



# *Nari Kallyan Shangho*



## *Assessing Digital Literacy and Learning Needs of South Asian Women in Edinburgh*

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## Message from the Chair

As Chairperson of NKS (Nari Kallyan Shangho), I am extremely proud to present an independent report, *Assessing Digital Literacy and Learning Needs of South Asian Women in Edinburgh*, as well as a comprehensive response to the findings.

This is the first ever piece of research and analysis, specifically designed to understand the extent and scope of the digital exclusion barriers faced by South Asian women in Edinburgh, who speak little or no English. And it has been driven by NKS's core mission to empower women and their families by facilitating access to information and knowledge. We believe it is vital to identify gaps in service provision for ethnic minority women, so that the multiple barriers of gender and race discrimination, which exclude them from the integration process, can be addressed.

A response to the independent report produced by Dr. Vibha Pankaj (attached as appendix C) is seen by NKS as an integral part of the research.

This thought provoking response has been instrumental in helping NKS achieve its objective of analysing the extensive research data and using it to direct and shape ongoing community development and to establish a best practice model for the provision of training opportunities for South Asian women in Edinburgh. As evidenced already by the results of the pilot training programme, we know that the right training for women at grassroots level can be transformational.

This groundbreaking research is an important milestone on the road to full digital and social inclusion for the South Asian community. We are all inspired by the dedication shown by the research team and advisory group to successfully produce this report.

On behalf of the NKS board, I would like to thank the people who have worked very hard with limited timescales and resources and commend their passion and commitment:

- Naina Minhas NKS manager, for managing the project and providing ongoing advice and support
- Vibha Pankaj, Researcher for writing and production of the report
- Sameen Quayum and Leena Khan for interviewing and providing language support to survey respondents
- Humera Adnan for Administrative support and as a course tutor
- Tatheer Fatima for being bilingual tutor for pilot sessions and Sana Khalid as bilingual tutor and translation of handouts)
- Mathew Bakewell (Digital Skills Academy) for facilitating the course.  
Advisory Group members– Lesley Morison (Digital Skills Academy), Smita Grant (Minority Ethnic Health Inclusion Service) and Honor Loudon (NKS Board Director) for their advice.

**Rohini Sharma Joshi**  
**NKS Chair**

## Foreword – Naina Minhas, NKS Manager

Digital literacy is a powerful tool that can empower communities by providing a means to access information and gain knowledge. Digital technology has become part of the day to day lives of the majority, but gender issues still remain to be addressed, as women are largely excluded from innovations in this area. United Nations statistics show that of those individuals with an online presence there are 250 million fewer women than men and the gap between the sexes in terms of internet usage was 12% in 2016.

Increasing the number of women able to access and use digital technology not only leads to the empowerment of increasing numbers of women but also allows for the potential to have a positive impact on the global economy. As quoted by Phumzile Mlambo-Ngcuka, executive director of UN women, in the Geneva announcement of Equal Programmes:

*“The information society is incomplete without the inclusion, contribution and leadership of women and girls (<http://mzl.la/community>, July 31, 2017)”.*

The issue of digital exclusion can often be exacerbated due to low literacy levels. Ethnic minority women from grass root communities in Scotland can have low literacy levels. There is very little information available about the digital literacy status of ethnic minority women. Researching the issues that require to be addressed in this area and the learning needs of women by identifying the barriers faced by them is a necessary exercise if we desire to facilitate their inclusion in the digital world.

Nari Kallyan Shangho (NKS) is a community organisation that has been engaged in empowering women for over three decades. Issues of exclusion and integration have always been high on the agenda of NKS. Digital exclusion of South Asian women has been of great concern to the organisation as more and more information and facilities are becoming available in a digital format in Scotland. As an organisation it is felt that there is not much information available about the extent of digital exclusion and barriers faced by ethnic minority women living in Scottish society. Hence, it is imperative to look into the barriers faced by such women in accessing digital tools and learning opportunities. It is considered that identifying the learning needs of such women and devising a good practice model is an effective way of increasing digital literacy amongst them.

An independent report has been produced by Dr. Vibha Pankaj based on a survey with 89 South Asian women as well as through conducting a pilot training programme (attached as an appendix C). The report provides extensive data in the form of charts and stakeholders' feedback. It also provides valuable information that has helped NKS to produce a response to the report, in a community development context, and to provide a comprehensive analysis of the learning needs of women. The response report has also allowed for a best practice model to be devised which will allow for the effective and efficient running of digital training courses for South Asian women in the future.

The advisory group and the management committee of NKS felt it was important to produce a response to the independent report, as a community development approach was required to build a good practice model. The response is produced by the organisation by way of drawing on information provided by various stakeholders involved in the research and by consolidating the views with regard to needs as expressed by participants.

Based on all the above a best practice model has been produced that it is hoped will lead to increased participation and learning amongst South Asian women. We hope the information presented in both the independent and response report provides an invaluable insight to the reader.

## **Background**

This report is a response to the independent report '*Assessing Digital Literacy and Learning Needs of South Asian Women in Edinburgh*' produced by Dr. Vibha Pankaj (see appendix C). It is based on survey findings, focus group discussions and pilot training conducted at NKS.

The need for a response to the independent survey report arose for the following reasons:

- ***The requirement for a community development approach***

The findings that emerged from the independent report have been extremely useful for gaining data to help NKS present this response which is linked to the cultural and social needs of grass root women. This response fulfils a strong desire to reflect on and analyse the findings of the independent report in a community development context. It was felt that such an approach was essential in order to highlight the socio-economic and cultural needs of women, a cause which if taken up and worked upon, would lead to their empowerment. Such needs had been identified by the research team as they had engaged in field work by actively interacting with the survey participants. The social and cultural needs have also emerged from the evaluation carried out with the Pilot training participants.

- ***The benefits of consolidating the Digital Learning needs of women***

Although a number of digital literacy needs were identified in the independent report, as noted by the advisory group and acknowledged by the management committee, these were required to be consolidated to achieve the outcome of devising a suitable training model for grass root women.

- ***The need to produce a Best Practice Model***

The primary aim of the research project was to identify the learning needs of women and devise a best practice model that would lead to digital literacy inclusion of grass root South Asian women. It has been agreed by the advisory group and the NKS management committee to produce the model in a format separate from the independent report.

- ***An overly fragmented approach***

A research team was recruited to conduct a survey with South Asian women in Edinburgh and to pilot a training programme based on the survey findings. The aim of the team was to assess the learning needs that would further inform a good practice model for devising digital literacy training for women. The team consisted of a researcher, interviewers, an administrative assistant and tutors who conducted the pilot training. In addition, an advisory group was formed to advise the team. The team was managed by the manager of Nari Kallyan Shangho (NKS). Given that the entire project was novel and devised on an innovative basis, it soon emerged that the team had adopted a fragmented approach to the project and there is a need to put together the information in the form of a response report.

- ***The requirements of the author of the report***

The report submitted by Dr. Vibha Pankaj has been attached, unedited (as per research standards), as an appendix C to this response for accessibility to all readers. As her report was submitted at the end of March 2018, any views, experiences and observations that other stakeholders have contributed have been documented in the response report.

- ***To keep the length of the report to a minimum***

A separate response to the independent report has been produced in order to keep the report to a length that is comfortably readable whilst also allowing for several issues that were seen as essential part of the research project to be highlighted.

In view of all of the above, the NKS board and the advisory group for the project have decided that a response to the report should be produced to highlight many important aspects that emerged from the project work. These include the experiences, views, feedback and observations of the rest of the research team and the partner agencies.

### **Aim of the response**

The primary aim of the response is to highlight information, views, feedback, experiences and observations of the stakeholders involved in the research project that may not have been included in the independent report, but were considered important by the advisory group, staff team and the management committee. It is also aimed at providing additional and comprehensive information to the funding body to raise awareness of the digital learning needs of grass root South Asian women

The response will refer to the independent report and recognises it as an important piece of work to use as a reference point for this report.

## **Introduction**

We live in an ever changing and advancing digital world. Basic digital literacy skills have become essential for everyone to access online information, means of communication and services. Appropriate strategies and models have to be devised to ensure increased digital participation among grass root communities that are generally unintentionally excluded from opportunities to enhance their skills to keep up with changes around them.

Nari Kallyan Shangho (NKS) is a community organisation that works closely with women and families. Through the work of the organisation it has always been identified and argued that South Asian women are excluded from lifelong learning in general due to their backgrounds, which often entail cultural norms that become barriers for them to learn and often result in low literacy levels and gender discrimination.

With the changing format of information that is becoming increasingly digital South Asian women are facing further exclusion as all the above mentioned factors are becoming barriers to obtaining digital skills. NKS has on many occasions endeavoured to provide digital learning opportunities for South Asian women with little success. We have realised that there are many issues faced by women that become demotivating factors in the pursuit of enhancing their digital skills. There must be a change in the approach of exposure to digital literacy for them.

The main purpose of the response is to highlight women's digital learning needs and to identify the barriers faced by them. In turn, NKS will be able to devise a good practice model to allow for the active participation of South Asian women by enhancing their digital literacy skills.

The independent report highlights women's current skills, their motivation levels, and their circumstances that have become barriers to their learning. The response identifies issues that need to be addressed if we are to seek to empower women through information and knowledge, ultimately making digitally inclusive.

The response report focuses on the experiences of interviewers; views of field workers who gathered and collated information; delivery of the pilot training programme and evaluation of its effectiveness to enhance South Asian women's digital skills.

A good practice model has been created by referring to the consolidated views and needs of women who participated in the survey project. A great deal of contribution has been made by the research team, comprising of interviewers, bilingual tutors, administrative assistants and an advisory group. Their feedback, comments and experiences of interacting with women have been included in the response to provide a comprehensive assessment of the needs of South Asian women in terms of digital literacy and best practice model.

## **The Survey Sample**

Referring to 3.2 'Accessing target groups'<sup>1</sup> of the independent report, as part of the response, it is essential to provide further information about the survey sample. Furthermore, the experiences of the interviewers enable significant insight into the barriers that organisations may face in accessing hidden grass root communities.

In addition to interviewing NKS users, a number of organisations providing support to South Asian women in Edinburgh were also identified and contacted as evidenced by the report submitted by one of the interviewers, at the end of conducting interviews with women. The organisations contacted were:

- Amina Women's Organisation
- Apna Group
- Annadale Mosque
- Blackhall Mosque
- Gilmerton Centre Computer classes
- Iqra Academy
- MEHIS (Minority Ethnic Health Inclusion Service)
- Milan
- Interviewers' neighbours
- Saheliya
- Shakti Women's Aid
- Sikh Sanjog

Not all of the above mentioned organisations could respond, perhaps due to their busy schedules, but of the 12 organisations, 7 responded. A total of 89 women were interviewed and 39 of these women were interviewed with the support of the above listed organisations.

## **The experiences of and information provided by the interviewers**

The above listed organisations were initially contacted via email and this was then followed up by a phone call in order to introduce them to the Digital Literacy Research project. Furthermore, a flyer providing relevant project information was emailed to these parties.

The organisations were contacted with the aim of broadening the research being conducted by way of allowing for access to several sections of various South Asian communities.

One of the interviewers was allowed access to a group session at the Shakti Women's Aid, but unfortunately the group got cancelled on the day due to unforeseen circumstances. Nevertheless, the staff at Shakti Women's Aid provided her with insight into the work they do with women experiencing domestic violence.

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<sup>1</sup> Chapter 3, Research methods, page 9, point 3.2

The interviewer came away from this experience understanding that the most important need for such women is to become financially independent and to be able to obtain a job that allows for this. In order to support women achieve this Shakti assists them with CV writing, completing job applications, and uploading CVs online etc. The interviewer's discussion with Shakti staff brought to the fore how important digital learning is for such women, and how they often face an additional barrier when excluded from receiving information by way of a lack of digital literacy skills. The lack of English language skills exacerbated the barriers faced by them to access any information online.

### **Barriers in Conducting Research and Accessing Survey Participants**

Obtaining sufficient accessibility to survey participants was not a straightforward and smooth process. As it was important to include women from different backgrounds and not just NKS group members, a variety of support organisations were contacted.

One of the interviewers outlined the difficulties in obtaining access to and interviewing respondents

- Repeated phone calls to obtain availability and schedules of groups
- Organisations did not respond quickly and had to be chased
- Some organisations were not able to help the interviewer even though they seemed very keen at the beginning of the process
- Participants would initially agree to be interviewed but then not turn up for the scheduled interview for various reasons e.g. family priorities, health issues or not having the confidence to change their lifestyle
- Reluctance to be surveyed but with further encouragement would be interested and agreed
- Reluctance to answer questions in detail until probed by the interviewer and providing thorough explanations as to why in depth responses were required.

