



 **Castrol**



EKLAVYA

CSR Impact Assessment Report

 **SoulAce**
Path to Sustainability

SOULACE CONSULTING PVT. LTD.

CONTENTS

Chapter 1 Executive Summary	01-03
Project Background	01
Research Methodology	01
Key Findings	02
Key Impact	03
<hr/>	
Chapter 2 OECD Framework	04-05
<hr/>	
Chapter 3 Introduction	06
<hr/>	
Chapter 4 Research Methodology	07-08
Objectives of the Research	07
Research Design	08
Use of Mixed Approach	08
Sampling Methodology	08
Key Stakeholders	08
Tools of Data Collection	08
<hr/>	
Chapter 5 Key Findings	09-38
Section 1: Socio-demographic details of the respondents	09-10
Section 2: Training in 5S concept-change in knowledge and behaviour	11-14
Section 3: Behavioural changes in hygiene practices post Eklavya	15-16
Section 4: Safety Precautions to be taken in the workplace	17-19
Section 5: Impact of Eklavya in enhancing technical skills	20-25
Section 6: Impact of Eklavya on customer relations	26-27
Section 7: Impact of Eklavya on the earnings of the mechanics	28-29
Section 8: Impact of financial literacy	29-32
Section 9: Digital Payment Methods	33-34
Section 10: Attitude towards family norms and values	35
Section 11: Precautions related to checking tires before driving	36-38
<hr/>	
Chapter 6 Recommendation	39-40
<hr/>	
Chapter 7 Conclusion	41
<hr/>	

01. EXECUTIVE SUMMARY

Project Background



The Castrol Eklavya flagship social development program was launched in Tamil Nadu in 2009. It has evolved as one of the most extensive skill-building endeavours in the automotive sector. The program is designed to bring about holistic skill development in mechanics, encompassing both fundamental knowledge and diagnostic skills.

The program curriculum consists of behavioural aspects like health and safety, digital financial literacy, savings, and customer relations and technical aspects like body parts of automobiles, mechanical systems such as the ignition system, engine system, lubrication system, air intake system, and the cooling system.



Year

2022



Beneficiaries

12,800



NGO Partners

Empower, Seeds Learnet, Fuel



Project Locations

Delhi, Haryana, Chhattisgarh, Punjab, Uttar Pradesh, Gujarat, Maharashtra, Karnataka, Madhya Pradesh, and Tamil Nadu.



Research Methodology



Research Approach

Mixed Approach



Research design

Descriptive research design



Sampling design

Quota sampling



Sample size

450



Geography covered (states)

Uttar Pradesh, Chhattisgarh, Delhi, Karnataka and Tamil Nadu



SDG Goals



Stakeholders

Project in charge/ Project coordinators from NGOs, Trainers, trainees, Mechanic Association Presidents/office bearers

Key Findings



A majority of the mechanics (90.46%) who participated in the Eklavya program, observed positive behavioural changes towards 5 S technique adoption.



Post the Eklavya program, improved hygiene practices like handwashing, not eating at the work place, use of dustbins, drinking boiled water was observed among the mechanics.



The mechanics followed safety precautions such as cleaning the floor after oil spills, wearing personal protective equipment, and ensuring there was adequate lighting in the workplace.



A majority of the mechanics reported enhancement of their proficiency from beginner & practitioner levels to next higher levels of proficiency.

Key Impact



Enhanced Technical Knowledge & Skills:

The study observed that there was an improvement in the competency of the mechanics post Eklavya in areas like repair of engine valves, lubrication systems, air intake systems, fuel supply system, ignition system, etc.



Timely Service Delivery & Organized Work Space:

88.7% and 90.2% of the mechanics reported on time delivery and maintenance of cleanliness at work place respectively, by following 5 S technique.



Adoption of Workplace Safety Measures:

- 92.7 % of the mechanics reported using sufficient lighting always in the workplace, while 91.1% of the mechanics reported avoiding explosive things in the garage.
- 89.8% of the mechanics used personal protective equipment always, while 90.4% of the mechanics reported that they make it a point to wipe out the floor soon after an oil spill.



Improved Customer Relations & Satisfaction:

- A majority of the mechanics reported positive behavioural changes in customer relations like greeting the customers, polite demeanour and updating the customers.
- 90.6% of the mechanics stated that they always wished the customers while at the workplace, while 93.1 % of the mechanics reported answering customer's doubts politely.
- 91.5% of the mechanics always updated their customers about their work status.
- 75.6% of the mechanics reported minimum customer complaints and 82.9 % of the mechanics reported minimum defects by following 5 S technique.



Increased Income & Savings:

- The vast majority of the mechanics (98.7%) affirmed experiencing a clear rise in their income levels following the implementation of the Eklavya program.
- Most (64.4%) of the mechanics reported an increase of between 10-20% of their income, from before the intervention.
- 30.4% of the mechanics reported an increase of between 20 to 30% of their income than before the intervention.
- A majority of the mechanics (67.6%) saved at least a minimum of 10% of their monthly incomes in a saving scheme post Eklavya.
- A significant proportion of mechanics that is 35.5% of the mechanics who were not saved their monthly income earlier, began the practice of saving some part of their monthly income post the Eklavya program.



Improved Digital Financial Literacy:

- 58.2% of the mechanics who had not undertaken digital transactions prior to the Eklavya program started adopting digital payment methods for receiving receipts from their customers.
- A significant increase of (64.8%) in the number of mechanics, was observed for their adoption of debit cards and credit cards while conducting transactions.



Improved Familial bonding:

- A positive shift towards enhancing family relations and bonding was reported as an outcome of the program like sharing responsibilities towards taking care of children, dining together with the family, going for family vacations/holidays, etc.

02. OECD FRAMEWORK



Relevance

The Eklavya program caters to mechanics hailing from disadvantaged socio-economic backgrounds who possess limited formal education. Many of these individuals have entered the profession through experiential learning, observing and working alongside seasoned mechanics. Offering formal training through the Eklavya program equipped them with enduring technical skills and practices, enhanced their earning potential, and subsequently their chances of a secure livelihood.

Hence the Eklavya program can be stated to be very high in its relevance as it empowered the beneficiaries economically and aided them in breaking the barriers laid down by their circumstances.



The Eklavya program is aligned with the following SDGs of the UN.

- SDG 1: No Poverty
- SDG 3: Good health and well being
- SDG 8: Decent work and economic growth
- SDG 9: Industry, innovation and infrastructure
- SDG 10: Reduced inequality
- SDG 17: Partnerships for the goals



Coherence

The program is also aligned with the National Occupational Standards of the Automotive Skills Development Council.

The Eklavya program can be stated to be very high in the coherence parameter.



Effectiveness

The study found that Eklavya demonstrated effectiveness in achieving its primary goals by effectively engaging with the appropriate target demographics and improving the fundamental knowledge and diagnostic abilities of mechanics. The training program was positively perceived by the participants.

The program can be characterized as highly effective.



Efficiency

The study found that the social benefits of the project significantly outweighed the investments made. Such as enhancement of technical knowledge and skills, increased awareness of safety and hygiene, improved earning potential for mechanics, transition to digital financial transactions and enhanced income and savings among the beneficiaries.

The program can be said to be very high in its efficiency.





Impact

The study found that Eklavya brought significant changes in the mechanics in the following areas.

- Awareness about 5 S principles and the inclination towards adopting these principles at the workplace.
- Enhanced adherence to safety precautions.
- Enhanced technical knowledge and skills leading to improvement in the quality of repairs, resulting in improved customer satisfaction and loyalty.
- Ease of cash handling experienced through the change to digital transaction mode.
- Positive attitudinal shift towards family values and norms.
- The training contributed to an overall improvement in the efficiency of the mechanics.

