about the purpose of the Study and on obtaining informed consent, the Participants who fulfilled the inclusion criteria were included in the Study.

### **RESEARCH SETTING**

Data was collected from Private and Government schools under Fatehgarh Sahib

District. An Interview Schedule method was used to collect the data.

## **ELIGIBILITY CRITERIA**

### **Inclusion criteria**

Students of 11<sup>th</sup> and 12<sup>th</sup> grade with Medical Stream were included in the Study and, Both male and female subjects were included in the Study.

### **Exclusion criteria**

Students not willing to participate, Students with Auditory, Visual, or Perceptual Deficits, and Physically Handicapped students were excluded from the study.

### **Ethical Approval**

The approval to conduct the present study was obtained from the Institutional Ethical Committee (IEC) constituted by Sri Guru Granth Sahib World University, Fatehgarh Sahib, in accordance with the ICMR ethical guidelines for Biomedical Research on Human Subjects (2006) with Reference No. SGGSWU/IEC/2024/38.

## **DEVELOPMENT OF THE QUESTIONNAIRE**

The data was collected using a Self-Administered Questionnaire. Convenience sampling was used for the Study. The questionnaire included Informed Consent for the voluntary participation of the students.

The Questionnaire included a total of 17 multiple-choice questions to determine the Knowledge and Awareness of Physiotherapy as a career option among High School Students.

## **STATISTICAL ANALYSIS**

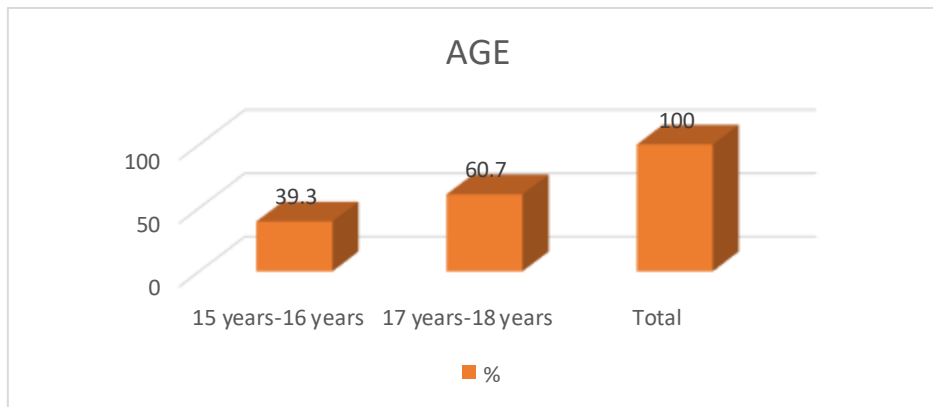
The data was further analyzed using the Statistical Package of Social Science (SPSS) Windows version 26 and summarized using Descriptive Statistics of the Bar Chart, Pie Chart, Frequency, and Percentage using Tables.

**RESULTS**

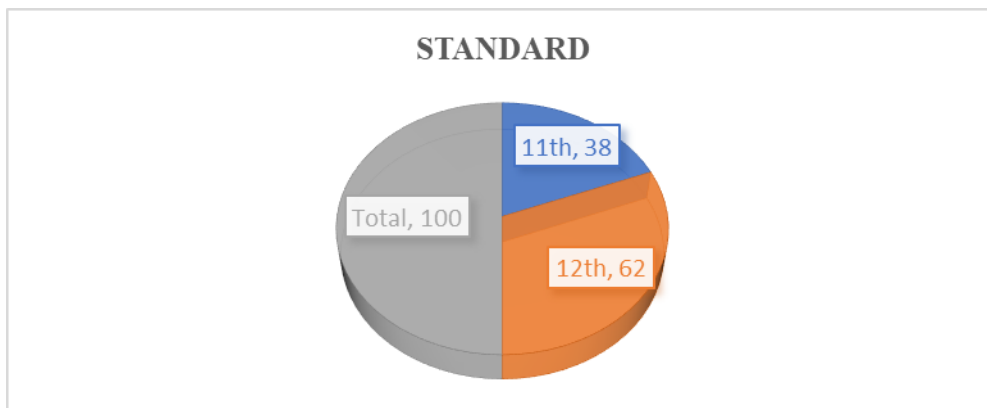
Table 1.1 depicts the Demographic Characteristics of the Subjects under Study. The data was collected from 150 respondents, 39.3% were in the age group of 15-16 years and 60.7% were in the age group of 17-18 years. In terms of education, 62% were in 12th grade while 38% were in 11th grade. Gender Distribution was fairly even, with 48% male and 52% female respondents.

**Table 1.1: Presents the Demographic Characteristics of the Subjects under Study (N=150)**

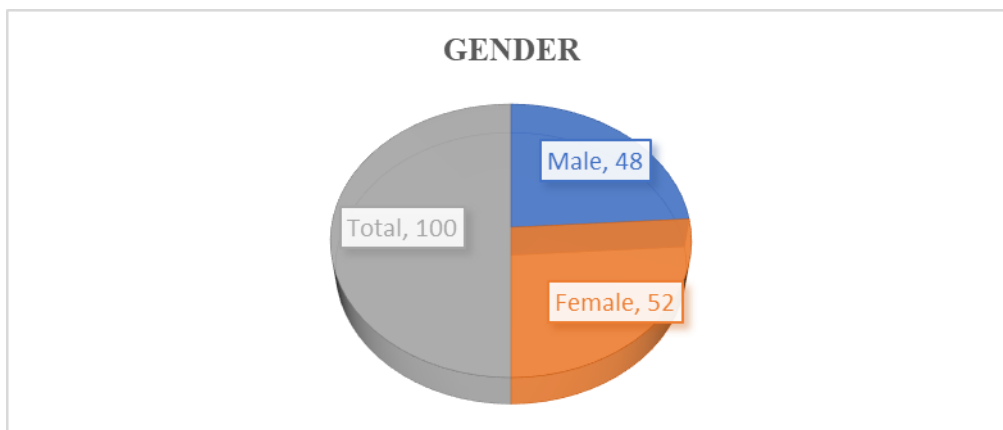
Characteristics		
Age group (years)	Absolute no.	%
15-16	59	39.3
17-18	91	60.7
Standard		
11 <sup>th</sup>	57	38
12 <sup>th</sup>	93	62
Gender		
Male	72	48
Female	78	52