More so, the interviewers were hugely supported and advised by the manager of NKS to carry out interviews with women and to ensure that interviewers did not work in isolation. On many occasions, the manager demonstrated interviewing styles to the interviewers by conducting interviews herself in their presence, and then encouraging them to conduct interviews under her supervision.

All interviews were conducted by the end of November and data collated by early December, ready for analysis purposes. The author of the independent report was not involved in interviewing the survey participants.

## **Analysing questionnaire responses**

Referring to 3.6, point of analysis<sup>2</sup>, in the independent report, the method used to collate the data obtained from the 89 respondents was simplified through a Google programme. The administrative assistant and one of the interviewers uploaded all 89 responses to a Google programme that automatically collated the data for analytical purposes. The graphs and charts were produced automatically by the Google programme. However, the author of the report did make some changes to the graphs according to the requirements of the report. The collated data was then exported to Excel (Microsoft Office) for further analysis.

## **The digital literacy status of the women interviewed**

The digital literacy status of grass root South Asian women is low and this is very much linked to their level of education and English language skills. This is also evidenced by way of the literature reviewed in the independent report. Grass root South Asian women are disadvantaged in their digital literacy status in main due to general low levels of educational obtainment and the language medium in which they have obtained their education. The majority of them have received their formal education in their first language; mainly one of the various South Asian languages. The survey data reveals that 24% have either had no formal education or have only been to primary school in their countries of origin. More than half (53%) have only been educated to school level<sup>3</sup>. Furthermore, 48% of the participants either do not understand English at all or have very little understanding of it<sup>4</sup>. This is further evidenced by a study conducted by Rashid in 2016 (*as in the independent report*). To explore gender differences in ICT provision, use of computer in five countries was compared. It emerged that the use of computer and internet by women in Bangladesh was lower than in other countries included in the study<sup>5</sup>.

South Asian women's learning experiences are also related to accessibility to digital devices as well as the patriarchal culture they have been brought up in and conditioned to. This is evident from the comments made by one of the survey participants:

*"I never had a reason to use it. My husband uses it and explains it to me if needed".*

Inaccessibility to computers is evident from the survey data and reveals that 50% of participants did not use computers, although these were available at home. A survey participant explained:

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<sup>2</sup> Chapter 3, research methods, page 13, point 3.6

<sup>3</sup> Chapter 4, page 14, point 4.1.1, fig.4.1

<sup>4</sup> Chapter 4, point 4.1.2, fig. 4.2

<sup>5</sup> Chapter 2, page 8, point 2.3

*“My children have computer/laptop. They do not let me touch it, they think I will do something wrong there. I am not motivated”.*

Gender discrimination is one of the main reasons for exclusion of women from the world of digital literacy. One survey participant’s reply when asked about her knowledge of using digital devices was:

*“I don’t know how to because of family restrictions”.*

Women may not have access to a digital device for economic reasons, as one woman explained:

*“There is no computer at home. My children go to the library to use it”.*

The literature reviewed in the independent review backs up the reasons given by the survey participants. Age, gender, education, learning skills, available social support and socio-economic position have been highlighted as factors that impact on having internet skills. The role of friends and family is also seen as an important determinant in gaining digital skills (*as in the independent report, page 8, Van Deursen et al., 2015*)<sup>6</sup>

### **Motivation to Learning**

Completing online applications (73%) and looking up online information (71%) were high on women’s agenda, as mentioned in the independent report. However, it was further identified that online banking (61%), reading news (64%), online shopping (56%), building confidence to use different applications and attempting to make online health appointments and request prescriptions were also seen as other motivations as highlighted by women through interaction with them and through the survey results<sup>7</sup>.

Different age groups have different motivational levels and reasons to learn. It emerged by talking to women in groups that communicating with friends and relatives, and building on their social networks is a huge motivation for women to enhance their digital learning. For older women, the very idea of being able to communicate with their grand-children via digital devices is an attractive proposal.

*“Everything is about computer and internet. I want to stay on technology. Stay in touch with family and friends”.*

For younger women, it’s more about enhancing their skills in order to obtain better job opportunities.

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<sup>6</sup> Chapter 2, Page 8, Point 2.3

<sup>7</sup> Chapter 4, page 21, point 4.7

*“I want to be independent. If it helps me to get a job, it’s good and I also want to feel intelligent”.*

Low health status is also a huge barrier in motivating women to learn, as one woman said, *“this is demanding. Since I have had cancer, I don’t remember anything”.*

### **Barriers to learning**

Evidenced by the digital literacy status of women identified through the survey and highlighted in the independent report, the barriers to digital participation by grass root South Asian women are:

- A lack of English language skills
- Low levels of educational obtainment
- Gender discrimination
- Cultural issues i.e. family restrictions
- Family responsibilities
- A lack of confidence
- Inaccessibility to digital devices
- A lack of suitable engagement methods
- Socio-economic issues i.e. family support, travel distance etc.
- A lack of information about any services available to improve women’s skills
- Health issues, especially for older women

### **The Pilot Training Programme**

As part of the research project, a pilot training programme was developed to deliver digital literacy training to a sample of the survey participants. The main aim of the pilot programme was to assess the specific literacy needs of women and to evaluate the effectiveness of such a programme. This would then in turn help to develop a good practice model leading to digital literacy inclusion of South Asian women. There were two parts to the programme which included training sessions for a sample of the survey participants and delivering a short training session to the NKS community development workers.

In total 8 sessions were held. These included four for the survey participants and four for the NKS staff team. Six women and six staff members participated respectively. The women were selected by way of a systematic assessment carried out by a Digital Literacy (DSA) officer. The women were selected according to their assessed ability level, and the workers undertook self-assessment to take part in the training programme. The sessions took place in collaboration with the DSA and all the women received a certificate of participation.

A presentation was devised to provide insight to the training participants about the Digital Literacy project. This can be found within Appendix A.

Referring to 5.1.2 of the independent report under the heading, 'Training delivery and resources'<sup>8</sup>; the DSA provided an experienced trainer and NKS recruited three bilingual support workers. The workers' training programme was delivered by the DSA trainer, but the training sessions for survey participants were mainly provided by the bilingual support workers. The DSA trainer was present for only one session, as opposed to the information documented in the independent report that detailed that sessions were delivered alongside the trainer. The course content is not documented in detail in the independent report. It is important to provide detail in relation to this to provide the reader with an idea of the level of training provided. In addition to the topics mentioned in the report, other course content related to the basics of tablets, getting to know your tablet, navigation buttons, keyboard buttons, what Wi-Fi actually means and installing and uninstalling apps.

### **Evaluation of the pilot training programme**

Although a detailed account of the feedback obtained from various stakeholders who took part in the pilot programme (women, tutors, trainers, partners, and NKS staff) is documented in the independent report, further information is added below to give a clearer picture of the issues and needs of South Asian women and to provide a logical basis for the good practice model devised from the information collected using a variety of methods.

The training programme was evaluated using formal and informal methods. These methods were used to obtain feedback from the participants and the views and observations of the tutors while interacting with women and the staff team that participated in the training programme.

Two different questionnaires were used to obtain formal feedback from women and the community workers who participated in the pilot programme (attached as appendices). A great deal of emphasis was also placed on informal feedback which was obtained by interacting with the pilot training participants to get an idea of the issues and their needs for digital literacy inclusion purposes.

Through feedback, the six NKS community workers who participated in the pilot programme reported that sessions were very useful and they would be keen to attend a tailored training programme in line with their job description needs if offered by the organisation. The training would help them to support NKS users by incorporating advice on the use of digital devices when engaging with grass root women in South Asian communities.

A sample of six survey participants took part in the pilot training and found the programme extremely useful (*attached in appendix*).

*"I felt privileged to learn how to use smart phones and a tablet".*

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<sup>8</sup> Chapter 5, Page 24, Point 5.1.2

*“Translated slides made it easier to learn...”*

*“I now can use you tube better”.*

*“Using a tablet on a daily basis now”.*

*“Now I enjoy cartoons with my grand-daughter”.*

*“One to one support received was helpful”.*

*“I used to go home and ask more questions to my daughter in law”.*

Three of the participants couldn't attend one session each for socio-economic reasons. These reasons were provided to tutors when they were questioned about their absence:

*“Due to school holidays in February, I missed a session”.*

*“I didn't attend first session as I was away to Pakistan”.*

*“I had a GP appointment and had to miss a session”.*

*“Although childcare was offered but it was not practical to bring all my four children with me for a two hour session. Travel distance and cost is an issue”.*

*“I missed 3<sup>rd</sup> session due to my husband's illness. If I had attended, would have learnt more”.*

It is clearly evident that the participants found the programme beneficial and were happy that they had the opportunity to take part. All of them said they would look forward to further training programmes if offered by the organisation.

One of the tutors working with South Asian women to teach English as a second language (ESOL) at NKS provided her opinion on the basis of her experience. She stated that encouragement and support towards self-directed learning would be helpful in the long run in order to sustain continuous learning amongst grass root women.

As many of the women attending ESOL classes have very little experience of formal classroom learning, self-directed learning is a formidable objective that requires to be built into the good practice model by way of utilising effective strategies.

A suggestion of inculcating a learning-discipline among women who are essentially homemakers, in our opinion comes from a blame culture, where a learner is blamed for their lack of motivation to learn. There is a clear issue of unavailability of suitable engagement methods among service providers that leads to a lack of interest among women. It emerges that there is a need for a flexible and comfortable learning

environment where a busy home maker feels more relaxed and can enjoy the learning offered in an informal way.

In summary, the evaluation backed up by quotes from the course participants, clearly evidence the cultural and socio-economic needs of women when devising a best practice model.

Evaluation forms were used to gather feedback from the trainees, with regard to the pilot training programme. These can be found in Appendix B.

## **South Asian Women - The Learning Needs and Best Practice Training Model**

The primary purpose of the research has been to identify the digital literacy and learning needs of grass root South Asian women in Edinburgh and barriers that can be faced by them when attempting to access and participate in digital literacy programmes. Furthermore, a best practice model has been devised based on identified needs and barriers.

The 'need' is essentially defined as the gap between what is there and what should be there. In the context of this study, it is primarily about highlighting the issues that become a hindrance for women in increasing their digital participation. The survey that has been conducted; the focus group discussions with women; the pilot training and experiences of tutors; as well as the training of participants have helped highlight a number of issues that have informed this research about the needs of South Asian women in an attempt to enhance their digital literacy.

Here, the needs can be categorised by two separate headings; infrastructure needs and the learning process needs.

### **6.1 The Infrastructure Needs**

- I. The structured support of a community organisation by providing, time, resources and a safe space to learn.
- II. Trained bilingual workers who can explain everything to the women in their first language.
- III. In addition to bilingual trainers, there is a need for support workers to work closely with women.
- IV. Childcare and travel expenses to allow women to participate in the training programme.
- V. Flexible learning opportunities due to family responsibilities.
- VI. An informal learning environment due to a low level of literacy among grass root women and a lack of formal learning in their early life.
- VII. Translation of the necessary material that will make learning easier for women.

- VIII. Rewards and incentives to learn that may lead to increased motivation and active participation.
- IX. Women only training programmes to cater to women's cultural needs.
- X. Training/courses with a small number of participants at a time; between five and ten women in each session.

## **6.2 The Learning Process Needs**

- I. Grass root South Asian women require support with the English language skills.
- II. The participants require more time to learn as they have a slow learning pace due to a low level of literacy.
- III. One to one support is required according to the level and abilities of the participants. No more than two participants should be allocated to one support worker.
- IV. The learning process for each woman should be in line with their ability to learn. Each woman should be assessed and taken through the training according to their needs.
- V. The course content should be in line with their interests in using the digital tools.
- VI. The emerging learning needs of the participants should be monitored and the course updated accordingly.
- VII. The participants should be involved in the planning of different stages of their learning process.
- VIII. Confidence building workshops should be held prior to the course to build self-belief in learning among women.
- IX. Communication among women to share information and success stories with each other should be encouraged.
- X. The participants should be paired in a way that they can learn from each other.
- XI. Informal meetings should be organised to encourage discussions about the course and obtain feedback from the participants about the success of the training course.
- XII. The participants should be supported in accessing digital devices. They should be encouraged to own a digital device by subsidising the cost of the device.