The program can be stated to be very high in its impact.



Sustainability

The study observed that the Eklavya program delivery model is replicable and sustainable.

Eklavya is well aligned with the CSR goals and values of Castrol and emphasises the importance of skill development in improving the livelihood of mechanics and the standard of living of their families.

As Eklavya involves the constant upskilling of mechanics, it builds the capacities of mechanics to adapt and learn new techniques and technologies of the future. This is a relevant approach in the ever-evolving field of mechanics.

As mechanics have less formal educational backgrounds, upskilling them through a skill development program like Eklavya, widens their competencies and makes them capable of earning more income, because of increased business opportunities.

The model adopted by Castrol to implement the program is easily replicable and can be made more sustainable, with strategic collaboration with mechanic's associations and vocational training centres.

Thus, the program can be stated to be high in its sustainability.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

INTRODUCTION

CHAPTER 3



Focus group discussion with beneficiaries from Siddharth Nagar

In the Indian automobile servicing sector, non-company-owned service centres are predominantly staffed by a substantial proportion of unskilled mechanics. These unskilled mechanics are usually individuals with minimal formal education or vocational training in the field. Their competence in mechanical skills is primarily cultivated through hands-on experience, practical learning and informal observation of experienced mechanics who have established themselves in the industry. Unskilled mechanics in this context, often face challenges such as being unorganised and having poor working conditions like low wages, lack of physical safety and security and an uncertain job security outlook.

Castrol's Eklavya program primarily focuses on improving the foundational knowledge and diagnostic abilities of unskilled mechanics located in various states across India.

Launched in 2009, Eklavya stands as Castrol's flagship initiative and has since become one of the most comprehensive skill-building initiatives in the automotive industry. This program is strategically crafted to facilitate the comprehensive skill development of mechanics, covering essential knowledge as well as diagnostic skills.

The course curriculum is holistic, covering both behavioural aspects and technical aspects. Behavioural content pertains to introducing 5 S techniques, health and safety, digital financial literacy, savings, customer relations, family values and norms. Technical aspects include an introduction to various body parts of automobiles and carrying out repairs in mechanical systems like the ignition system, engine system, lubrication system, air intake system, cooling system, etc.

CHAPTER 4

RESEARCH METHODOLOGY



Focus Group Discussion with Eklavya beneficiaries in Bangalore

Research is the methodical and unbiased examination of a subject. It necessitates a well-structured plan for stages like sampling, data collection, analysis and statistical testing to meet objectives expediently. An effective research methodology ensures the systematic execution of the various stages of research without hassles.

Social impact assessment studies, usually undertaken by a neutral third party enable corporate organisations to evaluate the social effect of their CSR activities on direct beneficiaries in the community and stakeholders in the larger society. This research study was carried out by SoulAce social ventures to assess the impact of the Eklavya program implemented in the year 2022 across India, in the states of Uttar Pradesh, Chhattisgarh, Karnataka, Tamil Nadu, West Bengal, Haryana, Kerala and Maharashtra.

This section describes the various stages of research followed in this study.

Objectives of the Research



To assess the impact of the Eklavya program on mechanics in relation to knowledge, perception and behavioural changes with reference to adoption of 5 S, safety, hygiene, savings, enrolment in government schemes, digital financial transactions and customer relations.



To understand the extent of enhancement of knowledge and skills in technical areas pertaining to the repair of two wheelers and four wheelers.



To study the perception of the participants of Eklavya about the training program.



To assess the overall impact of Eklavya in enhancing the income levels of the participants of the training program.

Research Design

This study adopted a descriptive research design, as the purpose was to portray the characteristics of the subject matter taken up for research rather than finding causal connections between the variables involved in the study.

Use of Mixed Approach

The study employed a mix of both quantitative and qualitative approaches for better validation and triangulation of the results. A quantitative approach was used to describe the research findings in precise numerical terms, and a qualitative approach was used to bring out deep, underlying phenomena, which cannot be uncovered by quantitative methods. The use of a mixed approach enabled the finding of answers to multifaceted research questions.

Sampling Methodology

Quota sampling was adopted where fair representation was provided to involve beneficiaries who attended the Eklavya program conducted by all 3 NGO partners of Castrol in various states of India.

A sample size of 450 direct beneficiaries was used in accordance with the standard practice to maintain a 95% confidence level with 5% significance, in the research. The respondents were truck drivers who attended the Eklavya program during the year 2022 at various centres run by the implementing partners.

Key Stakeholders



Project coordinators and centre-in-charge of the implementing partners



Trainers of Eklavya



Local mechanic Association Presidents/
Office bearers

Tools of Data Collection

For the quantitative approach, a structured interview schedule with multiple-choice answers was prepared. To study the variables related to perception and behaviours, separate scales with indexes comprising indicators to study the specific variable were used.

For the qualitative approach, a guide for semi-structured interviews was used. A facilitation guide for focus group discussions with various stakeholders was prepared.



CHAPTER 5

KEY FINDINGS

This chapter presents key findings of the research, like the socio-demographic profile of beneficiaries and the impact of Eklavya, in the enhancement of basic knowledge and diagnostic skills, income and savings and perception of the mechanics of the Eklavya program.



Section 1: Socio demographic details of the respondents

CHART 1: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY AGE-GROUP

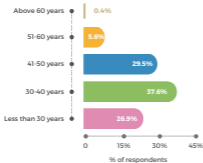


CHART 2: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY THEIR EDUCATIONAL LEVEL

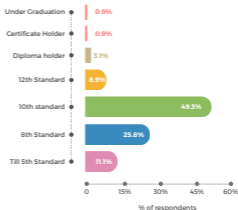


CHART 3: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY THEIR MARITAL STATUS

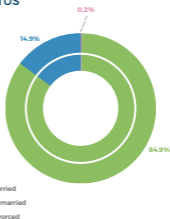
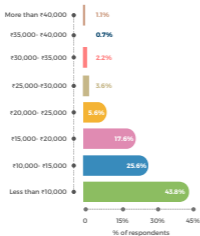


CHART 4: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY THEIR MONTHLY INCOME



Key findings on socio demographic variables in the study



Age of the respondents

Barring 2 respondents or 0.4 % of the sample, the rest from the 450 mechanics who attended the Castrol's Eklavya program, are in the age group of 20 to 60 years.

Those falling under the age group of 30-40 years formed the largest chunk of these respondents at 37.6%, with a relatively lesser proportion of respondents falling under other age groups. The age group of mechanics suggests that they are well within the productive age of life.



Educational status of the respondents

The study shows that a majority of the respondents 49.3% studied till 10th, with a significant proportion of respondents educated only till 5th standard and 8th standard. Only 4 respondents or 0.9% of the 450 respondents did an under graduation.



Marital status of the respondents

The study reveals that a majority of the respondents (84.9%) are married, while the rest are not married. Married respondents can be expected to have relatively more social and emotional support and can have more responsibilities and commitments towards their spouses and children than the unmarried individuals. Married individuals require more financial stability and sufficiency for tending to a family.



Income of the respondents

The largest proportion of the respondents that is 43.8 % earn less than ₹10,000/- per month, whereas only a smaller chunk of respondents (7.6%) earn more than ₹ 25,000/- a month. The lower income levels indicate the lesser income potential of this profession and one can expect lower socioeconomic standards of these respondents.