**Fig 1.1.1: Age-wise Distribution of the Participants**



**Fig 1.1.2: Shows the Standard of the Participants**



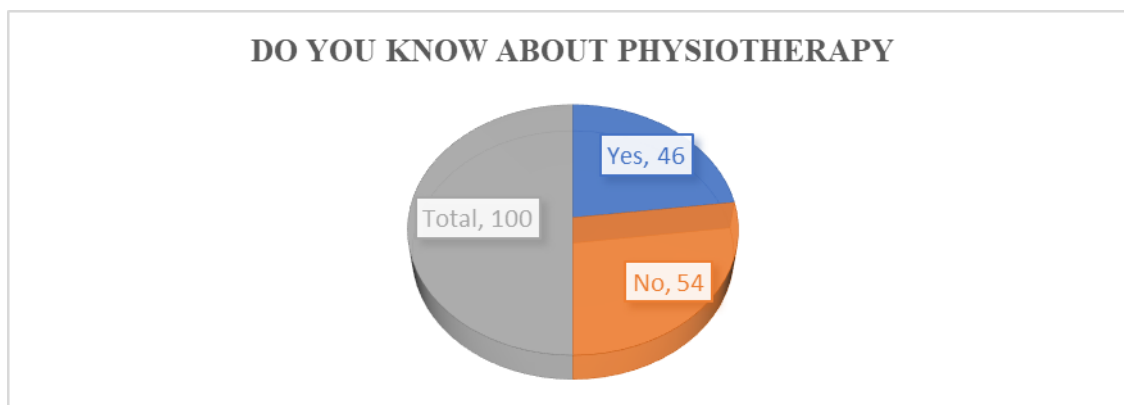
**Fig 1.1.3: Gender-wise Distribution of the Participants**

Table 1.2 depicts the Awareness of Physiotherapy in General which shows that 46% of respondents were familiar with Physiotherapy, and 54% were not. However, 82%, considered it as a career option in the medical field. Most of the Participants identified Physiotherapy as being practiced by Allied Health Professionals/Physiotherapists, although some confused it with Acupuncture or Indigenous treatments. There is varied Awareness regarding the eligibility criteria for entering a Physiotherapy Degree Program, with responses indicating differing levels of familiarity. 55% of people are aware of the eligibility requirements for entering a

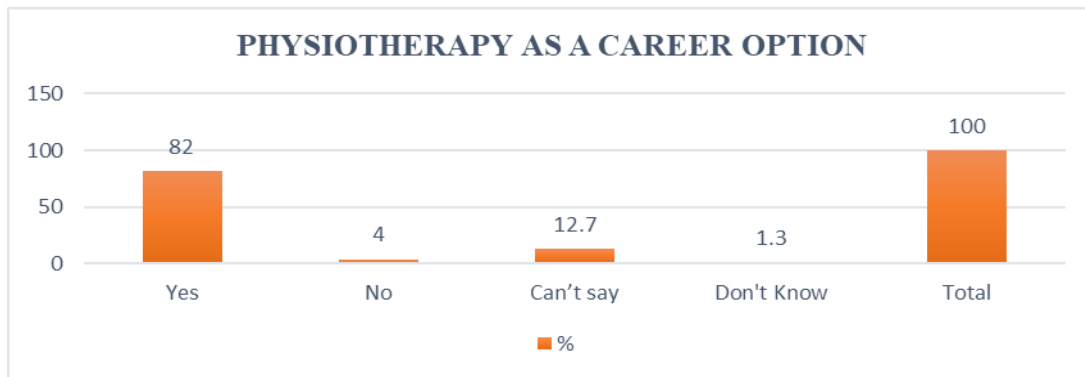
Physiotherapy Degree Program, while 63.3% are not. When it comes to the duration of the training, responses varied, with 39.3% indicating a 3-year program, 30% mentioning 4.5 years, and 22.7% opting for 3.5 years. Participants' perceptions of components typically found in a Physiotherapy department showed that 3.3% of respondents identified Electrical Modalities, while 5.3% recognized Therapeutic Tools. Additionally, 13.3% mentioned Tapes, Bandages, and Splints, and 6.7% mentioned Manual Therapy, Exercise Balls, and Resistance Bands, and 71.3% recognized all of the mentioned components.