### **Best Practice Training Model tailored to South Asian Women's Needs**

Based on the above mentioned needs, a best practice model has been identified and devised to make learning effective and to provide positive outcomes for South Asian women.

The model devised has two different levels and each level needs to be completed before moving to the next level.

### **Level 1**

**Organisation:** Organisational planning to provide training programmes is required to provide a suitable structure to ensure the smooth running of the project.

- Ensure appropriate time and resources are available.
- Provide a suitable venue for the course
- Identify the course lead and support staff to take the course forward
- Define the boundaries of the course by setting goals.
- Develop support mechanisms for the potential participants i.e. childcare, available devices, travel etc.

**Project Lead:** The project lead should be recruited prior to the start of the training programme. The Project lead will have a crucial role at level one of the project.

- Organise an open day to identify potential participants.
- Identify and separate active participants from the ones who lack confidence.
- Identify the needs of participants.
- Identify important topics for the participants and develop course content based on those topics.
- Develop course content that matches the level and ability of the participants.
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### **Level 2**

**Organisation:** The organisation's role and support is pertinent at this stage of the course, a stage at which the participants have been identified and the training programme offered.

- Provide information to course participants to demonstrate the value of the course.
- Provide information in the first language of participants as and when possible.
- Define incentives and rewards for the participants.
- Allocate a set number of hours for learning.
- Discuss the needs of the participants who will be taking part in the course.
- Inform participants of the facilities available to them.
- Allow for a slight variation in the plans.
- Involve participants in the planning of various stages of the training
- Value and celebrate the successful outcomes of participants.

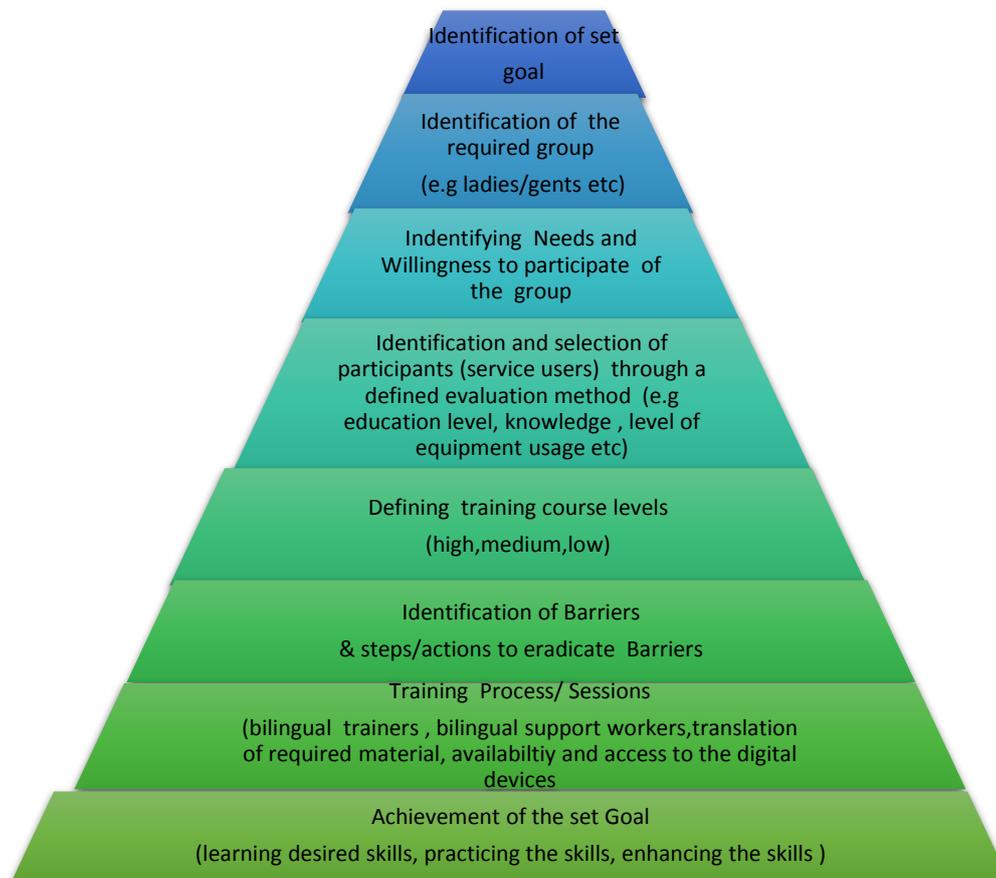
**Project Lead:** The Project lead along with the support staff need to plan the structure and process of the training sessions.

- Organise groups according to the ability and level of knowledge of the participants.
- Ensure that all participants have access to the facilities made available to attend the course.
- Explain the content of the course and how this can be applied in their day to day lives.
- Translate the necessary material according to the needs of the participants.
- Allocate support workers' time to the participants as per the requirements of the course.
- Maintain an informal and approachable environment in the sessions to encourage maximum learning among women who have not been in formal education for a long time.
- Organise joint working sessions by pairing confident women with those who are less confident.
- Ensure that the support workers work at the pace of each participants' ability to learn.
- Encourage communication and discussion during the course of each session.
- Maintain a personal relationship with each participant to keep their motivation level high during the course.
- Value individual performance by encouraging participants' efforts.
- Monitor the emerging needs of participants and update course content accordingly.
- Organise meetings outwith the course sessions to obtain feedback from the participants.
- Encourage self-learning and independence among participants.

It is important to follow a specific model of learning with the participants according to their cultural and social needs. An individual's behaviour is to a large part determined by their beliefs which are inculcated by way of their culture and background. Therefore, for any programme to be successful, the cultural beliefs and values of participants need to be incorporated into it.

The above model has been summarised by way of a pyramid diagram as below:

## The Best Practice Training Model Pyramid



### Conclusions

It is abundantly clear from the independent study and from the response here that increased digital literacy and participation amongst grass root South Asian women has become a pressing need to ensure accessibility to information and knowledge and to enhance inclusion in Scottish society as active and responsible citizens. With an increasing shift to providing information and services by way of digital format, grass root South Asian women are experiencing further exclusion and becoming heavily dependent on family members or support workers to access such information and services. The survey conducted has highlighted that women are keen to learn, but lack confidence due to a number of issues faced by them.

The lack of English language skills among grass root South Asian women, inaccessibility to digital devices, cultural and socio-economic issues, low formal education, family responsibilities, a lack of information about services providing digital literacy opportunities, a lack of confidence to access these services, unavailability of tailored programme according to their needs are some of the issues that need to be addressed if we together desire to facilitate digital literacy inclusion for South Asian women.

The above mentioned issues faced by women can become barriers to their learning. It is important to address these issues in order to support suitable engagement methods and to allow for women to actively participate in the digital learning process.

Although five significant recommendations have been made in the independent report, it is pertinent to make further recommendations here as part of the study to address issues that hinder the increased participation of South Asian women in digital literacy. Further recommendations are also made in view of the need to develop a good practice model and tailored programmes for grass root women. The additional recommendations have mainly come from the research team engaged in the field work that informed the independent report. For the sake of completeness all of the recommendations are listed below. These include recommendations made in the independent report.

### **Recommendations made in the independent report<sup>9</sup>**

***Programme for trainers:*** A training programme for service users' needs to be preceded by training the trainers. Advanced level training which goes beyond what the trainers are expected to provide the trainees will be a strong incentive for the trainers.

***Skills based variations:*** Being taught skills that one is already competent in, or on the other hand assumes prior knowledge which may not exist can be extremely demotivating. Therefore, training classes need to be divided on the basis of learning needs and levels. The training programme should be flexible to cater to variable digital literacy skills.

***Programme content:*** While what digital literacy programmes should contain in general has been well established by Digital Skills Academy (who are partners of NKS in this project), training programmes for South Asian women need to incorporate a number of additional features. Images and scenarios relevant to learners some of which could be from their country of origin need to be included. Programmes should encourage use of English in general – applications such as Google Translate will help. Programmes should include confidence building measures to assure users that equipment cannot be readily damaged. Measures to

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<sup>9</sup> Chapter 6, page 29, point 6.2

avoid phishing attempts and hoaxes need to be highlighted without alarming the learners. Similarly, programmes could consider distinguishing between information from reliable and authoritative sources from those presented by dubious websites need to be included.

***Pre-training introductory session:*** Prior to formal training commencing one or more pre-training introductory sessions need to be held to assess user skills, explain the content of training and the learning outcomes. These sessions need to clearly spell out expectations around punctuality and discipline. These sessions should be used to introduce the concepts of self-directed learning and consequent expectations from the learners (e.g. attempts on completion of tasks on their own). These sessions should also be used to explore specific needs (such as child care) for action.

***Delivery approach:*** Small group classes (five to ten participants) are likely to be most successful. As discussed these need to be supported by bilingual trainers. Initial sessions will benefit from the presence and supervision of trainers from Digital Skills Academy. The delivery needs to consider sections of the training content where: (a) one to one support could be provided; (b) where learners are expected to follow on screen instructions; and (c) where learners are expected to show how they have applied their learning.

### **Additional Recommendations**

***Training Programmes for South Asian women:*** It is clearly evident from the study that providing digital literacy training programmes for South Asian women devised specifically according to their needs is a highly effective means to ensure increased digital participation among them. Therefore, training programmes tailored to the needs of South Asian women should be devised and provided to ensure their digital literacy inclusion.

***Organisational support:*** Organisational support of community agencies that understand the social and cultural structure of South Asian communities is fundamental. Commitment from such organisations in terms of time, resources and suitable venues where women feel safe and comfortable is an essential part of required support.

***Motivation and active participation:*** It is recommended that suitable engagement methods need to be identified through initial discussions with women before the training programme commences. This can be done by assessing women's training needs as well as the needs that ensure their active participation and involvement.

***Best Practice Model tailored to women's needs:*** It is fundamental to the provision of digital learning for South Asian women that a suitable model is devised that encourages them to learn and makes learning easier. The model should take into

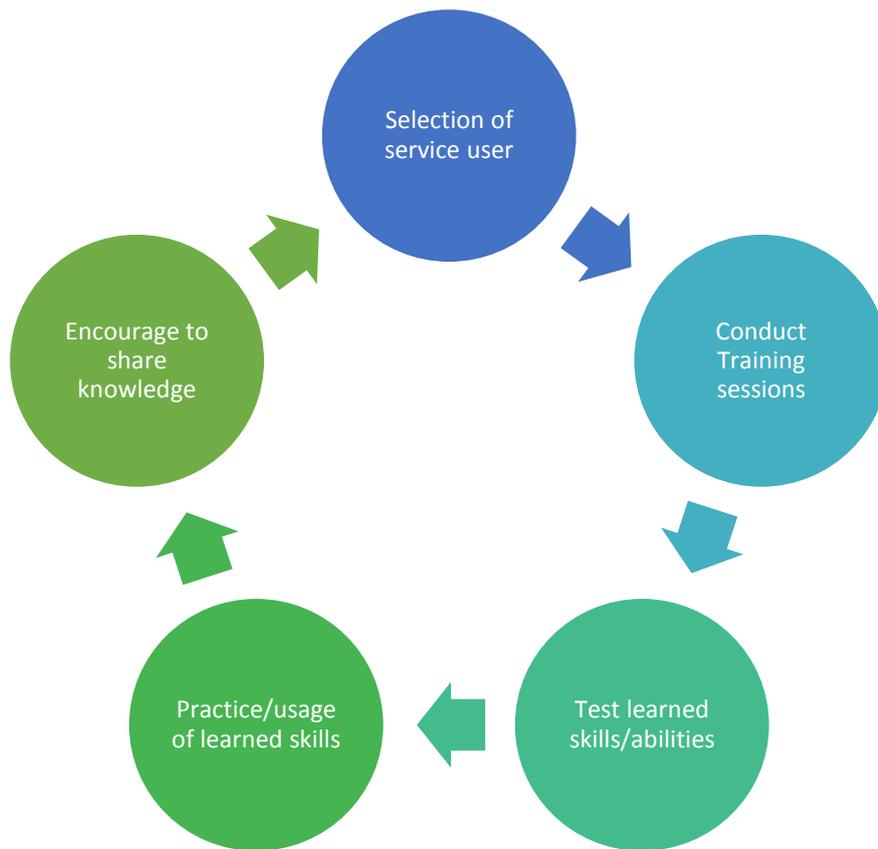
consideration the needs and barriers emerging from the research and from the pilot training sessions conducted during the course of the study.