Beneficiaries in Karur, Tamil Nadu, proudly showing their Eklavya completion certificate

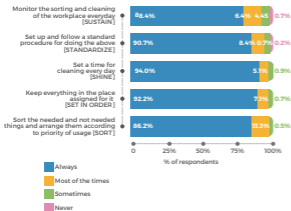
Section 2: Training in 5 S concept- change in knowledge and behaviour

The 5 S is a Japanese management technique used for lean manufacturing to enhance safety, productivity and overall efficiency. The 5 S framework consists of 5 principles, each beginning with the letter "S" and these are Seiri (sort), Seiton (set in order), Seiso (shine), Seiketsu (standardise) and Shitsuke (sustain). Implementing the 5 S concept in the workplace can lead to a more organised workplace with reduced wastage, improved quality and enhanced customer satisfaction. Eklavya imparted training in 5 S to the mechanics and the study measured the extent of improvement in knowledge and application of 5 S techniques

Impact of 5 S training

Behavioral changes towards adopting 5 S to workplace

CHART 5: IMPLEMENTATION OF THE 5 S AFTER LEARNING THE CONCEPT



Sorting the mechanic shop

Most of the mechanics shared that they started the practice of removing unnecessary things from the workplace to make it clutter free and keep it in a more organised manner.

Some of the mechanics observed that they practise sorting by keeping different types of tools at separate places like pliers, wrenches, screwdrivers, spark plugs etc.



Setting the mechanic shop in order

A majority of the mechanics reported setting the mechanic shop in order helps them organise the workshop in an ergonomically better manner with easy access to necessary tools and equipment.



Setting a time for cleaning every day

Mechanics interacted with during the study stated that they are now cautious about keeping the workplace clean from oil spills and unwanted fragments from repair work.

Most of them shared that they started allocating a routine cleaning schedule too, which makes them feel good about the work place.

Key findings



Positive Behavioural changes towards 5 S adoption

Post the orientation on 5 S, positive behavioural changes with respect to organising the workplace was observed among the mechanics.



Standardize the workplace

Mechanics observed that they standardized their work processes in terms of standard procedures for maintenance and repairs post the Eklavya program.



Sustaining the behavioural change

Mechanics reported ease of work procedures and flow of work processes following 5 S, which motivated them to sustain the behavioural change towards adoption of the same.



Ram Ashish Prajapati's story serves as a compelling testament to the positive impact of Castrol's Eklavya program and the resilience demonstrated by individuals when facing economic challenges. At the age of 28, Ram Ashish Prajapati, hailing from Gorakhpur, shouldered the immense responsibility of supporting his 16-member family. The onset of the COVID-19 pandemic brought about an economic slowdown that forced Ram to temporarily close his shop, presenting formidable obstacles for him, his family and the mechanics with whom he engaged. Fortunately, he crossed paths with the program staff of Eklavya and seized the opportunity to participate in Castrol's Eklavya program. Eklavya's comprehensive training, spanning 15 days encompassed various aspects such as BS 6 bike technology, lifestyle adaptations, toll-free assistance and more. Furthermore, the program equipped Ram with knowledge of the 5S technique, which he promptly implemented within his shop. By embracing the 5S technique, Ram not only enhanced the organization and efficiency of his shop but also bolstered the morale of his team, while yielding positive feedback from satisfied customers. Consequently, the training facilitated smoother and more efficient bike repairs. These transformative changes in his business translated into an increased income for Ram Ashish Prajapati. He is now able to save approximately ₹ 20,000 to ₹ 25,000 per month.

Before his involvement in the Eklavya program, he paid his employees between ₹ 100 and ₹ 200 per day. However, as his business prospects improved, he raised their daily wages to up to ₹ 300. Ram says 'Thanks to the Eklavya program, I not only experienced personal growth but also improved the livelihoods of my employees by offering them better wages.'



Impact of 5 S at work place

Benefits experienced due to the application of 5 S at workplace	Before learning the 5 S concept	After learning the 5 S concept
Minimum customer complaints	24.4	75.6
Minimum defects	17.1	82.9
Minimum cost of materials	14.9	85.1
Ontime delivery	11.3	88.7
Maintenance of cleanliness of workplace	9.8	90.2
Ownership/responsibility towards the workplace	11.3	88.7

Key impact



Minimum customer complaints

51.2% more mechanics reported minimum customer complaints, which was attributed to faster repairs due to proper organisation of the work setting. This has in turn lead to reduced down time enabling faster repairs and services.



Minimum defects

65.8% more mechanics observed that there were minimum defects after they started following 5 S techniques. Reduced errors due to standardised work practices was cited to be the reason for minimum defects experienced now.



Minimum cost of materials

70.2% more mechanics experienced minimum cost of materials attributed to stocking only essential spare parts and removing obsolete tools.



On time delivery

88.7% of the mechanics reported on time delivery resulting out of factors like a well organised work place, increased efficiency, proper storing of inventory. All of which resulted in easier handling of materials needed for carrying out repairs without delays.



Maintenance of cleanliness of the work place

90.2% of the mechanics expressed that their work place looks clean now due to sorting, setting of things in order and regular washing of floors.



Enhanced sense of ownership of the work place

77.4% more mechanics stated that they feel an enhanced sense of ownership attributed to their active involvement in the work place processes through 5 S principles.



“

Pawan Yadav, proprietor of Agra car centre, Agra says "I have approximately 33 years of experience working in the car servicing industry. Throughout my career, I have consistently emphasized to my assistants the importance of maintaining a clean workshop, regardless of its size. When and my assistants, participated in the Eklavya program, it felt like a reinforcement of the principles I've always stressed. Many of the concepts introduced in the 5 S methodology were new to me, even though I had been practicing some of them out of habit. Following the 5 S methodology has proven to be beneficial in reducing customer complaints and ensuring timely delivery of serviced cars. The clean and organized appearance of our workshop also leaves a positive impression on our customers. Overall, the implementation of 5 S has significantly improved the cleanliness of my workshop.

Additionally, Eklavya provided me with valuable insights into repair techniques that I wasn't previously familiar with. I want to express my gratitude to Castrol for offering the Eklavya program."

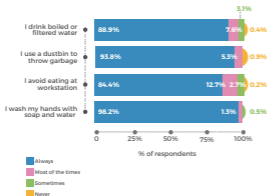
”



Section 3: Behavioural changes in hygiene practices post Eklavya

Hygienic practices are essential for the maintenance of good health and safety of mechanics. Staying healthy is crucial for enhanced productivity and reduces financial burden from medical expenses and loss of wages due to absence from the workplace due to ill health. Hygiene is a vital component of the Eklavya program for mechanics. The following section discusses hygienic practices followed by mechanics post Eklavya program.

CHART 6: PRECAUTIONS TAKEN RELATED TO HYGIENE AFTER TRAINING



Avoiding eating at workstation

Mechanics observed that eating at the workstation can lead to spilling of food on the shop floor resulting in unsanitary working conditions.

It was shared that the environment of a mechanic shop is not very conducive for consuming food.



Maintenance of garbage bins

Post training, mechanics reported using separate garbage bins to throw waste materials, to keep the work station free of clutter.



Consumption of boiled water

There is an increased realisation among the mechanics interacted with during the study that consumption of boiled water is good for health and to stay away from seasonal illnesses.

Key impact



Improved handwashing practices

Mechanics interacted with during the study reported that they come into contact with a lot of contaminants like grease, oil, dirt, chemicals etc. at the workstation. They shared that the practice of handwashing largely reduces the risk of skin irritation and also removes contaminants which can get accidentally ingested.

The study found that a majority of the mechanics started practising washing hands with soap.