**Table 1.2: Presents the Awareness of Physiotherapy in General**

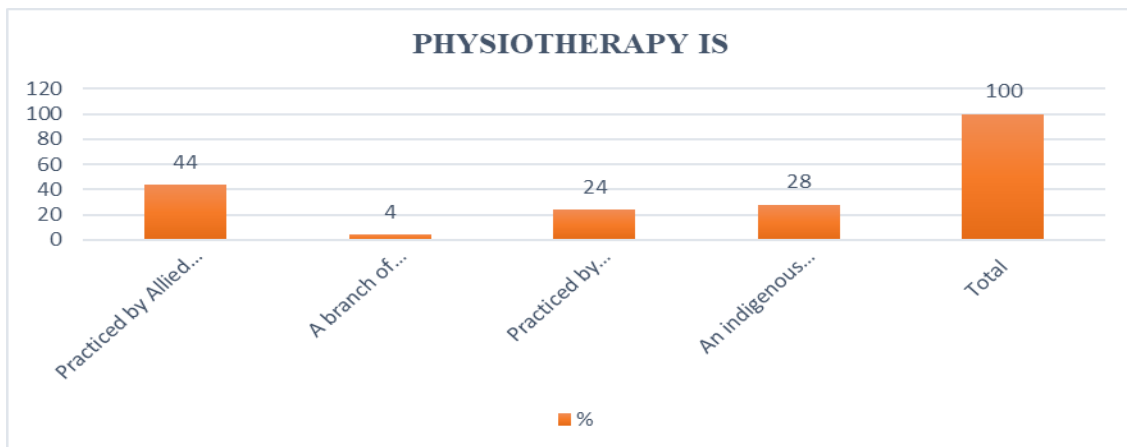
Do you know about Physiotherapy	Absolute no. (n)	%
Yes	69	46
No	81	54
<b>Do you consider Physiotherapy as a Career Option Medical Field?</b>		
Yes	123	82
No	6	4
Can't say	19	12.7
Don't know	2	1.3
<b>Physiotherapy is</b>		
Practiced by Allied Health Professionals/Physiotherapists	66	44
A branch of acupuncture	6	4
Practiced by masseurs	36	24
An indigenous treatment method	42	28
<b>Do you know about the Eligibility for entering for Physiotherapy Degree Program?</b>		
Yes	55	36.7
No	95	63.3
<b>How many years of training are there in the Physiotherapy Degree Program?</b>		
3.5 years	34	22.7
4.5 years	45	30
5 years	12	8
3 years	59	39.3
<b>What does a Physiotherapy Department include</b>		
Gym		
Electrical modalities	5	3.3
A therapeutic tool	8	5.3
Tapes, Bandages, Splints	20	13.3
Manual Therapy, Exercise balls, Resistance Bands	10	6.7
All of the above	107	71.3



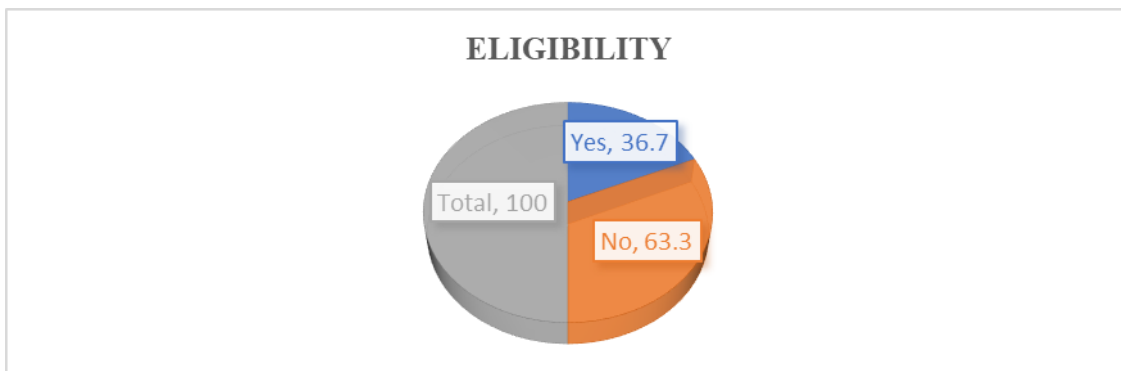
**Fig 1.2.1: Presents the no. of Participants who are aware of Physiotherapy**



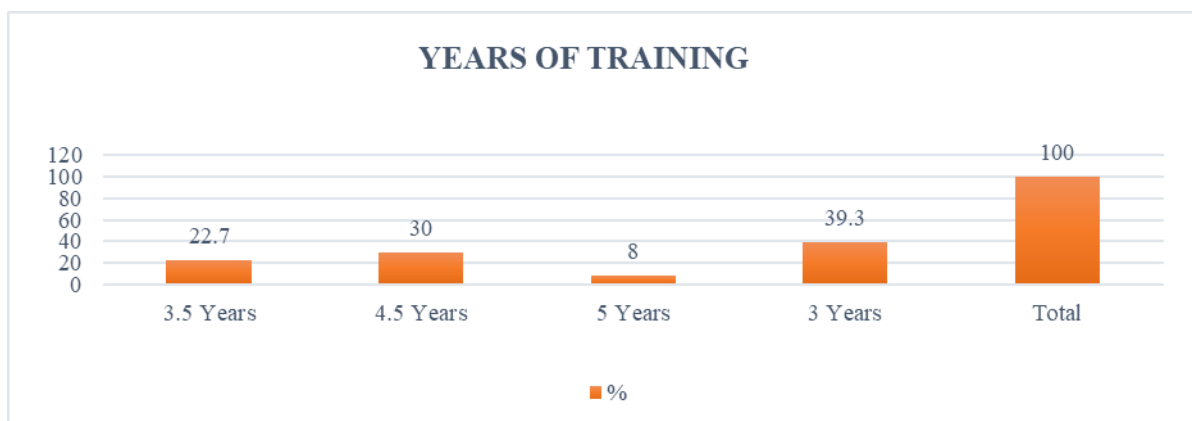
**Fig 1.2.2: Distribution of the Participants Considering Physiotherapy as a Career Option in the Medical Field**