***The process of continuous learning:*** A post-training activity is recommended to sustain the learning process and to develop self-directed learning skills. Digital literacy is a continuous process. Once a learner builds confidence to use a digital device, they can build upon this further. One can also encourage others and help them learn new skills by sharing their knowledge.

In order to encourage post-training activity that will lead to the development of self-directed learning skills, the following model is recommended.

**Process of continuous learning model: The model below outlines the process of progressive learning among trained service users.**

**Continuous Learning Model to build self-reliance**



## Appendix A – Presentation Slides

Brief introduction  
on  
Digital literacy

learning and support needs  
A scoping study  
By  
NKS

Purpose of the study

- To contribute towards generating a better understanding of the needs and barriers to digital participation of women of South Asian origin
- To establish the learning needs of community workers who provide support to the target groups
- To create sustainable support to service users as well as community workers

NKS partners

Cre8te/Digital Skills Academy - Edinburgh

Providing learning support to wider adult population in digital literacy

The study milestones  
*(study started September 2017)*

- Establishing the baseline
  - Conducted interviews through questionnaire
  - One to one meetings
  - Focus group discussion
- Developing digital literacy resources
  - For service users and community workers  
*(to adapt learning courses/modules for piloting with participants)*
  - Findings will be piloted to establish good practice models
- Developing recommendation for future work

Where we are.....

- Piloting the project with identified participants
  - based on their different skills and abilities
  - 4 training sessions
  - 1 each week
- Why we are here
  - Primarily fact finding meeting with workers through the SCVO questionnaire to establish current skill level and then crafting learning plans.

Outcome expectations of the study

- Inform the development of education and learning modules that are adapted to the need of south Asian women
- Contribute towards developing sustainable infrastructure for ongoing learning support for digital participation through empowerment of community workers and partner organizations

## Appendix B - The Pilot Training Evaluation Form – Service Users

### Digital Literacy Pilot Training Assessment

1. Did you attend all the sessions of the course?

- Yes  
 No

2. If No, how many sessions did you attend?

- 1  
 2  
 3  
 4

3. How easy did you find the training materials? e.g. tablet, presentation slides, print handouts.

4. Was the course relevant to your learning needs?

- Yes  
 No

5. If Yes, how?

6. If No, why not?

7. Did the course provide you with any new information?

- Yes  
 No

7a. Yes - what information?

7b. No - why not?

8. Are you confident to use your tablet device after the training?

- Yes  
 No

9. If No, why not?

Long answer text

10. Are you using OR going to use the skills that you have picked up in the course?

Long answer text

11. How often are you using OR going to use your device after training?

Long answer text

12. What support did you receive during the course?

Long answer text

13. Was the support you received enough and relevant?

Long answer text

14. What is your opinion of the tutors who worked with you?

Long answer text

...

15. How did you find the venue?

Long answer text

16. Was the time and day suitable?

Long answer text

17. What were the barriers you faced while attending the course? e.g. language, travel issues, childcare, etc.

Long answer text

18. Do you feel that bilingual tutors are an essential part of the course?

Long answer text



19. How can we make the course better in the future? e.g. training material, length of class, length of course, etc.

.....  
Long answer text

## Appendix 3 – The Pilot Training Evaluation Form – Community Workers

### Digital Skills for All Evaluation

1 What subjects did you cover in the lessons? (please tick all that apply)

Tablet Basics

Using the Internet

Using Google for searches

Email

Social Media including Facebook

Skype

Microsoft Office (Word, Excel)

Taking and managing photographs with your tablet

Online shopping

Online banking

Other (please specify)

2 How easy did you find the training materials?



3 How well did the trainer explain things?



4 How confident did you feel using your tablet device before the training?



5 How confident do you feel using your tablet device after the training?



6 How often do you use your tablet device after the training?

Daily

Weekly

Monthly

Rarely

Never

7 Can you please rate each of the following aspects of the course?

Trainer



Training Materials



Frequency of classes



Length of classes



Length of course



8 Do you have any suggestions how any of these could be improved?  
Please state:

Trainer	
Training Materials	
Frequency of classes	
Length of classes	
Length of course	

Appendix C – Independent Research report

**Assessing digital literacy and learning needs  
of  
South Asian women in Edinburgh**

Dr Vibha Pankaj

Nari Kallyan Shangho

March 2018

## **Acknowledgements**

Enthusiasm and support of Naina Minhas (Manager, Nari Kallyan Shangho) is gratefully acknowledged. Research Advisory Group, comprising of Naina Minhas (Manager, NKS) Lesley Morrison (Manager, Digital Skills Academy), Smita Grant (Service Manager, NHS Lothian Minority Ethnic Health Inclusion Service), Michael Ellis (Tap into it) and Honor Loudon (NKS Board member) provided extremely valuable advice for this study. Thanks are due to Matthew Bakewell (Digital Inclusion Officer, Digital Skills Academy) for his role in leading the delivery of the training pilot sessions and to Susan Sim (Edinburgh College) for sharing her extremely valuable insights. Leena Khan and Sameena Quayum are acknowledged for conduct of the survey and Humera Adnan for providing administrative support throughout the project. Tatheer Fatima and Sana Khalid are acknowledged for the conduct of training pilots.

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Thanks are due to the staff and service users of NKS who shared their views and volunteered to participate in the training pilot.

Above all the funding received for this study from the Scottish Government's Aspiring Communities Fund is gratefully acknowledged, without which this project would not have happened.

## **Executive summary**

### **Study aim**

NKS works to make South Asian women active citizens by supporting them to access mainstream services; it builds their capacity and confidence, connects them to their local communities and provides opportunities that would help increase their employability. In recent years there has been a concern raised by the workers and users of NKS that the women lacked digital literacy and were unable to access mainstream health and care services on their own. The aim of this study was to establish a baseline of digital literacy learning needs of South Asian women.

### **Research methods**

The research utilised an online survey, interviews and group discussions. Views from three target groups were obtained: a) South Asian women; b) Community workers (NKS employees); and c) partner agencies delivering basic computer training to disadvantaged groups in Edinburgh (Digital Skills Academy and Tap into it)

### **Key findings and recommendations**

A majority of those who responded to the survey were housewives. Most respondents had access to computers (84%), touchpads (82%) or smart phones (92%). However, those who actually used large screen devices was significantly less; 50% for computers and 55% for touchpads.

While a majority of South Asian women are aware of the range of functions that can be performed on various digital devices, the number who perform these activities on a regular basis (e.g. once in three months) is small. Activities regularly undertaken by a majority (>50%) are watching online films and using WhatsApp and video-chatting on mobiles.

Advanced skills such as banking, paying bills online, filling online applications or using online help to solve problems, are the least executed (<25%) activities by South Asian women. Wide variation of skills was apparent amongst those surveyed.

The study showed that a lack of English language skills is a deterrent to digital literacy.

Existing gender norms in which women undertake domestic responsibilities, while men perform computer related activities appear to be barriers to digital literacy amongst women.

Completing online applications (followed by looking up online information) was found to be the major motivation for digital literacy.

Enhancement of digital literacy amongst South Asian women requires appropriately trained bilingual trainers.

Developed training programmes need to emphasise the importance of self-directed learning to help learners go beyond what is taught in the classroom and apply their learning to varied situations.

Appropriate incentives such as provision of childcare support are required to ensure digital literacy training is given priority and attended with punctuality.

Training classes need to be divided on the basis of learning needs and levels. The training programme should be flexible to cater to variable digital literacy skills.

Images and scenarios relevant to learners, some of which could be from their country of origin need to be included. Programmes should encourage use of English in general.

Programmes should include confidence building measures to assure users that equipment cannot be readily damaged. Measures to avoid phishing attempts and hoaxes need to be highlighted without alarming the learners.

Small group classes (five to ten participants) are likely to be most successful. The delivery needs to consider sections of the training content where: (a) one to one support could be provided; (b) where learners are expected to follow on screen instructions; and (c) where learners are expected to show how they have applied their learning.

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# 1

## Introduction

### 1.1 Background

Nari Kallyan Shangho (NKS) has been supporting ethnic minority women from South Asian communities in Edinburgh for over thirty years. The organisation aims to alleviate deprivation and isolation experienced by women and their families from these communities and to promote positive health and well-being among them. NKS works to make South Asian women active citizens by supporting them to access mainstream services; it builds their capacity and confidence, connects them to their local communities and provides opportunities that would help increase their employability. In recent years the need for promoting digital literacy to enable access and participation in the increasingly digital world has been voiced by the workers and users of NKS.

NKS service users who were earlier self-dependent and communicated with health and care services through phone or via one to one meetings (often with interpretation support) started to feel disadvantaged due to their lack of digital skills. Digitalisation of public services without appropriate support had resulted in many NKS service users to increasingly rely upon help from others. This gap between those skilled in digital technology vs those who were not, had created a potential for isolation and exclusion not only from the mainstream society but also from their own communities and social networks.

### 1.2 Aims of this study

The overarching aim of this study was to establish a baseline of digital literacy learning needs of South Asian women. Specific aims were as follows.

- To highlight issues related to access, current use and skills in using digital tools
- To identify existing barriers to learning
- To establish motivations for learning
- To gauge learning culture/skills and consequent support requirements
- To inform the development and delivery of the training pilot sessions

## Digital literacy

### 2.1 Definition and elements

Digital literacy is understood as **those capabilities which fit an individual for living, learning and working in a digital society.**

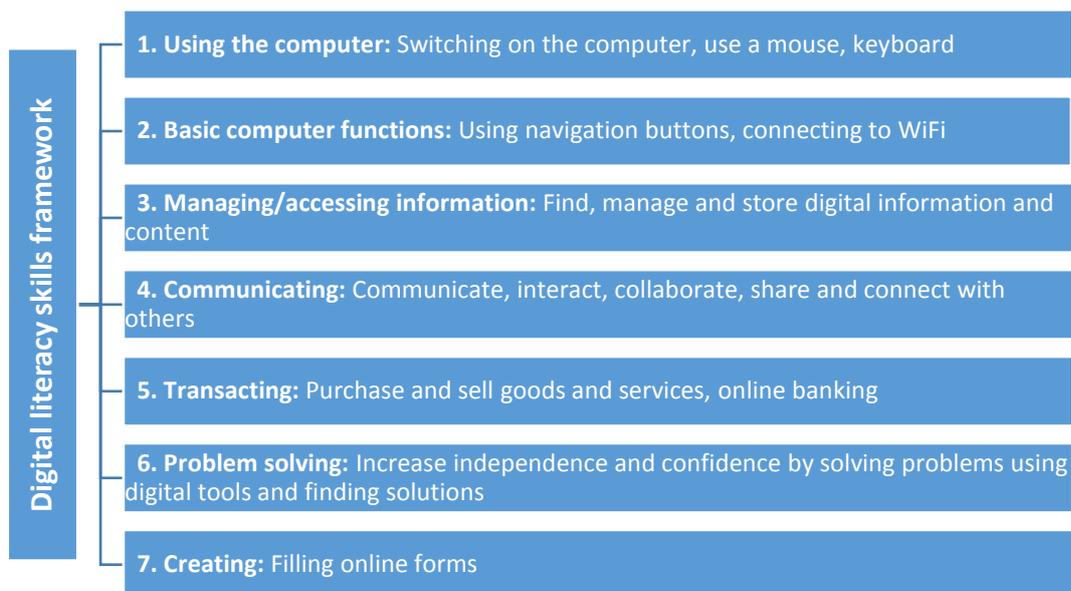
**“Digital literacy looks beyond functional IT skills to describe a richer set of digital behaviours, practices and identities. What it means to be digitally literate changes over time and across contexts, so digital literacies are essentially a set of academic and professional situated practices supported by diverse and changing technologies.”**

[www.jisc.ac.uk/guides/developing-digital-literacies](http://www.jisc.ac.uk/guides/developing-digital-literacies)

It is clear that in order to participate and take advantage of Information and Computer Technology, individuals must be digitally literate. Digital literacy has been presented as comprising of 7 elements (Sharpe and Beetham, 2010):

1. *Communication and collaboration.* Participate in digital networks such as Facebook, email, Skype, WhatsApp
2. *Information literacy.* Find, interpret, evaluate, manage and share information
3. *ICT literacy.* Adopt, adapt and use digital devices, applications and services
4. *Learning skills.* Study and learn effectively using technology (formal and informal)
5. *Career and identity management.* Manage digital reputation and online identity
6. *Media literacy.* Critically read and creatively produce academic and professional communication in a range of media
7. *Digital scholarship.* Participate in emerging academic professional and research practices that depend on digital systems

It appears that competency domains 1, 2 and 3 are the foundation for digital literacy before progressing to the others. However, for the purposes of this research, a simplified version of the framework developed by the Tech Partnership ([www.thetechpartnership.com/basic-digital-skills/basic-digital-skills-framework/](http://www.thetechpartnership.com/basic-digital-skills/basic-digital-skills-framework/)) was used. The framework has five elements to which two additional basic skills (items 1 and 2 of Figure 2.1) were added.