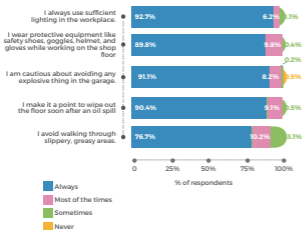
Balaji, a 49-year-old resident of Vengamedu in the Karur district of Tamil Nadu, faced economic hardships that compelled him to discontinue his formal education after completing the 8th standard. In pursuit of better opportunities, he embarked on a journey that ultimately transformed him not only into a successful entrepreneur in the field of motorcycle mechanics but also the president of the local mechanics association in Kulithalai. From a young age, Balaji evinced a keen interest in understanding the intricacies of how motorcycles functioned. He eagerly observed the owner of a local mechanic shop, where he was employed. His initial role in the shop primarily involved assisting senior mechanics by fetching tools, spare parts and equipment. However, Balaji's enthusiasm for learning the trade slowly graduated him from doing minor repair work to carrying out major repair work independently. Over 15 years, he honed his skills and became a proficient motorcycle mechanic. Gaining enough confidence in repair works, he decided to venture into entrepreneurship and in the year 1990, he took the bold step of establishing his own mechanic shop, which he named "Yashika Motors" in Karur. Balaji had never received formal training in motorcycle repairs until he joined the Eklavya program. The Eklavya program equipped him with new knowledge and skills that complemented his years of practical experience. Balaji found that the Eklavya program resonated with his own practices of hygiene like keeping the workplace clean, wiping up oil spills immediately, avoiding eating at the workplace, etc. Balaji says 'I am encouraging mechanics from my association to attend the Eklavya program, as it has the potential of equipping them with good knowledge on safety, and hygiene apart from technical knowledge.'



Section 4: Safety Precautions to be taken in the workplace

Mechanic shops are usually stacked with machinery, power tools and various automotive fluids and negligence can lead to falls, slips, fractures and tool-related injuries. Hence safety precautions were made a part of the Eklavya curriculum. This section deals with the safety precautions followed by the mechanics in the workplace, post Eklavya training program.

CHART 7: PRECAUTIONS TAKEN RELATED TO SAFETY WITHIN THE WORKPLACE



Key impact

As revealed in the data presented above, a majority of the mechanics reported increased adherence to safety precautions by stating that they either always follow them or follow them most of the time. There is an increased realisation that following safety precautions is beneficial to them in multifarious ways.



Avoid walking through slippery areas

A majority of the mechanics reported being cautious while walking through slippery and greasy areas which can lead to slips, trips or falls.



Wiping the floor after oil spill

Most of the mechanics observed that they now consciously wipe the shop floor soon after instances of oil spill.



Keeping explosive things away

Mechanics interacted with during the study revealed that they avoid keeping explosive objects in the work shop as they are aware of its dangers.



Wearing personal protective equipment

A majority of the mechanics interacted with during the study reported that using personal protective equipment helps in effective prevention of cuts when handling sharp objects and preventing burns while handling extremely hot objects.



Ensuring sufficient lighting

A majority of the mechanics shared that sufficient lighting is necessary at the work place to clearly see obstacles, oil spills, sharp objects lying on the floor and other possible hazards at the workplace.



“

Seenu Kumar, the proprietor of Ganesh Motors in Bangalore, expressed his profound appreciation for the Eklavya program, emphasizing its multifaceted dimensions. He shared that the program not only equipped mechanics like him with essential technical knowledge but also imparted valuable life skills and insights. These encompassed concepts such as the 5 S methodology, cultivating a savings habit and recognizing the importance of family welfare. Moreover, the program instilled a keen awareness of safety practices, including immediate response to oil spills through floor cleaning, the diligent use of personal protective equipment and ensuring proper workshop lighting. Seenu Kumar underscored the crucial role of safety in sustaining their livelihoods and extended his heartfelt gratitude to Castrol for this enlightening and enriching initiative.

”



“

Mohammed Akram Khan, a 4-wheeler mechanic himself and owner of Shan Motors, Transport Nagar area of Agra says 'In any workshop safety is paramount, and it was reinforced by the importance of safety precautions through the Eklavya program. After attending the program, I emphasised to my assistants in the workshop to wear appropriate personal protective equipment like safety goggles, and gloves whenever it is required to ward away any risk of injuries. I ask them also to be cautious while handling hazardous chemicals some of which can be inflammable. Likewise, safety is essential in handling electrical components and wiring. The Eklavya program not only imparted to us technical skills but also instilled the need to adhere to safety precautions in the workshop.'

”



Section 5: Impact of Eklavya in enhancing technical skills of the mechanics

Enhancing basic knowledge about the body parts of two-wheelers and four-wheelers and improving diagnostic skills for carrying out repairs efficiently are the core objectives of Eklavya. Technical knowledge of aspects like ignition system, fuel system, air intake system, gearboxes, clutches, wiring systems, wheel suspension, etc. was imparted to the trainees. This section deals with the improvement in self-rated proficiency of mechanics who participated in the study.



Trainer demonstrating with a 4-wheeler automotive component to the trainees

CHART 8: PROFICIENCY IN CARRYING OUT REPAIRS OF ENGINE VALVES

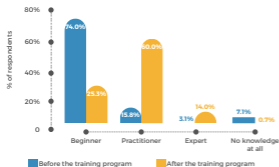


CHART 9: PROFICIENCY IN CARRYING OUT REPAIRS IN LUBRICATION SYSTEMS



CHART 10: PROFICIENCY IN CARRYING OUT REPAIRS IN AIR INTAKE SYSTEM



CHART 11: PROFICIENCY IN CARRYING OUT REPAIRS IN FUEL SUPPLY SYSTEM



CHART 12: PROFICIENCY IN CARRYING OUT REPAIRS IN IGNITION SYSTEM FAILURE



CHART 15: PROFICIENCY IN CARRYING OUT REPAIRS IN AUTOMATIC GEAR BOX



CHART 13: PROFICIENCY IN CARRYING OUT REPAIRS IN CLUTCHES

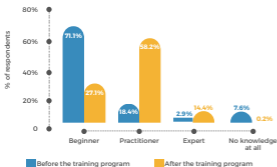


CHART 16: PROFICIENCY IN CARRYING OUT REPAIRS IN CHAIN DRIVE



CHART 14: PROFICIENCY IN CARRYING OUT REPAIRS IN MANUAL GEAR BOX

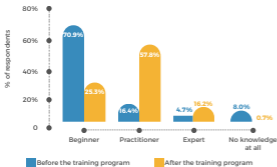


CHART 17: PROFICIENCY IN CARRYING OUT REPAIRS IN WHEEL SUSPENSION



CHART 18: PROFICIENCY IN CARRYING OUT REPAIRS IN WIRING SYSTEMS



Competency enhancement in repairs with air intake systems

A significant improvement in 42.8 % of the mechanics transitioning from beginner level of competency to practitioner level of competency was observed post Eklavya.

43.6% of the mechanics moved to practitioner competency level from lower competency levels.

10.6% of the mechanics upgraded their skill levels as experts after the program.



Competency enhancement in the repair of engine valves

48.7% of the mechanics have moved from beginner level of proficiency before Eklavya to higher levels like practitioner or expert proficiency levels after the program.

44.2% of the mechanics became practitioners from lesser competency levels post Eklavya.

A considerable increase of 10.9% of the mechanics improving their proficiency to expert level from lower competency levels was also observed as an outcome of Eklavya.



Competency enhancement in repairs with fuel supply system

There was a significant increase of 45.4% mechanics moving to higher skill levels from beginner level.

39.1% of the mechanics upgraded to practitioner level from lesser skill levels.

An increase of 10% of the mechanics moving to expert skill level from lesser skill levels was observed.



Competency enhancement in repairs with lubrication systems

42.2% of the mechanics have improved their proficiency levels and moved to higher levels of proficiencies post Eklavya.

37.5% increase in proficiency levels to practitioner level was observed post Eklavya.

11.1% of the mechanics improved their competency level to expert level from lower competency levels.