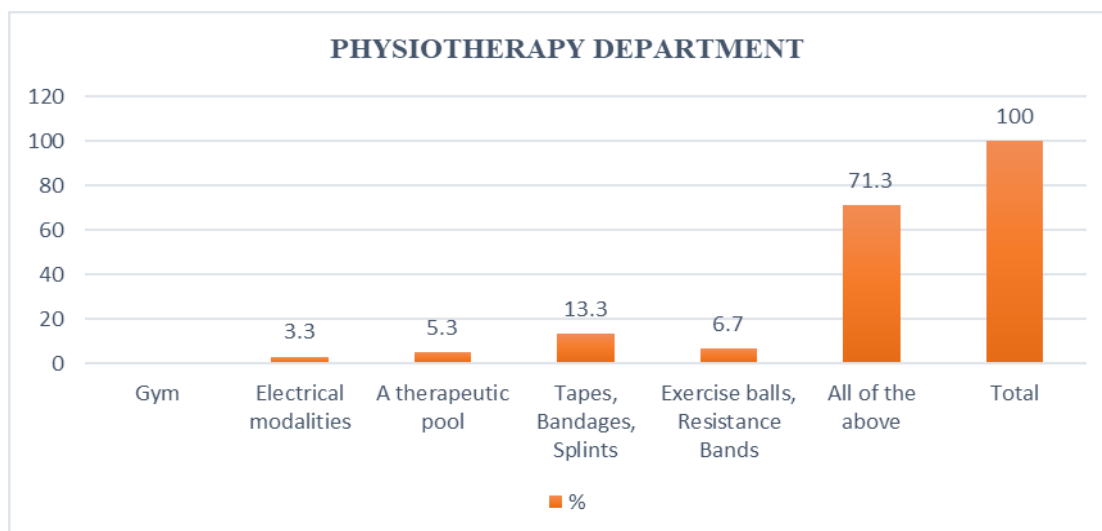
**Fig 1.2.3: Shows Participant's Knowledge of Physiotherapy**



**Fig 1.2.4: Shows Participant's Knowledge about Eligibility of Physiotherapy Degree Program**



**Fig 1.2.5: Shows Participants' Understanding of Duration of the Physiotherapy Degree Program**



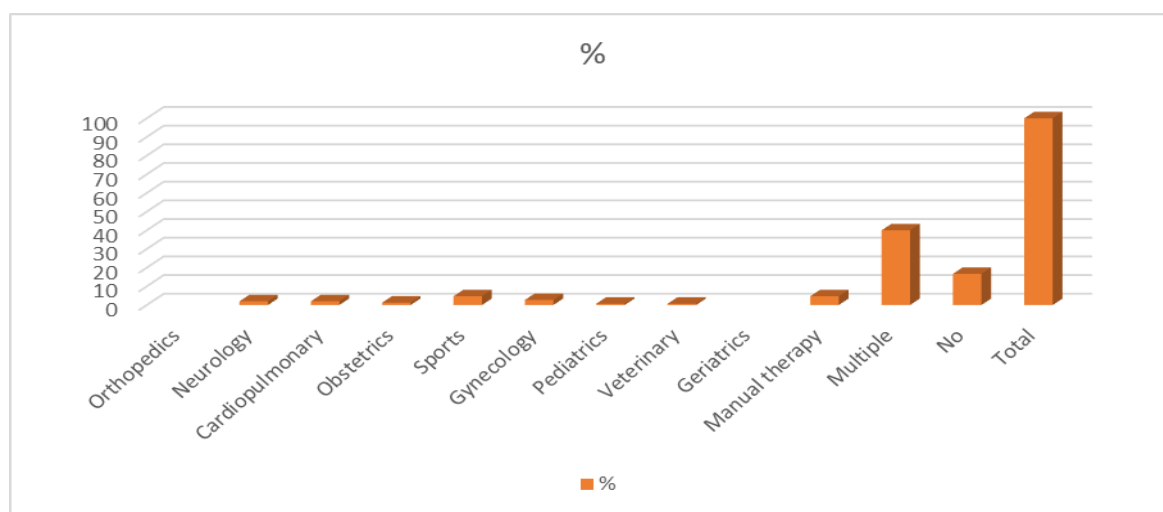
**Fig 1.2.6: Shows Participants' Awareness and Knowledge about Components of Physiotherapy Department**

Table 1.3 depicts Awareness of various Specializations. The survey indicates a varied Awareness of Physiotherapy Specializations among respondents. While 40% recognize multiple Specializations and 24.7% acknowledge all of them. Commonly

recognized Specializations include Orthopedics, Neurology, Cardiopulmonary, Sports, and Manual Therapy. However, 16.7% of respondents were not aware of any Physiotherapy Specializations.

**Table 1.3: Presents the Awareness of Physiotherapy Specializations**

Are you aware that Physiotherapy has a Specializations? If yes, list out the Specializations you are aware of	Absolute no.	%
Orthopedics	0	0
Neurology	3	2
Cardiopulmonary	3	2
Obstetrics	2	1.3
Sports	7	4.7
Gynecology	4	2.7
Pediatrics	1	0.7
Veterinary	1	0.7
Geriatrics	0	0
Manual Therapy	7	4.7
Multiple	60	40
No	25	16.7



**Fig 1.3.1: Shows Participant's Knowledge and Awareness about various Physiotherapy Specializations**

Table 1.4 depicts Awareness of various aspects of Physiotherapy. The survey findings revealed that Physiotherapy services are predominantly available across all sectors, with 80% of respondents indicating availability in government hospitals, private clinics, and NGOs. Among the biggest misconceptions about Physiotherapy, 28% believe it's similar to massage Therapy, while 22% are unaware of any misconceptions. However, 44.7% of respondents are unsure about the pathological conditions managed in Physiotherapy. A significant majority of 83.3% agreed that Physiotherapy follows a definite assessment protocol. Additionally,

79.3% of Participants agreed that Physiotherapy is effective in reducing Pain. Participants' Views on Physiotherapy as a profession, 25.3% of respondents viewed it as Excellent' while 29.3% considered it Very good. Additionally, 42% of respondents viewed it as Good, while only 3.3% expressed the opinion that it is Not good. Most respondents (60.7%) believe a referral is required for Physiotherapy treatment, and 60% agree that one should consult a physiotherapist when injured, in Pain, or during Sports activities. The main source of awareness about Physiotherapy was through friends/family (56.7%).