**Figure 2.1:** Digital literacy skills framework (adaptation of basic digital skills framework, The Tech Partnership) [www.thetechpartnership.com/basic-digital-skills/basic-digital-skills-framework/](http://www.thetechpartnership.com/basic-digital-skills/basic-digital-skills-framework/)

## 2.2 Usage of digital technology

The Statistical Bulletin (2017) of the Office for National Statistics (ONS) suggests that there has been a constant increase in the use of internet across the UK as a whole. It suggests that in 2017, 90% of households in Great Britain had internet access. Access to internet ‘on the go’, using mobile phones or smart phones had also more than doubled since 2011. The trends also suggest that increasing number of people are purchasing goods online with 77% of adults buying goods or services in 2017 as opposed to 53% in 2008. The most popular items purchased were clothes and sports goods which comprised 56% of the purchases. However, age was found to be a factor in the use of mobile digital tools.

Regarding the most popular activities on internet, the ONS report suggests that 82% of adults had sent or received emails in 2017. The second most popular activity on the internet was finding information about goods and services (71% of adults). Younger adults (25 to 34 years) were most likely to buy products online from outside the UK and those aged 65 and over were least likely to do so. There was a gender difference in online activity too. Men were more likely to purchase online from outside the UK than women.

Scotland specific data (Scottish Household Survey, 2016) suggests a rising trend in households having access to internet. In 2016, the survey found that 82% of households had access to internet and it varied with income levels. A small percentage of adults (3%) living in a household with a total net income of £40,000 or more did not use the internet in 2016 as compared with a third (36) of those in the £6,001-£10,000 bracket. These trends suggest that while there is access to digital technology, it is not used in a uniform fashion across the population.

## 2.3 Digital exclusion

The digital revolution has meant that more and more services are being delivered through the internet. Being digitally literate is increasingly becoming an expectation from all concerned. Online delivery of healthcare is one of the most fundamental changes affecting our lives. The development of new applications are expected to help people in coping, monitoring and managing their long term conditions; for example a wide range of applications are now available for diabetes. The Scottish Government Digital Strategy (2017) states:

“we put digital at the heart of everything we do - in the way in which we deliver inclusive economic growth; reform our public services; prepare our children for the workplace of the future; and tackle inequalities and empower our communities”. (Scottish Government, 2017)

However, it is clear that not everyone is skilled and confident in using this technology. Thus the benefits from these innovations accrue disproportionately towards the digitally literate. The Scottish Governments’ plan for digital Scotland recognises that the issue is not about majority being digitally included but about including those who remain offline or are not confident in using the digital technology.

There is no doubt that the potential of digital technology in empowering, tackling inequalities and inclusion is immense (The Royal Society of Edinburgh, 2014). The question is whether everyone (particularly minority ethnic communities, older adults, women) is equally prepared to take advantage of the new technology. The digital technologies can be particularly valuable to those at risk of social exclusion (e.g. ethnic minorities, the elderly, those with disabilities, communities formed around language and sexual orientation) (Mesch, 2016); so it is important to ensure that these groups are digitally literate.

E-health is seen as enhancing reach, delivery of healthcare and democratisation by improving access of disadvantaged groups to healthcare services. Digital Health and Care Scotland through their Technology Enabled Care Programme (<https://sctt.org.uk/drafts/technology-enabled-care-programme/>) emphasise the contributions that technology can make to individual lives through empowering people to become actively engaged and self-manage their own health through technology (e.g. having access to own Electronic Patient Record; tele-health and tele-care). Recent research conducted by Scotland’s Citizen’s Advice Bureau (Beattie-Smith, 2013), highlights the exclusion of their clients in accessing public services due to lack of digital literacy. Some of these users were identified as having a disability or a health condition; they struggled to use online services to apply for benefits or for jobs online. The study showed that about half of the clients of Citizen’s Advice Bureau did not have an internet connection and computer at home and a third had not used it. The digital divide can thus create a differential between those who can benefit from the digital opportunities and those who cannot (Bartikowski, 2017). This gap can create and in some cases further enhance existing social inequalities (Zillien and Hargittai, 2009). A European survey (Kummervold et al., 2008) conducted in 2005-2007, investigated

patterns and trends of internet use for health purposes. It found that the usage had steadily increased for accessing health information and its importance as a communication channel had been rising for patients as well as professionals.

Access to big screen devices are seen to promote economic value creating activities (e.g. buying and selling online, applying for jobs, online education) as opposed to small-screen devices (World Bank, 2016). Recent studies conducted in the US have shown significant differences in the way ethnic minority and majority consumers access and use the internet (e.g. Zickuhr and Smith, 2012). These studies suggest that minority ethnic populations used smart phones for emailing, social networking, purchasing online or listening to the music more frequently than the majority populations. The ethnic minority consumers were found to be more likely to use smartphones as their dominant tool or only mode of internet connection (Zickuhr and Smith, 2012). At the same time it has been recognised that the use of smart phones as compared to regular computers can lead to more shallow type of information processing and creates less economic value (Dunaway et al., 2015).

A recent study conducted in Israel (Mesch, 2016) suggests that ethnic minority groups are more motivated than the majority to use internet to access medical information, but are less likely to use e-health services. Another study conducted in five countries (Bangladesh, Brazil, Chile, Ghana, and the Philippines) explored gender differences in ICT provision (Rashid, 2016). Computer and internet use by women in Bangladesh was lower than women in other countries that were part of this study. The reason provided was that many women in Bangladesh were not sufficiently educated to be able to use digital tools at home.

Age, gender, education, learning skills, available social support and socio-economic position have been highlighted as factors that impact on having internet skills. The importance of the role of friends and family as being central to helping people learn digital skills and become internet users is also emphasised (van Deursen and van Dijk, 2011; Diffley et al., 2015). Friemel, 2016; van Deursen and Helsper, 2015).

# 3

## Research methods

### 3.1 Establishing a baseline

To inform the research process discussions were held with the project manager and staff of NKS who were directly involved in supporting the service. The focus of these meetings was to get insight into the issues that are important for the target group and could be included in the investigation. Meetings were also held with Digital Skills Academy and Tap into it, which have been providing digital literacy training in Edinburgh.

### 3.2 Accessing target groups

Discussions with community workers revealed that NKS service users who attended various support group sessions could be accessed for the research. These support groups are facilitated by bilingual group leaders who could provide interpretation support for this research if needed. Five such NKS groups being held on a weekly basis were identified. These were: 1) Urdu/ Hindi/Punjabi speaking group – all ages; 2) Urdu/ Hindi/Punjabi speaking group – older age; 3) Bangla speaking group – all ages; 4) English speaking younger women's group; 5) ESOL group – those who had limited English speaking competences. Initial contact was made and information about the project was provided to women to allow them to decide if they wished to participate in the research.

A few other organisations providing support to South Asian women in Edinburgh were also identified. An initial email was sent to the project leads, which was followed up with a telephone conversation. A flyer providing an overview of the research project was emailed to them.

### 3.3 Survey and focus groups for South Asian women

#### 3.3.1 *Development of survey questionnaire*

To explore the experiences of service users from South Asian communities, a survey questionnaire was developed. A range of themes identified through earlier discussions with staff and partners are summarised as follows:

- Demographic information
- Prior learning and education
- Language and interpretation needs
- Self-assessed competency in English as a second language (6 ESOL competences were used)
- Knowledge of everyday digital tools and terminology
- Access to computer and remote digital tools at home

- Use of remote digital tools at home
- Barriers to use of computer and remote digital tools
- Digital activities that the participants would find most useful in their day to day lives
- Prior training in ITC
- Motivations to learn and support from family and friends in accessing digital technology
- Learning environment and what worked well for them

The digital skills framework as discussed earlier was used for the evaluation of digital capabilities.

Also, a specific question on purposeful digital activities that would be most beneficial to the target population was created. The survey questionnaire (Appendix 1) included closed questions which were asked to obtain factual information and open ended questions to capture experiences of the individuals on various issues. The questionnaire was piloted with users and staff for content and clarity. Feedback from the piloting was collated and after discussions with the Research Advisory Group amendments were made.

### *3.3.2 Delivery of survey questionnaire*

To provide language support to survey participants, two bilingual interviewers were recruited; one who was proficient in English/Bangla and the other in English/Hindi/Urdu/Punjabi. The interviewers were provided training by the researcher in conducting the survey and were informed of data protection and ethical issues. Since these workers were also from South Asian backgrounds they were well aware of the cultural sensitivities. They were in constant contact with the researcher to discuss issues that arose and seek advice when required. To ensure they understood their roles, some practice sessions were held with them to help them feel confident in this task.

While some research participants needed intensive language support, others filled the questionnaire themselves. In some cases, the interviewers visited the survey participant's homes to get the questionnaire filled, while in other cases, the questionnaires were filled through telephone conversations. A total of 89 completed questionnaires were received.

Three focus groups were held with women of all ages in which interpretation support was provided for Bangla, Hindi/Urdu, and Punjabi. Notes were taken and the discussions were recorded for further analysis.

### 3.4 Other interviews and discussions

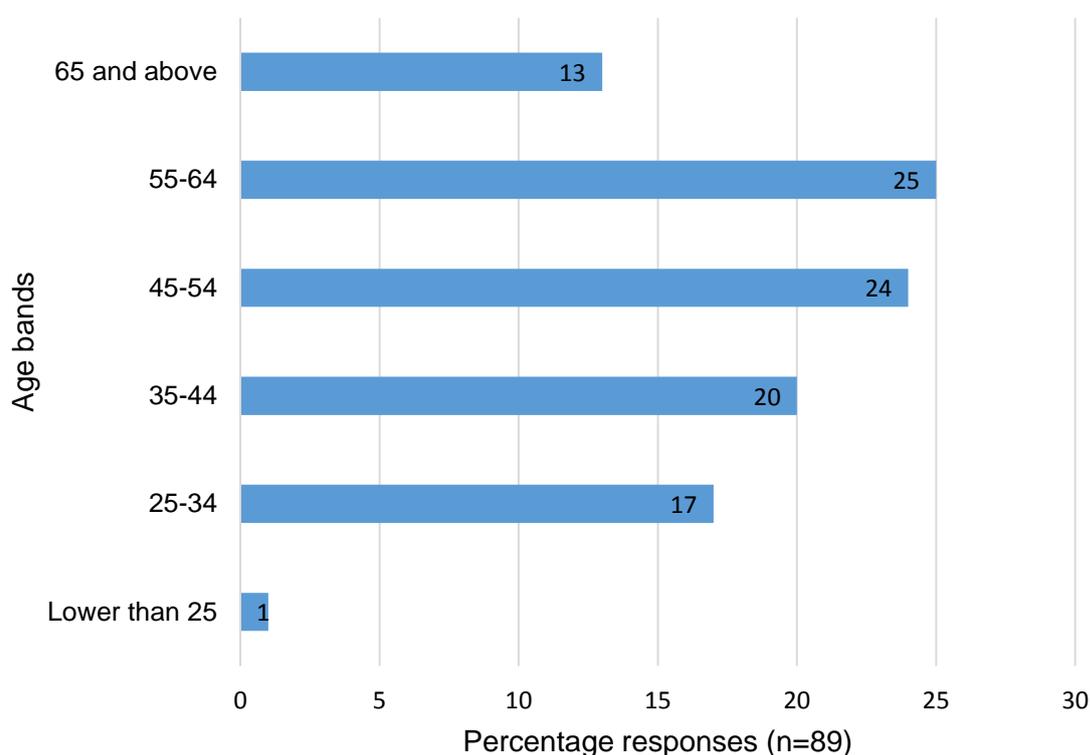
One to one interviews with community workers providing day to day support to the South Asian women were held to gauge their experience of supporting South Asian women; their own motivation for learning; their experience of barriers to learning faced by the service users; and what works when providing learning to them.