Competency enhancement in repairs with ignition system

A significant improvement among 45.1% of the mechanics moving to higher skill levels from beginner level was observed.

43.1% more mechanics have become practitioners post Eklavya program.

An increase to 9.1% of the mechanics becoming experts after Eklavya was observed.



Competency enhancement in repair of the clutch

An appreciable increase with 44.9% of the mechanics transitioning from beginner level proficiency to higher levels was observed.

39.8% of the mechanics upgraded to practitioner level post Eklavya.

10.2% of the mechanics honed their skill levels to become experts.



Competency enhancement in repairs of the manual gear box

A significant transition of 45.6% of the mechanics from beginner level of proficiency to higher levels was observed.

41.4% of the mechanics upgraded to practitioner level post Eklavya.

11.5% of the mechanics developed their skill levels to become experts.



Competency enhancement in repairs of the automatic gear box

A noteworthy improvement among 43.1% of the mechanics moving to higher skill levels from beginner level was observed.

42% more mechanics have become practitioners post Eklavya program.

An increase with 11.6% of the mechanics becoming experts after Eklavya was observed.



Competency enhancement in repairs of the chain driver

A considerable improvement with 48% of the mechanics transitioning from beginner level of competency to practitioner level of competency was observed post Eklavya.

42.7% of the mechanics moved to practitioner competency level from lower competency levels.

12.2% of the mechanics upgraded their skill levels as experts after the program.



Competency enhancement in repairs to wheel suspension

A significant improvement in 44.9% of the mechanics moving from beginner level of proficiency to higher levels was observed.

43.6% of the mechanics upgraded to practitioner level post Eklavya.

10% of the mechanics developed their skill levels to become experts.



Competency enhancement in repairs to wiring systems

An observable improvement in 44.8% of the mechanics from beginner level of proficiency to higher levels was observed.

38.2% of the mechanics upgraded to practitioner level post Eklavya.

12.7% of the mechanics developed their skill levels to become experts.

“

Indrajit Nishad, a 28-year-old resident of Gorakhpur, has achieved remarkable success in the 2-wheeler repair industry, all thanks to Castrol's Eklavya program. For the past ten years, he has been running his motorcycle repair business in the Gorakhpur market, relying solely on his hands-on experience to service motorcycles. However, everything changed when he enrolled in the Eklavya program. This initiative provided him with comprehensive knowledge about the intricate details of various mechanical repairs and how to effectively address them. The program equipped him with a deeper understanding of issues such as clogged fuel filters, fuel pump problems, carburetor issues, spark plug replacements, ignition coil failures and more. While he had previously dealt with these issues, the Eklavya program significantly improved his ease and efficiency in dealing with them. As a result, his customers began to appreciate the higher quality of repair work he was now able to provide. His income prior to the Eklavya program was around ₹ 30,000/-per month and post the program it has increased to ₹ 50,000/- per month. He says ' the Eklavya program enhanced not only my technical skills, but also my assistants who attended it. Now I am able to pay them around ₹ 8000/- per month. I can feel more customer satisfaction and loyalty now than before. I am grateful to Castrol for making this possible.

”



“

Shah Rukh Qureshi, who owns BS service centre and Auto Works, Transport Nagar, Agra says 'I could not continue my education after 10th standard as I was in a situation to support my family. The Eklavya program helped me enhance my proficiency in the finer aspects of automotive mechanics, in which I was not skilled earlier. Automatic gearboxes are becoming increasingly prevalent these days and I was able to gain a good understanding of the inner workings of automatic transmissions, like that of torque converters, hydraulic systems and electric control units.

Wheel suspension systems are crucial for a car's stability, ride comfort and handling. Through the Eklavya program I got a good understanding of the wheel suspension systems, which is making my repair work faster than before. We were also taught about making alignment adjustments with precision. I have gained much confidence thanks to the Eklavya program and I would recommend other car mechanics to attend this beneficial program.'

”



Interaction with Local Mechanic Association President and members

Section 6: Impact of Eklavya on customer relations

Maintaining good customer relations is crucial to garner a high degree of customer loyalty, getting repeat businesses through word-of-mouth referrals and instilling a sense of trust and credibility among customers. Good customer relations boost businesses and enhance the sustainability quotient of a business. Eklavya's program for mechanics had customer relations as a part of its curriculum. This section deals with the behavioural practices of mechanics in dealing with customers.

CHART 20: WAYS ADOPTED BY RESPONDENTS TO DEAL WITH CUSTOMERS AT WORKPLACE



Politely clarifying customer queries

Most of the mechanics reported that answering the customer's doubts politely is important for maintaining good customer relations and shared that they do interact with the customers in a courteous manner.



Keeping the customer updated

Keeping the customers updated on the status of repair work puts them at ease and is much needed for gaining customer confidence.

Mechanics can better manage customer's expectations giving a realistic idea about when their bikes/cars will be ready for use, understanding the issues and the estimated costs.

A majority of the mechanics reported that they started the practice of keeping their customers updated post Eklavya program.

Key impact



Greeting the customer

A majority of the mechanics started wishing the customer while meeting at the work place. They reported that extending a warm greeting to customers instills a sense of being valued and appreciated. Creating that crucial initial positive impression that shapes their entire service experience.

When mechanics display a friendly demeanour, it helps ease any apprehensions customers may have when entering the workshop with concerns about timely and satisfactory repairs.



“

Raj Patwa, a 34-year-old from Padri Bazaar in the Gorakhpur district, has dedicated over 12 years to his role as a bike mechanic. Despite having only completed his education up to the 5th, he established himself in the local market. Raj supports his family of 10 members on a monthly income of approximately ₹15,000. Operating his bike mechanic shop in Padri Bazaar, Raj not only provides repair services but also stocks various spare parts. Challenges in his profession, such as the highly competitive market and changing customer preferences. As well as the maintenance and cleanliness of tools and workspaces have been constant hurdles for Raj. Additionally, adapting to the evolving lifestyles and preferences of bike owners, including technological advancements like BS-6 bike technology, was crucial. To overcome these challenges and remain competitive, Raj invested in the skill development of his team of himself along with his 5 employees. He found training in various technicalities of repairs along with strategies to win over customers to be very useful to him. Through Eklavya, Raj learned the importance of maintaining strong customer relationships for business development. He says 'Through the Eklavya program I understood how even small gestures like greeting the customer with a genuine smile can set a positive tone for further interaction. Updating customers regarding repair work, and asking for their feedback to gauge their satisfaction with the repairs performed, are some of the strategies I learned from Eklavya. My business has seen a remarkable growth by 30 to 40% post Eklavya.'

”



Section 7: Impact of Eklavya on the earnings of the mechanics

One of the main objectives of the Eklavya program is to enhance the livelihood of mechanics by facilitating acquisition of fundamental knowledge and basic diagnostic skills in carrying out various repairs in 2-wheelers and 4-wheelers. This section deals with the impact of the program on enhancing the income levels of the mechanics.

Increase in income levels post Eklavya

CHART 21: CHANGE IN YOUR INCOME LEVELS AFTER ATTENDING THE TRAINING PROGRAM

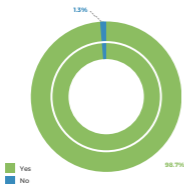
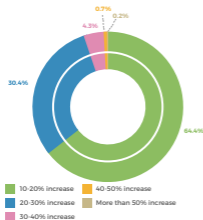


CHART 22: PERCENTAGE OF INCREASE IN INCOME LEVELS



Key impact



Enhancement of income

A vast majority of the mechanics (98.7%) affirmed experiencing a clear

rise in their income levels following the implementation of the Eklavya program. They credited this increase to the program's enhancement of repair quality and timeliness, which played a crucial role in attracting more business compared to their previous earnings.