**Table 1.4: Presents the Awareness of Various Aspects of Physiotherapy**

Physiotherapy services are available at	Absolute no. (n)	%
Government Hospitals	3	2
Private Clinics	18	12
NGO'S	6	4
All of them	120	80
None of them	3	2
<b>What do you think is the biggest misconception about Physiotherapy</b>		
It's only for athletes and Sports injuries	25	16.7
It's similar to massage Therapy	42	28
There are no misconceptions I'm aware of	33	22
Not sure	50	33.3
<b>Do you know about the Pathological conditions treated in Physiotherapy?</b>		
Yes	83	55.3
No	67	44.7
<b>Does Physiotherapy follow a Definite Assessment Protocol?</b>		
Yes	125	83.3
No	25	16.7
<b>Do you agree Physiotherapy is effective in reducing Pain?</b>		
Yes	119	79.3
No	12	8
Can't say	19	12.7
<b>What is your opinion on Physiotherapy as a Profession?</b>		
Excellent	38	25.3
Very good	44	29.3
Good	63	42
Not good	5	3.3
<b>Is there a need for a referral required for Physiotherapy Treatment</b>		
Yes	91	60.7
No	22	14.7
Can't say	37	24.7
<b>When to meet the Physiotherapist</b>		
When injured	22	14.7
When in Pain	26	17.3
When in Pain while playing Sports	12	8
All of the above	90	60
<b>You have Awareness about Physiotherapy through</b>		
Friend/Family	85	56.7
Myself as a client	11	7.3
Internet	14	9.3
Newspaper/magazine/ads	1	0.7
Career information resource	1	0.7
Teacher	24	16
Career literature/pamphlets	1	0.7
Health fair	2	1.3
Multiple	11	7.3

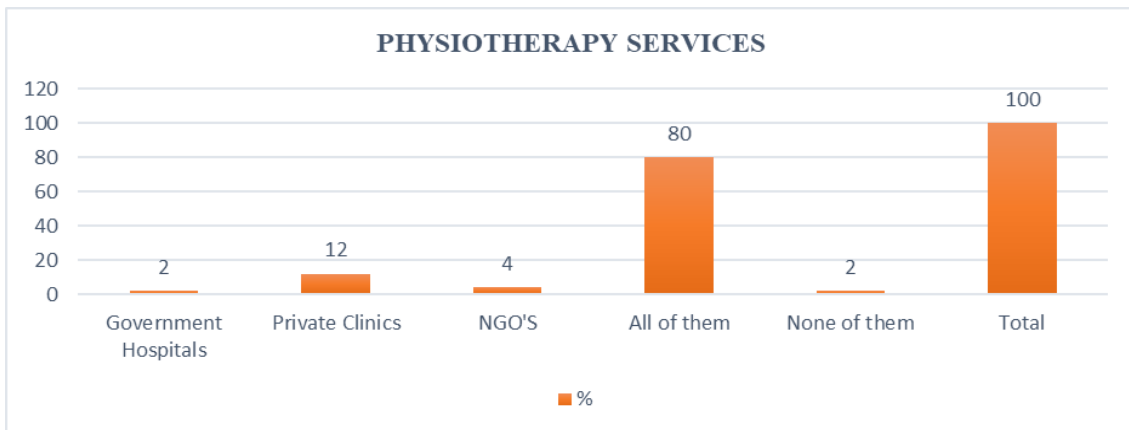


Fig 1.4.1: Shows Participant's Awareness and Knowledge about Physiotherapy Service Availability

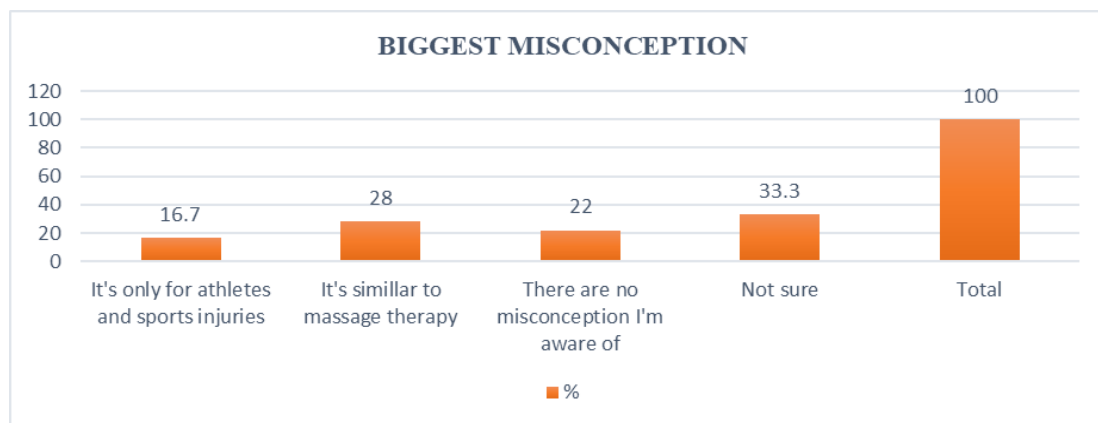


Fig 1.4.2: Shows Distribution of Participant's having misconceptions about Physiotherapy