One interview was held with the ESOL (English for speakers of other languages) teacher who delivers weekly lessons in English to the South Asian women at NKS. The focus of the discussion was to find out what had worked in delivering lessons to women who had little or no literacy skills. The discussion focused on the ways in which barriers faced by women were navigated to provide them with a person-centered learning experience.

Meetings were held with two NKS project partners to discuss the development of digital skills training for South Asian women.

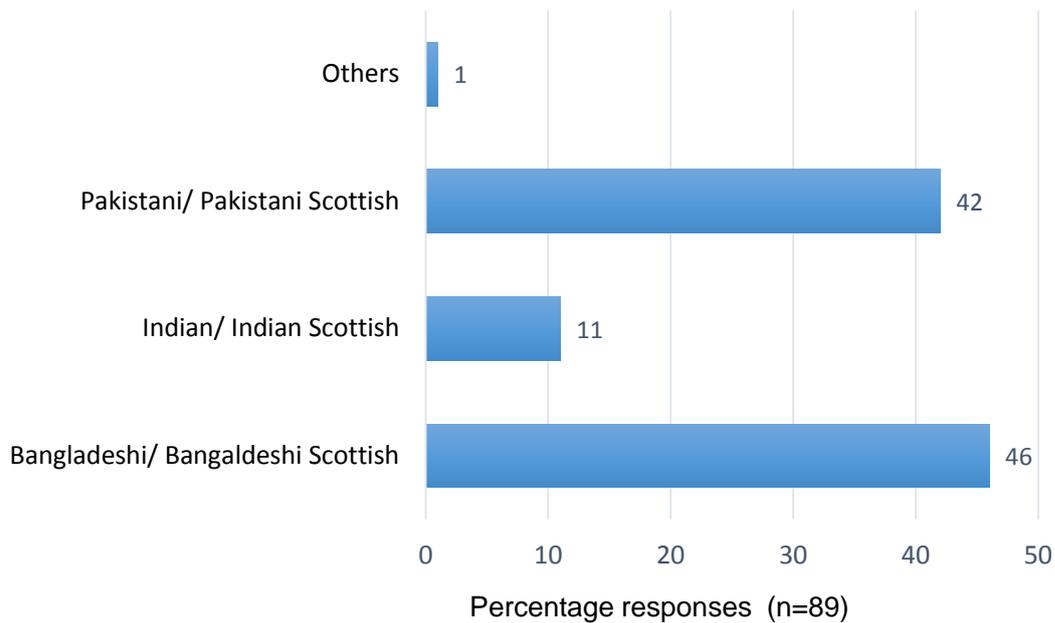
### 3.5 The survey participants

Of the survey respondents (n=89) two thirds were above 45 years of age and less than 20% were below 34 years of age (Figure 3.1).



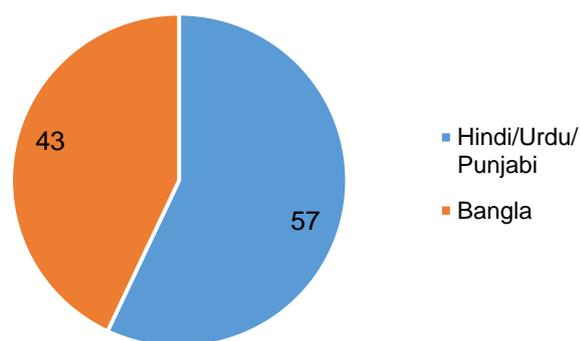
**Figure 3.1:** Percentage responses received from survey participants of different age bands

Most of the survey respondents identified themselves as Bangladeshi/ Bangladeshi Scottish, Pakistani/ Pakistani Scottish and Indian/Indian Scottish (Figure 3.2).



**Figure 3.2:** Ethnicities of participants responding to the survey

A majority of the survey respondents had Hindi/Urdu/Punjabi as their first language (Figure 3.3). The rest identified Bangla as being their first language.



**Figure 3.3:** Percentages of survey respondent's first language (n=89)

### **3.6 Analysis**

The data emerging from the surveys was exported to Excel (Microsoft Office) for further analysis. Notes from the interviews and recordings were compared. The themes emerging from the survey, focus group and interviews were combined to develop themes for presentation in the report.

### **3.7 Ethical considerations and informed consent**

The survey provided information to research participants about the project. It provided an outline of the aims of the research and briefed them of the confidentiality and anonymity of the data collected. The prospective research participants were also handed flyers that provided information and contact details so that they could enquire about the project if they wished. The interviewers for this project were recruited for their bilingual skills. Appropriate training was provided to them by the researcher along with guidance on ensuring anonymity and confidentiality of data accessed through the research. Opportunity to ask further questions was also provided.

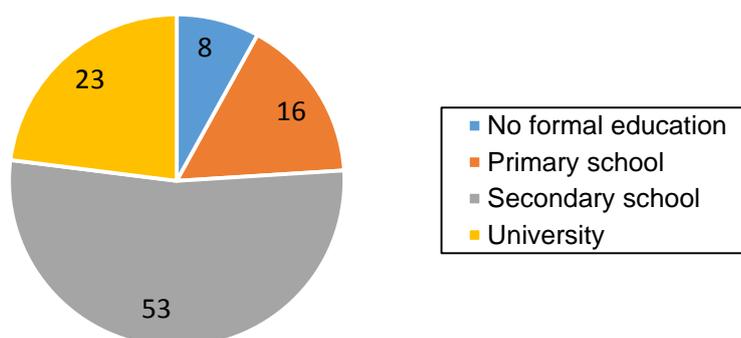
# 4

## South Asian women – Status of digital literacy

### 4.1 Current status of education and literacy

#### 4.1.1 Highest education

Over half of the participants (53%) had been to a secondary school (Figure 4.1). A small proportion of the respondents had no formal education (8%) and 16% had only attended primary school. About a quarter said they had university education. The data indicated that most participants had had their education outside the UK and in their native language.

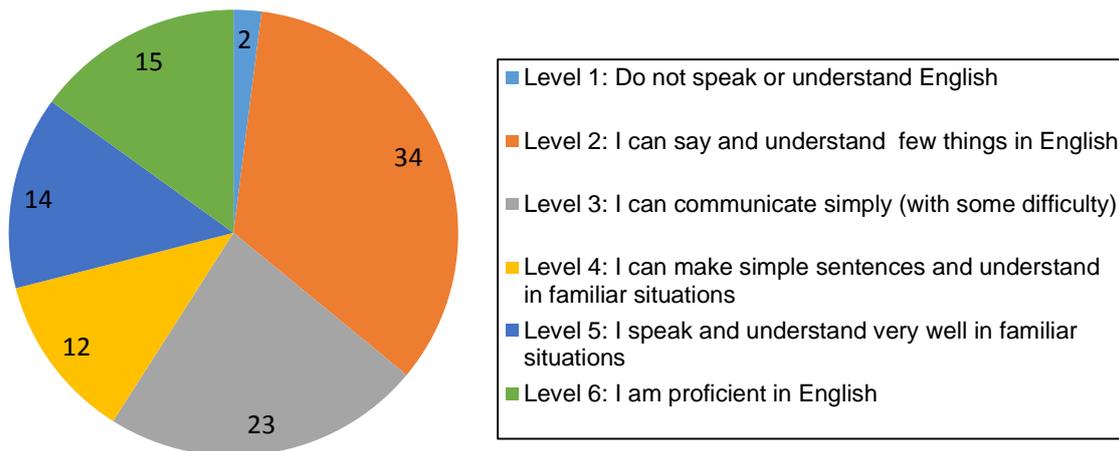


**Figure 4.1:** Levels of highest education achieved by survey participants (percentages, n=98)

A minority of respondents have attended English classes in Edinburgh. Some were in education when they got married and did not engage in formal learning after that.

#### 4.1.2 English as a second language –self-assessed competency levels

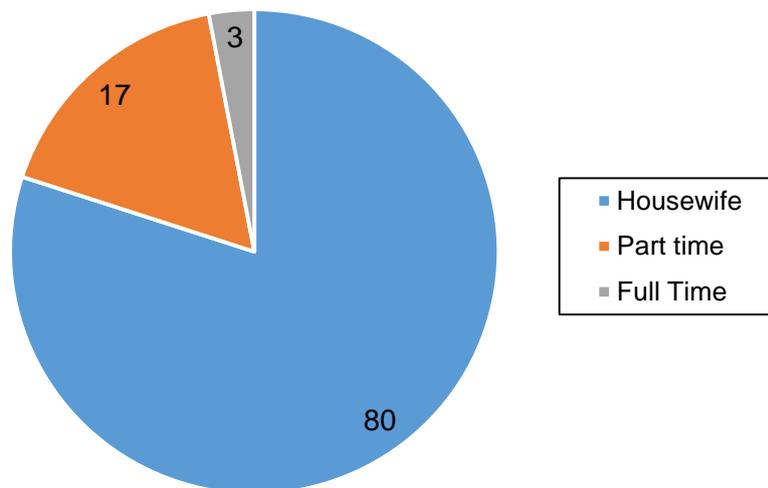
The survey asked women to tick one of the six competences in English as a second language. As shown in Figure 4.2, a majority of respondents (69%) were able to engage in simple day to day communication, from understanding some English to making simple sentences in familiar situations (Figure 4.2 levels 2, 3 and 4). Less than a third (about 30%) felt that they could speak and understand very well and/or were proficient in English (levels 5 and 6). Since the competency levels were self-assessed they are subject to differences in understanding and interpretation of what was being asked.



**Figure 4.2:** Self-assessed competency levels in English language (percentages, n=89)

#### 4.1.3 Employment status

The survey responses provide an insight into the employment status of the respondents. An overwhelming majority (80%) noted that they were housewives; while 17% worked part time and 3% were employed full time (Figure 4.3).

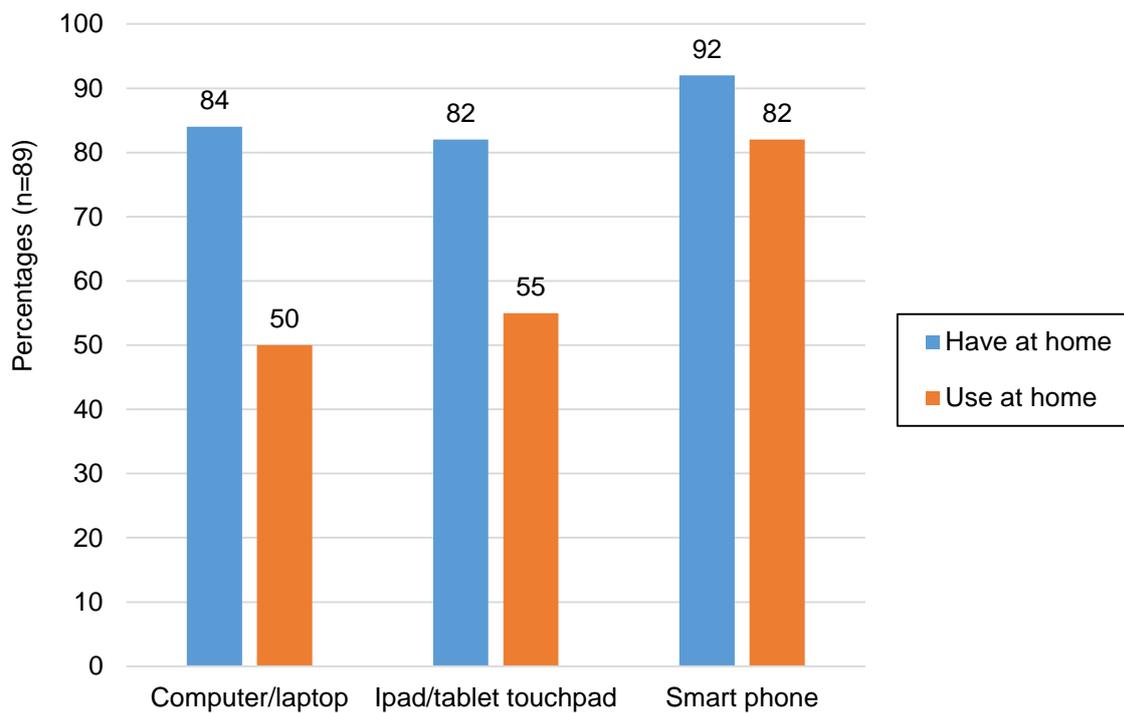


**Figure 4.3:** Current employment status of survey participants (percentages, n=89)

The survey also asked the participants if they had worked before and what the nature of that work was. Most commonly cited roles were: shop assistants, carers, administrators, customer services assistants, call centre workers, child care nursery workers and voluntary roles. The roles and responsibilities of the jobs suggest that some of them would have had exposure to the computers and digital technology.