Extent of increase in income

Most (64.4%) of the mechanics reported an increase of between 10-20% of their income than before the intervention.

30.4% of the mechanics reported an increase of between 20 to 30% of their income than before the intervention.



Upendra Chaurasiya, a 35-year-old mechanic from Rustampur village, faced declining earnings due to increased competition and the COVID-19 lockdown. He struggled to support his family of 8 and had to turn away customers with BS-6 bikes as he was not adept in it. A lifeline came through the Eklavya program, which offered a 15-day training covering various aspects, including BS-6 technology, customer service, tire maintenance and business management. The impact of this training on Upendra's life has been nothing short of remarkable. Armed with new knowledge and skills acquired, he now manages to save a substantial sum of ₹ 12,000 to ₹ 15,000 each month, comfortably covering all his expenses. The Eklavya program by Castrol and the unwavering support from the program staff proved to be invaluable assets, propelling Upendra Chaurasiya into a brighter and more secure future. Upendra says 'Attending the Eklavya program turned out to be a game changer for me.

Now I am confident in attending to bikes with BS 6 technology and my income has increased by 20 to 30 %. I am thankful to Castrol for this excellent training program'.





Beneficiaries of Eklavya from Karur, Tamil Nadu participating in the research study

Section 8: Impact of financial literacy

Mechanics enrolled in the Eklavya program come with lesser formal educational attainments and fall under the lower socio-economic rung of society. Financial literacy is very much needed for making decisions on planning, budgeting and making informed choices of possible investment options. Financial literacy is need both for managing personal finances and businesses effectively. Financial literacy was one of the key components of the Eklavya program and this section deals with knowledge, attitude and behaviour of mechanics on various aspects of financial literacy.

CHART 23: TYPES OF SAVINGS

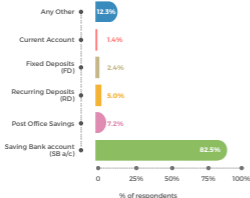
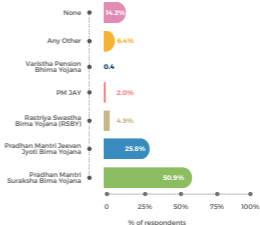


CHART 24: GOVERNMENT INSURANCE SCHEMES IN WHICH RESPONDENTS ARE ENROLLED



Among the government welfare schemes, 50.9 % of the mechanics enrolled themselves in the PMSBY, which entails an accidental death cum disability cover cum disability cover of ₹2 lakhs for death or disability due to accident against a premium of ₹ 20/- per annum.

The next most popular scheme enrolled by the respondents was the PMJJBY, which has a risk coverage of ₹ 2 lakh in case of death of the insured, due to any reason. The premium is ₹436 per annum.

CHART 25: PERCENTAGE OF SAVINGS FROM THE MONTHLY INCOME

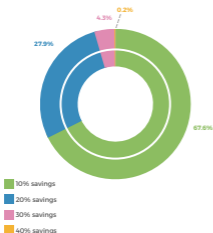
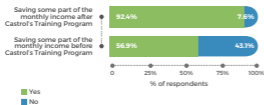


CHART 26: BEHAVIOURAL CHANGE WITH REFERENCE TO SAVINGS BEFORE AND AFTER THE CASTROL'S TRAINING PROGRAM



The study shows that there was an increase where 35.5% of the mechanics who were not saving their monthly income earlier, began the practice of saving some part of their monthly income post Eklavya program.



“

Sahid Ali, a 27-year-old from Shahpur village, Gorakhpur district, demonstrates how targeted skill development programs like Eklavya can uplift underserved individuals. Despite an 8th-grade education, Sahid's journey from a mechanic to a successful small business owner is a testament to the impact of the Eklavya program by Castrol. Coming from a family of six, Sahid's limited educational background posed challenges in finding sustainable employment. However, his passion for bikes led him to become a motorcycle mechanic, which became the main source of income for his family. He later established his own repair shop. Upon learning about the Eklavya program from mechanic friends, Sahid seized the opportunity to enhance his skills through a 15-day online and offline training program tailored for motorcycle mechanics. The program covered various topics, including lifestyle changes, customer awareness and the latest BS-6 technology trends. It also provided a toll-free helpline for guidance in business operations. Guided by Eklavya, Sahid learned financial planning and saving techniques. He started saving 10% of his monthly earnings, securing his family's financial future and promoting economic stability. Sahid now consistently saves ₹ 3,000 to ₹ 5,000 monthly, a significant achievement considering his background.

He remarked, "Eklavya not only imparted technical knowledge but also instilled the habit of saving in me. I am happy to set aside a portion of my income for my family's future. I thank Castrol for Eklavya and the impact it had on my life."

”





Shahrukh Khan, the proprietor of Erfan workshop specializing in the repair of four-wheelers in Agra, enthusiastically shares his journey through the Eklavya program, which has proven to be a transformative experience. This comprehensive training has allowed him to delve into the finer nuances of automotive repairs, particularly focusing on the ignition systems and engine valve systems. Despite having substantial hands-on experience, Shahrukh Khan acknowledges that the Eklavya program significantly expanded his knowledge base. He particularly highlights how it enriched his understanding of crucial components like spark plugs, ignition coils and distributors. What's remarkable is that this newfound knowledge emphasized the significance of using the right spark plugs to enhance both engine performance and fuel efficiency, shedding light on details he may not have previously considered. Furthermore, the program provided valuable insights into the various types of engine valves and their respective functions, deepening his grasp of these critical components.

Beyond the technical aspects, the Eklavya program also offered Shahrukh Khan a holistic perspective on his business. The program underscored the importance of fostering strong customer relations and emphasized the importance of savings and oriented him about different methods of savings. As a result, Shahrukh Khan has not only become more efficient and proficient in car repairs but has also seen a remarkable improvement in his monthly earnings. Previously earning between ₹ 10,000 to ₹ 12,000 per month, he now enjoys a more substantial income ranging from ₹ 18,000 to ₹ 20,000 per month. Additionally, he has successfully started saving approximately ₹ 2,000 each month.

In gratitude, Shahrukh Khan extends his heartfelt thanks to Castrol's Eklavya program for instilling confidence in him and enabling him to excel in his profession.



Key impact



Saving by one or other methods

Savings bank accounts was the majority used method of savings as observed with 82.5% of the mechanics.

Post office savings, recurring deposits, fixed deposits and current account were observed to be other saving options followed by the mechanics.



Enrolment in government schemes

Among the Government welfare schemes, 50.9 % of the mechanics enrolled themselves in the PMSBY, which entails an accidental death cum disability cover of ₹ 2 lakhs for death or disability due to accident against a premium of ₹ 20/- per annum.

The next most popular scheme enrolled by the respondents was the PMJJBY, which has a risk coverage of ₹ 2 Lakh in case of death of the insured, due to any reason. The premium is ₹ 436 per annum.



Enhanced habit of saving

The study shows that there was an increase where 35.5% of the mechanics who were not saving their monthly income earlier, began the practice of saving some part of their monthly income post the Eklavya program.



Enhanced savings post Eklavya

A majority of the mechanics (67.6%) interacted with during the study observed that they save at least 10% of their monthly income.

A significant proportion (27.9%) of them were able to save at least 20% of monthly income post the program.



Jayakumar, from Kulithalai, Tamil Nadu, boasts of a remarkable five-decade career in automobile repair. He is the district President of the Mechanics Association in Karur and owns 'Sri Sai Auto Works and Consulting,' a thriving business that has provided employment to around 7-8 mechanics. Throughout his career, Jayakumar has been a mentor, especially to young mechanics seeking growth in the industry. When Castrol introduced the Eklavya program, he not only encouraged his employees to participate but also joined himself, driven by a curiosity to update his knowledge and skills. Jayakumar emphasized the significance of such initiatives in enhancing the capabilities of young mechanics. Many newcomers lack formal education and rely on hands-on learning. Programs like Eklavya are essential for systematic and comprehensive skill development.