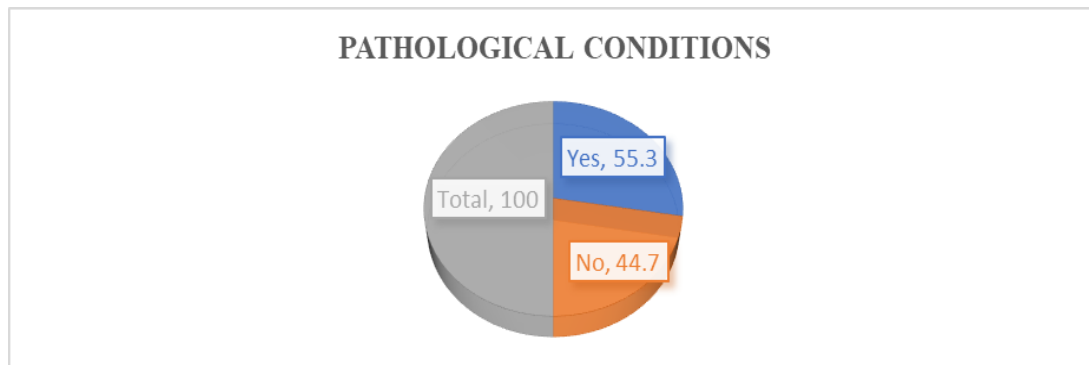


Fig 1.4.3: Shows Distribution of the Participant's knowing the Pathological Conditions managed in Physiotherapy

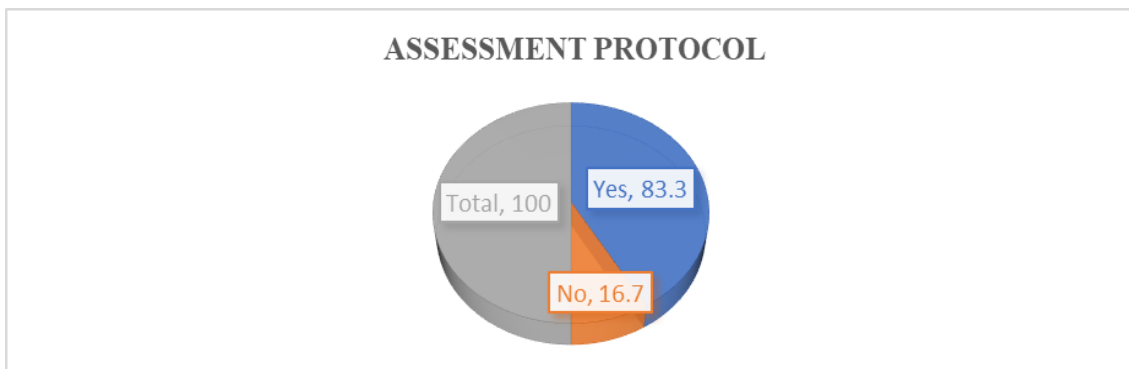
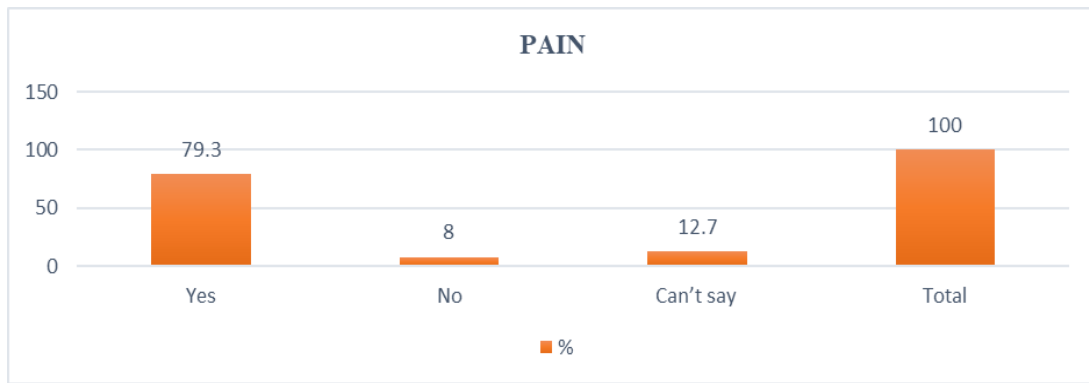
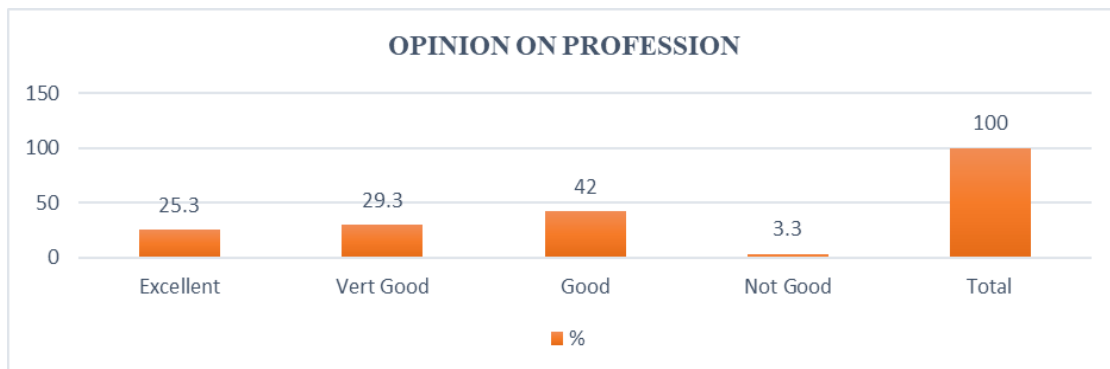


Fig 1.4.4: Shows Participant's Awareness about Physiotherapy Assessment Practices