## 4.2 Digital tools – access and use

Access to technology and usage at home are seen as important factors in promoting digital inclusion. The survey suggested that a majority of women (84%) had access to computers, 82% had access to iPads/tablets/touchpads and a further 92% had access to smart phones (Figure 4.4). However, those who actually used the tools at home was considerably less; only 50% for computers and 55% for iPads/tablets/touchpads. Not surprisingly 82% of the participants use smart phones regularly.



**Figure 4.4:** Access to digital tools and usage at home by survey participants

### 4.3 Digital literacy skills

The digital literacy skills framework discussed earlier was used to establish the knowledge and skills of the survey respondents. Questions shown in Table 4.1 were presented to the participants.

**Table 4.1:** Digital literacy skills framework and actions

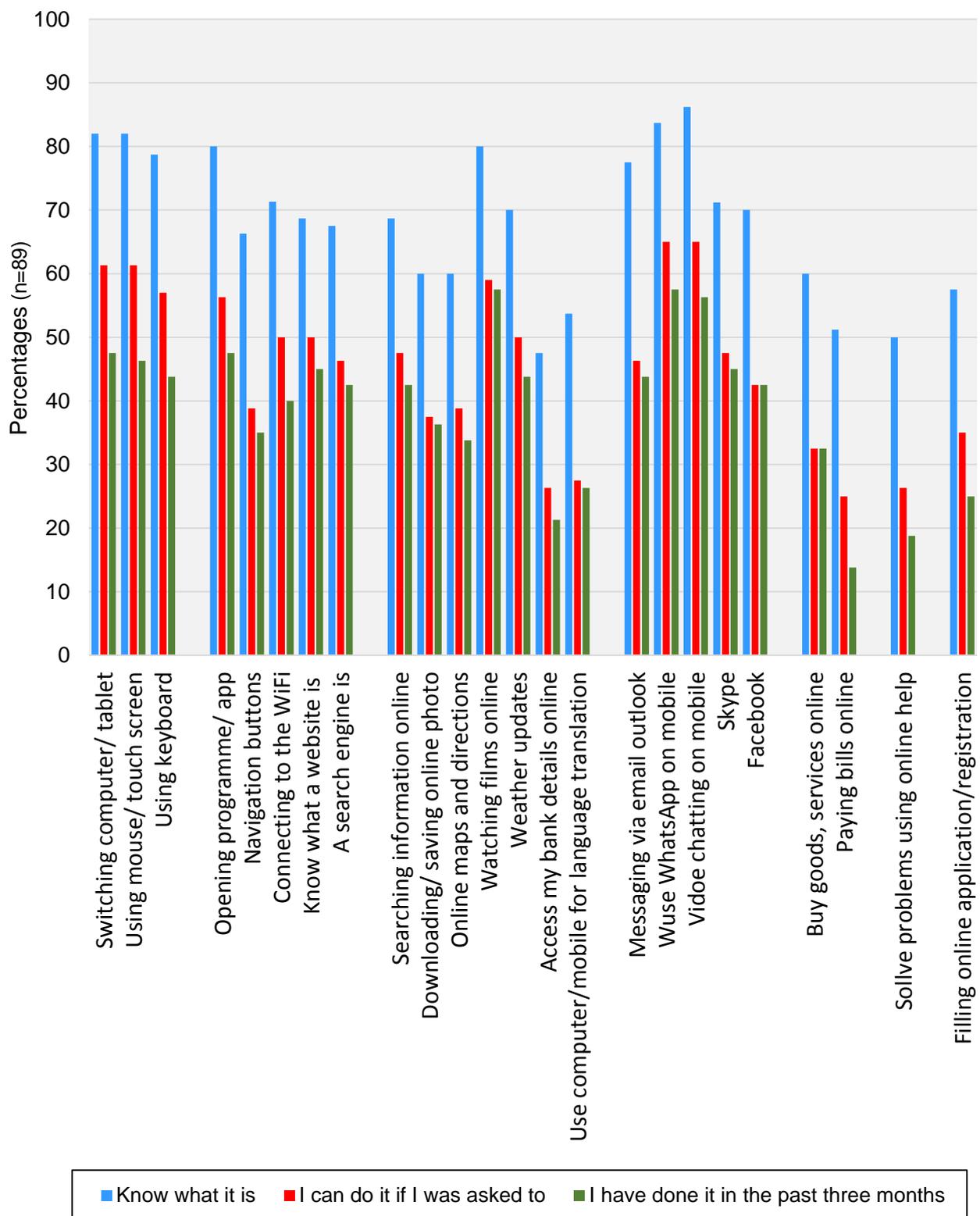
Skills	Actions
Using the computer/iPpad	Switch on a tablet/iPad Use a mouse/touch screen Use a keyboard
Basic Functions	Open a programme/app (e.g. <i>Internet Explorer, Photo Viewer, Outlook, Skype, YouTube</i> ) Use the navigation buttons (e.g. <i>go to previous page; clicking links; moving in between folders</i> ) Connect to the WiFi Use Google to search for a website
Managing/ accessing information	Search for information online (e.g. <i>health information, prices of goods, news</i> ) Download/save a photo found online Look for maps and directions Watch films (e.g. <i>on YouTube</i> ) Check for weather updates Access bank account details online Use computer/tablet/mobile to translate in English
Communication	Send personal message to another person via email or online messaging service (e.g. <i>Outlook</i> ) Use WhatsApp on mobile Video chat on mobile Use Skype Use Facebook
Transacting	Buy items or services from a website/app (e.g. <i>online shopping, food, clothes, cinema tickets</i> ) Pay my bills online
Problem solving	Solve a problem using online help
Creating	Complete online application/registration forms which include personal details (including job applications)

The survey asked the participants to respond to digital skills related questions at three different levels: (a) if they were aware of the listed digital terminology/actions; (b) if they could do specified activities; and (c) if they had undertaken the specified activities in the past 3 months.

### 4.4 Self-assessed awareness, skills and application of digital literacy skills

A majority of survey respondents were aware of the existence of almost all of the listed actions (Figure 4.5, blue bars) with a large proportion (70% to 86%) being aware of activities related to the *Communication* skill (e.g. Skype, Facebook, WhatsApp and video-chatting). Similarly, a large majority of respondents (60% to 82%) were aware of the basic computer related terms associated with *Using the computer* and *Basic functions* (e.g. mouse, screen, keyboard, websites), more than half of the participants (50-60%) knew about *Transacting*

(e.g. online shopping, paying bills online). Only half the respondents knew about online guidance to solve problems and more than half participants (58%) were aware of filling online applications.



**Figure 4.5:** Awareness, skills and application of digital skills of survey respondents

Next the study evaluated the self-assessed skill levels by asking the respondents if they could undertake specified actions (red bars of Figure 4.5) and if they had undertaken them in the past three months (green bars of Figure 4.5). As would be expected respondents who claimed to be able to undertake specified actions were consistently smaller than those who were merely aware of them. Those who had undertaken the specified actions in the past three months were even smaller. Important readings from this data are as follows:

- *Using the computer and Basic functions* – Over 50% of the participants had the skills to switch on the computer, use the mouse, open a programme and over 40% of them had done it in the past three months.
- *Managing/accessing information* – Lower percentages of participants had searched for information online (about 43%). About a third of participants had looked for maps and directions or saved a photo they found online. A quarter of participants felt that they knew how to access their bank details online but only a fifth had done it in the past three months. Similarly, around 27% of participants felt they could use computers for language translation and had done so in the past three months (26%).
- *Communication* – Activities in this domain scored the highest. For example, 65% of respondents assessed had skills for using WhatsApp; 65% for video-chat, a lower 47% for using Skype and 42% had skills to use Facebook.
- *Transacting* – Only a third of respondents (32%) felt they had the skills to buy items online. However, only a quarter of the respondents said that they could pay bills online but only 14% had done it in the past three months.
- *Problem solving* – This domain asked participants if they could solve a problem with a device they had or by using online help. Only a quarter of respondents said they could do it but only about 19% had actually done it in the past three months.
- *Creating* – About 35% of respondents knew how to complete online applications which include personal details, including job applications and a quarter of the respondents had done so in the past three months.

#### **4.5 Barriers in using digital tools**

The survey and focus groups provided an insight into the range of barriers experienced by the respondents in accessing and using the digital tools at home. Some participants who did not use computers felt that their children and other family members would not encourage them to use it and offered instead to do the tasks themselves. They felt that they were sometimes reluctant to teach them how to use digital tools.

I have no experience using computer and iPad. My children don't teach me. My relatives learn from their children.

I never had a reason to use it. My husband uses it and he explains it to me if needed.

I don't know how to because of family restrictions.

My children have computer/laptop. They do not let me touch it, they think I will do something wrong there. I am not interested.

Some respondents felt that their lack of ability to read and write English had an impact on their ability to use internet and digital tools.

My English is not good enough for using the computer. I have learnt little English by myself.

I find learning computer difficult and my English language is weak.

My writing skill is not very good, so I am afraid I'll make mistakes.

Some participants felt that they did not have the time to use the computers due to housework, while others were of the view that since smart phones met their day to day needs they did not need to use computers.

I don't use computer as I use my phone.

I don't use computer because I use iPad, I find it easier and it's simple to use.

I only use my phone as my resource.

I have used the laptop, but I have no knowledge or understanding of using it, I do switch it on but I don't use it much. I can use the phone, I download songs, duas and watch movies.

The smart phone appeared to be the tool of choice. The focus group discussions suggested that the mobile phones were used for a wide range of purposes which included communication with family and friends; searching for information, weather updates and to read the news. The participants felt more comfortable and confident in using the mobile phone and used apps that made networking with friends and family easy. Some others did use computers often to a limited extent.

I don't understand anything because it is explained to me very fast.

I have tried using computer, but I don't understand it properly.

#### **4.6 Motivations for learning**

Participants responding to the question on what would motivate them to learn more provided a number of reasons. They wanted to feel independent and not rely on others.

I would not need to take help from others. I do not like asking for help from others. I like being confident and self-sufficient.

Some younger participants who had school going children felt that they needed to keep pace with the changing world and not be left out. They shared their concerns about letting children access internet without knowing how to supervise them. They wanted to make sure that they understood what their children were doing online and could keep them safe.

For some participants motivation for learning to use digital tools was to keep in touch with the family members both within UK as well as in their country of origin. Those looking for employment felt that having digital skills would help in improving their job prospects. The respondents that had basic knowledge of using computers felt that they needed to learn more to be able to meet prospective job requirements. This group felt that skills for using

Microsoft Word, Excel and Outlook would help them with their job search.

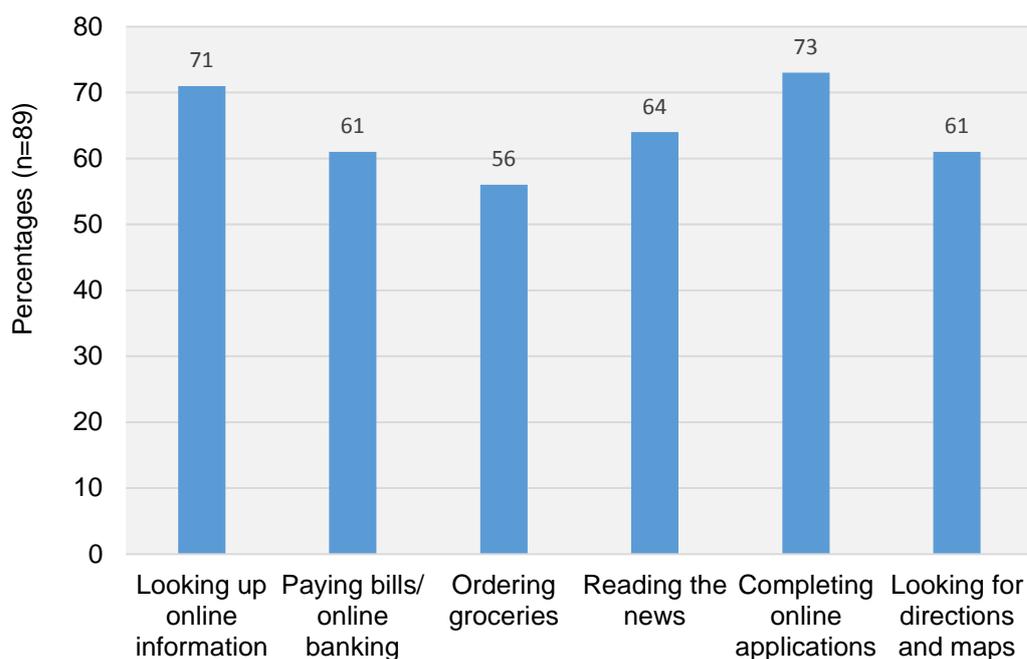
Some older participants who did not have computer skills felt that they had lost out on job opportunities and that they wanted to get back on the employment ladder. They felt that using apps properly in their day to day life would help them be more independent.