The Eklavya program also taught the importance of financial savings, a topic Jayakumar always emphasized. As a result, many mechanics started saving regularly, depositing money in banks and post offices. Some even enrolled in government welfare schemes, gaining financial security. Jayakumar praised the Eklavya program for its positive impact on mechanics' lives and financial well-being. He expressed the need for more such programs to benefit young mechanics, contributing to their professional growth and financial stability.



Section 9: Digital Payment Methods

Digital payment methods provide mechanics with multiple advantages such as the ease of receiving cashless payments from customers, the ability to maintain transparent transaction records and simplified tracking of receipts and payments. This section deals with the extent of adoption of digital payment methods post the Eklavya program.

CHART 27: USE OF DIGITAL PAYMENT METHODS FOR RECEIPTS FROM CUSTOMERS

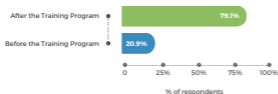


CHART 28: USE OF DEBIT/CREDIT CARDS

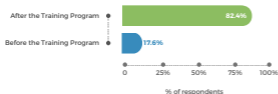


CHART 29: USAGE OF U.P.I./PAYTM/ GOOGLE PAY

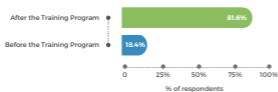
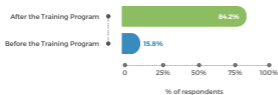


CHART 30: DIGITAL PAYMENT METHOD (PAYMENT TO VENDORS)



Key impact



Transition to digital transaction for receipts from customers

58.2% of the mechanics who had not undertaken digital transactions prior to the Eklavya program started adopting digital payment methods for receiving receipts from their customers.

Throughout the study, mechanics who participated noted that the digital payment process was found to be convenient for both themselves and their customers.



Enhanced use of debit/credit cards

A significant increase of 64.8% in the number of the mechanics were observed in their adoption of debit cards and credit cards for conducting transactions.

It was reported that these payment methods enabled them to process payments more expeditiously compared to handling cash.



Increased usage of mobile wallets

Following participation in the Eklavya program, a noteworthy 63.2% of the mechanics who had not previously employed mobile wallets began incorporating them for payment transactions.

Interactions with mechanics indicated that utilizing mobile wallets enabled them to complete the payment swiftly and conveniently using their smart phones.



Enhanced digital transaction with vendors

Subsequent to participation in the Eklavya program, a substantial 68.4% of the mechanics who had not been utilizing digital payment methods for vendors prior to the program initiated their adoption.

It was noted that this transition relieved them of the constant need to carry cash for making payments.

“

Manjunath, owner of Sri Manjunatha Bike Point witnessed firsthand the transformative impact of the Eklavya program on his business. He enthusiastically advocates for the advantages of digital payments, which have become increasingly prevalent thanks to this initiative. Digital payments have not only streamlined his transactions with customers but have also improved the overall efficiency of his business operations. Manjunath no longer has to worry about the hassles of handling cash and the convenience of digital payments has made it easier for customers to settle their bills promptly. He says 'Prior to the Eklavya program I was not very confident about digital financial transactions, but they have undoubtedly become a game-changer for my business, bringing benefits for both myself and my valued customers, who feel digital transactions are easier for them. I thank the Eklavya program for enlightening mechanics like me on digital transactions.'

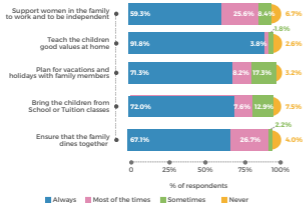
”



Section 10: Attitude towards family norms and values

The Eklavya program intended to promote a positive shift in the attitudes of mechanics, encouraging them to embrace family norms and values for enhancing family bonds and furthering emotional well-being. This section deals with the extent of attitudinal change undergone by mechanics towards adoption of family norms and values oriented to them by the Eklavya program.

CHART 31: ATTITUDE TOWARDS FAMILY NORMS AND VALUES



Key impact



Dining together as a family

A majority of the mechanics reported making a conscious choice of dining together with the family for at least one meal a day. It was shared that dining together helps them stay away from the stress of work routines and allows them to spend quality time with one another.

Mechanics reported that it helped them to better connect and communicate with their family members resulting in a measure of personal satisfaction for them.



Shouldering responsibility towards children

Most of the mechanics stated that they support their spouse at home, by taking

the responsibility of bringing children from school and tuition centres.

It was reported that it reassured them not only with a sense of safety and supervision, but also their commitment towards family involvement.



Family vacations

Mechanics observed that they do plan for family vacations and holidays not only to relax and rejuvenate themselves but also to enable their children to have shared and lasting memories of times spent together.

Some of the mechanics also reported vacations and holidays helped them to improve their overall well-being.



Inculcating moral values to children

Mechanics interacted with during the study observed that family is the best place to begin teaching moral values to their children. Many were emphatic in stating that inculcating desirable social, religious and civic values at young age will mould their children into good citizens.



Rendering support to women

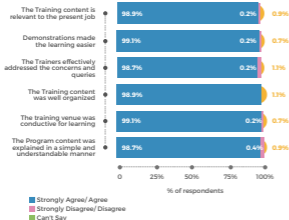
Many of the mechanics reported that though they were brought up in a patriarchal mindset, that men should work and women should take care of their families. Their mindset is changing to support women in their homes, to work and to be independent.

Many observed that women's economic contribution to the family help them to maintain better standards of living, provide good education to their children and to tide over financial crisis at home.

Section 11: Trainees perception of the program

This section deals with the perception of the trainees who participated in the Eklavya program towards various aspects of the program.

CHART 32: PRECAUTIONS TAKEN ON APPLICATION OF BRAKES WHILE DRIVING



Major findings



Relevance of the training

Almost all the mechanics who participated in the Eklavya program expressed that the training provided was pertinent to their needs and profession.



Demonstrations made the learning easier

A unanimous agreement could be observed that the repair demonstrations presented, significantly facilitated the learning process.



Concerns addressed

Nearly all of the mechanics concurred that the trainers effectively addressed their questions and uncertainties during the training program.



Well organised training content

A vast majority of the mechanics were in accord that the training content was well-structured.



Comprehensible delivery

Nearly all the mechanics were in consensus that the program was presented in a simple and comprehensible manner.



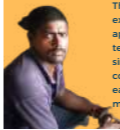
Dinesh, a beneficiary hailing from Kulithalai, Karur, Tamil Nadu, emphatically states, 'The Eklavya program has immensely enriched mechanics like me, who have honed our skills through years of observation and assisting seasoned professionals.'



While experience has enabled us to perform most repairs, initiatives like this empower us to grasp the underlying logic behind our actions with crystal clarity.'



Sudheer Kumar, a beneficiary of the Eklavya program, hailing from Siddharth Nagar, Uttar Pradesh, expresses, 'Mechanics like me rarely had the opportunity to attend school, participating in a formal training program was an entirely novel experience.'



The trainers were exceptionally approachable, and their teaching approach was simple and comprehensible, making it easy for us to grasp without much difficulty.'





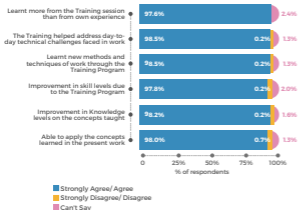
Nagesh, President, Mechanic Mitra Welfare Association, Bangalore.