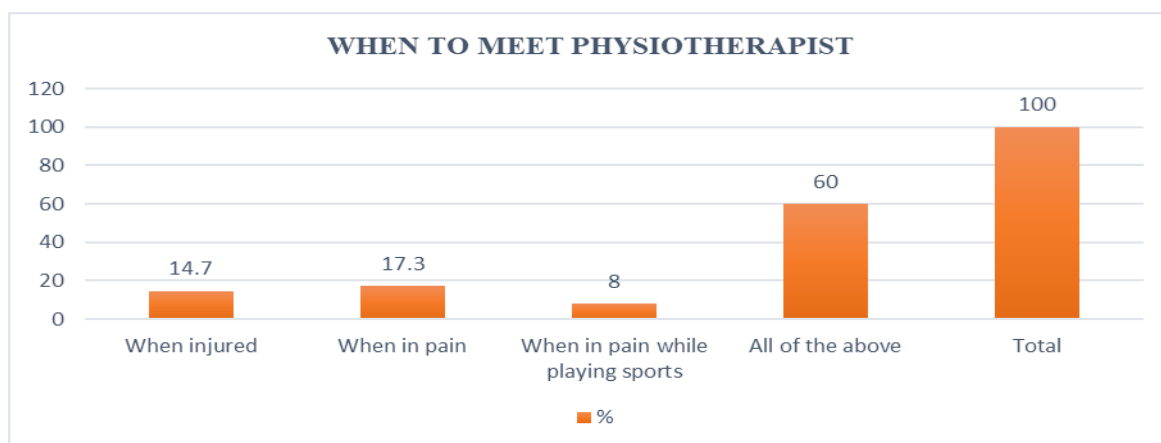
**Fig 1.4.5: Shows Participant's Awareness and Knowledge of Physiotherapy's Effectiveness in Pain Reduction**



**Fig 1.4.6: Shows Participant's Reviews on Physiotherapy as a Profession**



**Fig 1.4.7: Shows Participant's Opinion about the Referral Required for Physiotherapy Treatment**



**Fig 1.4.8: Shows Participant's Knowledge about when to Consult the Physiotherapists**

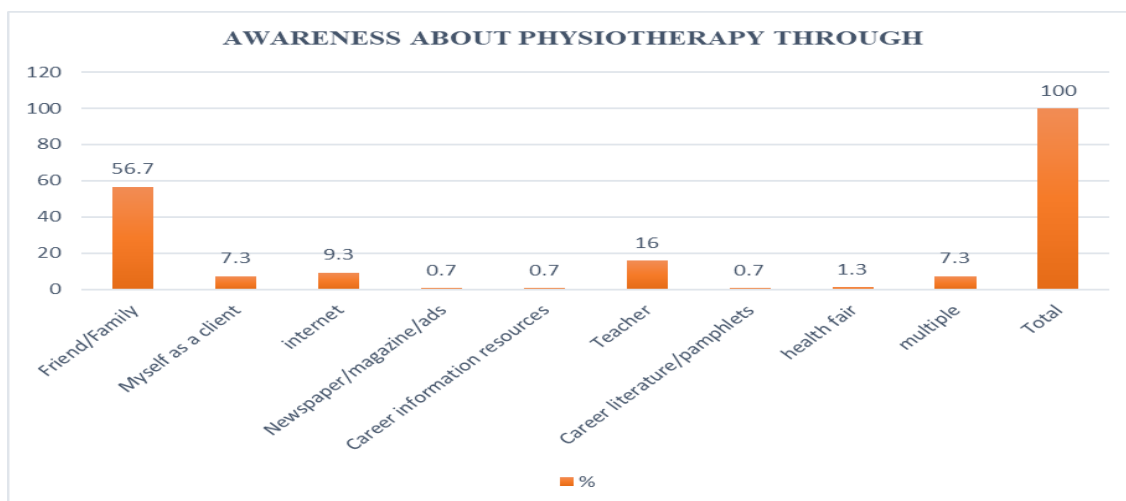


Fig 1.4.9: Shows Participants have an Awareness of Physiotherapy through

Table 1.5 depicts the Percentage of Participants who had considered Pursuing a Career in Physiotherapy, the majority of respondents, accounting for 72.7%,

indicated an absolute no. Conversely, 27.3% of respondents expressed their consideration towards pursuing a Career in this field.

Table 1.5: Presents the Participant's perspective on considering Physiotherapy as a Career Option

Have you ever considered Pursuing a Career in Physiotherapy	Absolute no. (n)	%
Yes	41	27.3
No	109	72.7

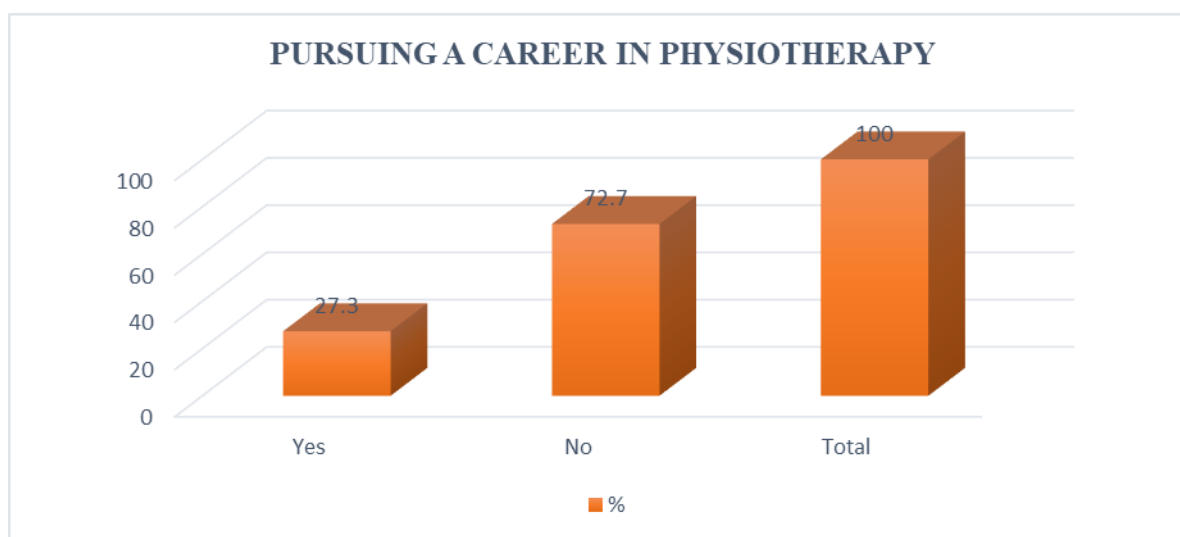


Fig 1.5.1: Shows the Percentage of Participants who want to Pursue a career in Physiotherapy

## DISCUSSION

According to the results of the study, it was revealed that 46% of participants were aware of Physiotherapy, while 54% were not. The study results were similar to the study conducted by Singh and Kapoor [1] which showed that 53.21% of Students were aware of Physiotherapy. The study results were similar to the study conducted by Rathod et al [16] which showed that 84% of

Students were aware of Physiotherapy. This showed that the Students of Jalgaon city of Maharashtra were more aware than the Students of Punjab. 82% of the participants considered Physiotherapy as a career option in the medical field. The study results were similar to the study conducted by Mehndiratta and Kalra [9] which revealed that 75% of subjects considered

Physiotherapy as a career option in the medical field.

44% of respondents identified Physiotherapy as a practice carried out by Allied health professionals, while smaller percentages associated with Indigenous treatment (28%), Acupuncture (4%), and Masseurs (24%). A similar study conducted by Singh et al [1] reported that 43% and 53% of students reported acupuncture is a branch of Physiotherapy and Masseurs are Physiotherapists respectively. 36.7% of participants were familiar with the Eligibility criteria for Physiotherapy Degree Programs, a similar study conducted by Singh and Kapoor [3] reported that 27.5% of Students were aware of the Eligibility criteria for Physiotherapy Degree Programs. However, 30% of participants were aware of the years of training in the Physiotherapy Degree Program. A similar study conducted by Singh and Kapoor [3] reported that 43.5% of Students were aware of the years of training in the Physiotherapy Degree Program. Participants' perceptions of components typically found in a Physiotherapy department showed that 3.3% of respondents identified Electrical Modalities, while 5.3% recognized Therapeutic Tools. Additionally, 13.3% mentioned Tapes, Bandages, and Splints, 6.7% mentioned Manual Therapy, Exercise Balls, and Resistance Bands, and 71.3% recognized all of the mentioned components. A similar study conducted by Singh and Kapoor [3] reported that 65% of students were aware of all the mentioned components of the Physiotherapy Department.

Awareness of specializations within Physiotherapy was limited, with only small percentages recognizing neurology, cardiopulmonary, obstetrics, and other specialized fields. However, 40% were aware of multiple specializations, and 24.7% knew about all mentioned specializations. A similar study conducted by Singh and Kapoor [3] reported 37% of Students were not aware of any Specializations, on the other hand only 2%

of Students were aware of all the mentioned Specializations.

Regarding Physiotherapy services, 80% of respondents knew their availability in various healthcare settings. 16.7% of participants had a myth that Physiotherapy is only for Athletes and Sports injuries, while 28% indicated that it's similar to Massage therapy.

Participants' knowledge about the Pathological Conditions treated in Physiotherapy showed that 55.3% were aware of these conditions, while 44.7% were not aware of these conditions. Regarding the understanding of whether Physiotherapy follows a Definite Assessment Protocol, 83.3% believed it does, while 16.7% did not. The study results were similar to the study conducted by Singh and Kapoor [3] which showed that 85.5% of the subjects believed that Physiotherapy follows a Definite Assessment Protocol. Participants' opinions regarding the effectiveness of Physiotherapy in reducing Pain revealed that 79.3% of respondents agreed that Physiotherapy is effective in reducing pain, while 8% disagreed, on the contrary study conducted by Singh and Kapoor [3] revealed that 81% of the subject's believed physiotherapy is effective in reducing pain. Participants' Views on Physiotherapy as a profession indicated that 25.3% of respondents viewed it as Excellent' while 29.3% considered it Very good. Additionally, 42% of respondents viewed it as Good, while only 3.3% expressed the opinion that it is Not good. A similar study conducted by Singh and Kapoor [3] reported that a majority of 48% graded the Profession as Very good.

Views on the necessity of a referral for Physiotherapy treatment varied, with 60.7% agreed followed by 14.7% disagreed and additionally, 24.7% of participants were uncertain. Most participants agreed that seeking a Physiotherapist's assistance is necessary for various scenarios, including injury (4.7%), pain (17.3%), and sports-related issues (8%), and 60% agreed for all of the mentioned. Mehndiratta et al., 2021

reported that 63.4% of subjects agreed that Physiotherapy assistance is necessary when injured. The main sources of awareness about Physiotherapy were friends or family members (56.7%), followed by Teachers (16%) and the Internet (9.3%), among others. The Percentage of Participants who had considered Pursuing a Career in Physiotherapy, the majority of respondents, accounting for 72.7%, indicated an absolute no. Conversely, 27.3% of respondents expressed their consideration towards pursuing a Career in this field.

## CONCLUSION

In summary, this study has highlighted the limited awareness and knowledge of Physiotherapy as a career option among high school students in Fatehgarh Sahib District. There were discrepancies in understanding regarding physiotherapy specialized fields, and treatment protocols. Despite a considerable number of Participants considered Physiotherapy as a career, the majority expressed no intention of pursuing it. While some students expressed interest and positivity towards the profession, many were uncertain about key aspects such as eligibility criteria and specialization opportunities. At the same time, this survey has effectively raised awareness of Physiotherapy among the Participants.

## STUDY LIMITATIONS

- The Study had a relatively small sample size
- Convenience sampling was used for the study.

## RECOMMENDATIONS

Further studies with large sample size are recommended to evaluate the Knowledge and Awareness of Physiotherapy as a Career option among High School Students in the Punjab region.

## Declaration by Authors

**Ethical Approval:** Approved

**Acknowledgement:** None

**Source of Funding:** None

**Conflict of Interest:** The authors declare no conflict of interest.

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