Mr. Nagesh, says 'I am proud to say that ours is one of the major associations for 2-wheeler mechanics in Bangalore and we have about 960 registered mechanics with us. A majority of mechanics do not have formal education in the sector and have developed their profession over the years by observing senior mechanics. This program was very useful to the mechanics to get more knowledge of the automobile components they are working with.

I would like to say that the program has built the confidence of the mechanics more about the trade and I wish more such programs are conducted.'



CHART 33: BENEFITS RECEIVED FROM THE TRAINING PROGRAM



Major findings



Transfer of learning

A majority of the mechanics affirmed their ability to apply the concepts and skills acquired during the Eklavya program, thereby demonstrating the program's effectiveness in achieving its intended objectives.



Enhancement of knowledge levels

Almost all of the mechanics unanimously agreed that the Eklavya program played a pivotal role in augmenting their understanding of various subjects. Despite their practical experience, the program provided them with advanced knowledge, particularly in areas such as BS 6 emissions standards.



Enhancement of skills

The vast majority of the participants concurred that their skills were significantly improved as a result of their involvement in the Eklavya program.



Learning new methods and techniques

Nearly all the mechanics stated that they learnt new work methods and techniques through the Eklavya program.



Relevance of the training in addressing day to day work challenges

A majority of the mechanics reported that the training proved beneficial in addressing the everyday challenges they encountered in their repair work.



More learning compared to hands on experience

Almost every mechanic stated that they gained more knowledge from the training program than from their own practical experience.

“

Harish, a 2-wheeler mechanic and beneficiary of the Eklavya program from Kulithalai, Karur, Tamil Nadu says 'After the program, I am able to relate the knowledge that I gained through the classes with my work.



I feel like I got more new insights about handling the problems of 2-wheelers in an effective manner.

”

“

Periasamy, Local Mechanic Association President, Karur, Tamil Nadu says 'Following Eklavya ' I would say there is a visible improvement in workplace standards, something most of us were not focussing on earlier. The quality of repair work has improved and there is better customer satisfaction now.



The training was very relevant as it helped in addressing the day-to-day issues with repairs. A majority of the mechanics feel they got recognition through the certificate that is issued on the completion of the Eklavya Program.'

”

“

Jagadish, owner of Maruti Motors, Bangalore says 'I have been in the field of 2-wheeler repairs for close to 25 years. I started to work as a mechanic at a very young age, and yet, when



I attended the Eklavya program, I felt that there were so many things that I must learn to do my job better.

”



CHAPTER 6

RECOMMENDATION

While Eklavya trainees acknowledge that they received training in the fundamentals of BS6 technology, there is a prevailing sentiment that they need a deeper mastery of these skills, particularly to address the growing influx of BS6 technology vehicles into their workshops. Mechanics have encountered several challenges in handling BS6 vehicles and one prominent issue is:



OB Handling

Mechanics from various locations have unanimously expressed their concerns about the complexity of managing On-Board Diagnostics (OBD) in BS6 technology vehicles. They have pointed out that these vehicles are equipped with intricate OBD systems comprising of multiple sensors and intricate computer programs designed to monitor a wide array of engine and emission parameters. Many of the mechanics openly discussed their educational backgrounds, with some expressing that their limited educational attainment has made it challenging to effectively handle OBD sensors.

It was reported that BS 6 vehicles come up with complex OBD systems which interact with the engine management system and emission control system. Participants in the study shared the opinion that they need more training to understand how these systems worked together.

Many of the mechanics shared that supply of a manual of Diagnostic Trouble Code (DTC) which can help them in interpreting the codes precisely and identify the root cause of the issues will be helpful for them.



Manual in regional languages

The study participants emphasized the need for repair manuals written in regional languages.

They suggested that such manuals, containing repair protocols and procedures, would greatly enhance their comprehension of repair tasks and enable them to work more efficiently.



Common Tool kit

Several participants in the study suggested the practicality of maintaining shared tool kits, such as a multimeter tool kit comprising of items like a digital multimeter, test leads, voltage probes, current probes and temperature probes, as well as star screw tool kits that include Torx bits, driver handles, socket adapters and bit holders. The consensus among them was that a single shared tool kit could adequately serve the needs of mechanics across approximately 100 garages.



More practical demonstrations

Few participants of the study expressed their preference for practical demonstrations of motor vehicle repair procedures, emphasizing the value of hands-on learning experiences over solely receiving theoretical lectures on the subject.



Increasing the periodicity of training

A majority of the participants conveyed the idea that increasing the frequency of training programs, such as having a training session every three months, would be highly beneficial. They believe that this approach would enable them to continually improve and enhance their skills and knowledge levels.



Peer-led training programs

Eklavya has the potential to cultivate peer leaders among seasoned mechanics who can conduct training sessions for their fellow mechanics year-round. The most prominent advantage of peer-led training lies in its ability to finely tune the training content to address the specific challenges and requirements faced by colleagues. These peer trainers effortlessly establish trust and rapport within the mechanic community, drawing upon their own first-hand experiences in similar working conditions. Furthermore, peer-led training programs can be notably cost-effective.



Creating video content

Learning often becomes more accessible when it involves visual demonstrations, and video content excels at providing a lucid and comprehensive view of repair procedures, making them easier to comprehend and replicate. Video content is an effective tool for presenting step-by-step instructions, guiding mechanics through a methodical problem-solving process. Moreover, it enables demonstrations on the correct usage of tools and equipment, significantly mitigating the risk of accidents or vehicle damage. The flexibility of accessibility allows mechanics to learn from video content at their own pace and convenience.



CHAPTER 7

CONCLUSION

The study has revealed a multifaceted impact of the Eklavya program, not only in enhancing technical knowledge and skills but also in fostering comprehensive development among mechanics in their profession. Notably, the behavioural components of the program, such as the 5 S orientation, safety and hygiene, have had a significant influence.

A majority of the trainees have noted that the adoption of 5 S principles has resulted in various positive outcomes, including reduced customer complaints, fewer defects, decreased material costs, timely deliveries, improved workplace cleanliness and a heightened sense of responsibility toward their work environment. Trainees have reported consistently adhering to safety measures, such as promptly cleaning up oil spills, wearing personal protective equipment and ensuring adequate lighting. Following the Eklavya program, improved hygiene practices have become more prevalent among the mechanics, including regular handwashing, refraining from eating at the workplace, proper utilization of dustbins and consuming boiled water. A significant number of the mechanics mentioned experiencing positive changes in their customer relations, including greeting customers, displaying polite behaviour and providing regular updates.

The study noted an improvement in the mechanics' competencies following their participation in the Eklavya program, specifically in areas such as engine valve repair, lubrication systems, air intake systems, fuel supply systems, ignition systems and more. A majority of the mechanics reported that their proficiency levels progressed from beginner and practitioner stages to higher levels of competence.

Many mechanics reported an increase in income levels by 10 to 20% and they began saving their earnings in banks and post offices and also enrolled in various government schemes. Most mechanics started saving a minimum of 10% of their monthly incomes in various savings schemes after participating in the Eklavya program. A considerable proportion of the mechanics began engaging in digital financial transactions and increased their use of debit and credit cards.

The program contributed to a positive shift in family relations and bonding, as reported by participants. This included sharing responsibilities of childcare, dining together as a family and going on family vacations or holidays.

Nearly all the mechanics reported a more effective transfer of learning, increased knowledge and skill levels and the practical relevance of the training in addressing their daily work challenges. They also noted that they gained more knowledge through the program than they had accumulated through years of hands-on experience.

The study has documented a generally favourable perception of the Eklavya program among its recipients, suggesting that similar training initiatives could be developed to further improve the livelihoods and well-being of automotive mechanics.