Internet security and fraud was raised as an important motivation to learn more. Many participants wanted to become aware of the danger, managing internet security and fraud and how to keep safe. Dangers of social media and identity fraud were repeatedly raised as concerns.

Participants who had negative experiences of using the internet were not sure where they could get guidance and advice if and when things went wrong. Many participants were keen to learn how to use online help to resolve problems.

#### 4.7 Most useful digital activities – the learning need

Activities listed in Figure 4.6 were those that the participants wanted to learn more about as they engaged with them in their day to day lives.



**Figure 4.6:** Learning needs of survey respondents

- Looking for information online - A majority (71%) of respondents were keen to learn about browsing the web to look for information, particularly on health and wellbeing.
- Similarly, about two thirds (64%) of respondents were interested in reading the news online particularly from the country of their origin.

- A majority (61%) wanted to learn how to undertake financial transactions online safely.
- A majority (61%) of the respondents were keen to learn about using the navigation apps as these were seen to be important when travelling alone.

#### **4.8 Learning style**

Discussions were held with an ESOL (English for speakers of other languages) teacher who had considerable experience of teaching South Asian women. She felt that learning styles varied considerably depending upon where the concerned group had had their early education. Often the learners were more accustomed to learning by rote as opposed to self-directed learning and therefore unable to apply their learning to situations which may vary from the examples that are considered while learning. The English language profile of the learners from these communities could be “spiky” as they develop their speaking skills but not their reading or writing skills. The need for women to be independent self-directed learners and be able to access the computers and practice it themselves was emphasised.

It was suggested that to ensure an effective learning environment, the following need to be considered.

- Getting to know the learners and what interests them
- Making the lessons fun and at the same time useful to motivate people to learn
- Working with images and scenarios from the country of origin
- Building confidence of the learners through using simple English website
- Using Google translate to help with pronunciations
- Providing screen shots of what needs to be done
- Having visual materials for digital skills learning can be very useful
- Inculcating skills to learn independently (self-directed learning)
- Providing one to one support

Key good practice points noted were:

- The class should be divided according to individual learning need, level and age
- There should be enough computers or support in bringing your own laptops/iPads
- Bilingual teachers and not interpreters should be used
- The training venue should be easily accessible.
- There should be support to develop self-directed learning skills
- Subject matter and context should be made relevant to the learners
- Certificates at the end of the course should be provided as an incentive

## **4.9 Training needs of community workers of NKS**

As discussed, interviews were held with community workers of NKS. They felt that many South Asian women lacked confidence when accessing services online as they lacked English language skills in addition to lack of digital literacy. The staff had to support them on a one to one basis which added to their work load. The staff felt that if they themselves were better skilled and confident they would be able to support the women better. They were also keen to learn and be better qualified for new opportunities that might arise for themselves. They identified their own digital literacy learning needs as follows:

- Enhanced understanding of office tools such as: Excel, Word and Outlook
- Using maps and navigation tools
- Learning online shopping, banking and paying bills
- Filling on-line job applications
- Providing and receiving online feedback
- Internet safety and protection from scams, hoaxes and viruses

## **4.10 Experiences of project partners**

Meetings were held with training managers from the two partner agencies who deliver digital literacy training which included older people (including those living in sheltered housing) and those looking for jobs. The partners were keen to work with NKS to ensure that all who need digital literacy have access to it. They put forward some ideas for partnership working which were as follows:

- Teaching English language along with digital literacy skills
- Developing competences of community workers so that they could become digital champions for their communities
- Sharing training materials for adaptation for use by South Asian women

The partners were keen to work alongside NKS to develop digital literacy training and learn from the training pilot. They shared their training materials and the digital literacy skills framework which has been used in this study.

# 5

## Digital literacy training pilot

The research findings discussed earlier were used by the Digital Skills Academy (DSA) to develop two sets of taster training courses for: 1) service users and 2) community workers. The purpose of the training sessions was to address the emerging digital literacy learning needs, barriers and motivations of the service users and the community workers and enable them to use digital technology with confidence.

### 5.1 Planning and delivery of training sessions

#### 5.1.1 Pre-training skills assessment

**Service users:** Thirty-eight survey participants volunteered to participate in the training pilot sessions. The training manager (from DSA) used information available from the survey feedback to develop a ranking for skills based on:

- a) Self-assessed level of competence in English language
- b) Number of devices used by the individual
- c) The age of the participant
- d) Computer classes attended

This ranking list was then used by NKS to contact the participants and find out about their availability. A total of six candidates participated in the training pilot sessions.

**Community workers:** An initial meeting was held between the lead trainer and NKS staff. A digital literacy skills evaluation (using a traffic light system) was conducted to inform staff training and to establish if they had the baseline required to start assisting clients with technology. The training and guidance provided was on how to assist service users and give them one to one training on tablets.

#### 5.1.2 Training delivery and resources

The training was delivered in four sessions each for the service users and the community workers. Each session lasted for two hours and was delivered weekly over a period of four weeks. The training manager (DSA) delivered training for community workers and the training delivered for service users was delivered alongside two bilingual support workers. The equipment used for this training was tablets (Android tablet) which were either provided or brought over by the users. The community workers also used tablets for their training.

To address language barriers, NKS recruited two bilingual support workers who had qualifications/experience in digital technology. Their role was to deliver the training alongside the lead trainer (DSA) and also provide language support and one to one support to service

users as well as community workers in digital literacy skills.

The course content for the service users included: Introduction to digital literacy, getting to know your basics (digital tools), Navigation (Wi-Fi) and Apps, which was based on the skills framework discussed earlier. Training resources were provided by the Digital Skills Academy (<https://cre8te.co.uk/digital-skills-academy/learning-materials-2/>). Issues relating to internet safety and security were considered to be at higher level skill for the service users and hence removed from the course content. The training was delivered at a slow pace for service users to enable language support by bilingual support workers. PowerPoint slides and one to one support was provided to learners. Some presentation slides were translated into Urdu by one of the bilingual support worker.

For the community workers the training was delivered in English. PowerPoint presentations and group discussions were used to raise awareness of identifying and dealing with internet safety and security issues, installation of antivirus on smartphones and laptops and use of You Tube, Snap chat and Instagram. A practical session on security settings for Facebook was provided.

## **5.2 Post training feedback**

Post training evaluation was conducted following the delivery of four training sessions for the service users (6 participants – 4 had Urdu as their first language and 2 had Bangla as their first language) and four sessions for the community workers (5 participants). All community workers were able to communicate well in their first language and in English.

### *5.2.1 Service user feedback*

Of the six service users who volunteered to take part, only half attended all four training sessions. Since the training was delivered at NKS premises, all were familiar and comfortable with the surroundings and knew how to get there. Key themes emerging from the feedback were:

- a) *Training delivery* - The training was developed by a skilled trainer (Digital Skills Academy) and delivered alongside bilingual support workers (NKS). This meant that the learners could get much needed one to one support, they could understand better and could apply their learning in a safe environment. Support provided by trainer and the bilingual workers during training was found to be appropriate by most learners.
- b) *Training materials* – Training materials and handouts provided by DSA were found to be helpful. Power point slides used during training were translated into Urdu by bilingual support worker. This made learning easier for those who had Urdu as their first language as they could understand what was being taught.
- c) *New learning* – Most learners felt that they had learnt something new, such as basics of using Android tablet, Apps, YouTube, setting Google accounts and that they could use tablet on a daily basis more confidently.

- d) *Frequency* – The learners were satisfied with the length and frequency (once a week) of the training sessions. A majority of learners attended at least two sessions of the four provided. The reasons for non-attendance were noted as family responsibilities. They were clear that although four training sessions were adequate as a starting point, they would benefit more if more sessions were made available. This would ensure that they became confident users of computers too and not just tablets and smart phones.
- e) *Level* – All service users except one felt that the basic level suited their learning needs.

### 5.2.2 *Community worker feedback*

A total of five employees of NKS (community workers) attended four training sessions. The community workers felt that the training materials were appropriate and could be readily used to support service users for their internet activities. Group discussions around internet safety and security were found to be very helpful. However, they were clear that these issues required higher level skills for the service users who would also require one to one support. Translation of training materials was one way of making training resources more accessible for the service users.

The community workers further suggested that although the training materials were good for the specific purpose of helping the service users, they did not meet their own digital learning needs. The workers were keen to upgrade their digital literacy levels through a higher level of digital literacy training focussed on their needs. Such training if made available would help them in their role as community workers. They proposed that this training would need to be intensive and would cover digital literacy topics in greater depth. Pre and post training assessments would help establish their learning and certificates at the end of the training would be a great incentive to learn further.

## 5.3 **Feedback from the trainers**

Key learning points and feedback emerging from the trainers is as follows:

- a) *Trained trainer* - A bilingual support worker should be identified to lead training sessions. This lead trainer should have the relevant experience to conduct a training course or at the very least be given appropriate train the trainer training prior to the start of the sessions. The lead trainer could deliver the training (in supervision of a DSA trainer) with additional multilingual support workers who could assist with larger groups.
- b) *Training materials* – The handouts and the slides were felt to be at a higher level and could be translated to help users follow the class better as well as have these as a reference outside of class.
- c) *Pre-training preparations* – Before commencing with any learning, the service users should be given an overview of the entire course and be introduced to the lead trainer. These initial introductions could happen at NKS premises prior to the training

session. The new group should be provided a round table discussion where they are free to discuss their experience and concerns freely and also to create a friendly and social atmosphere.

- d) *Learning plan* – The lead trainer should establish the lesson plan for each session and advise anyone assisting what they will be covering. Servicer users should also be advised the topic of the following session at the end of previous one so that they know what is coming. It is important to stress the potential benefits of each topic and use relevant examples to the client group to ensure they understand why they are covering the said topic.
- e) *Learning discipline* – The learners were found to lack discipline in terms of attendance and punctuality. It was apparent that other competing priorities took preference over training.
- f) *Training venue* – A suitable training venue should be identified and access to the training venue restricted to those involved for the duration of the sessions. This will create a good learning environment without distractions.
- g) *Self-directed learning* – Service users should be supported to take responsibility for their own learning by helping them to develop skills to use big screen demonstrations to undertake activities they are expected to do rather than seek one to one help for everything.
- h) *One to one support* – Although participants are very enthusiastic to learn, their attention span was found to be short. Also the pace of training delivery was slow as the participants required intensive one to one support from bilingual support workers.
- i) *Domestic and child care responsibilities* – In some cases, domestic and child care responsibilities came up as a barrier for some learners. They were unable to dedicate too much time for learning as they had no cover for child care.
- j) *Language support* – Inadequate English language and translation needs meant that a lot of time was consumed in explaining and understanding.

# 6

## Conclusions and recommendations

While there have been a number of studies to evaluate the digital literacy of the Scottish populations (White, 2013; Diffley et al., 2015; Ipsos Mori, 2014), this is perhaps the first study focussed on females of minority ethnic groups. Previous studies on ethnic minority populations have however been undertaken out with Scotland (Bartikowski et al., 2017; Haight et al., 2014; Mesch and Talmud, 2011).

More than two thirds of the participants of this study were from the older age groups (more than 45 years) and came from Bangladeshi (46%) and Pakistani (42%) communities in Edinburgh. A significant majority of the participants were first generation immigrants who had done all their schooling in their country of origin. Further only a minority of the participants were employed part time (17%) or full time (3%).

### 6.1 Conclusions

*English language competency:* It is apparent that a lack of English language skills is a deterrent to digital literacy. While translation facilities (Google.translate.com) are available for websites, they are not ideal.

*Access to equipment:* Availability of digital equipment at home has been seen in the past as an important factor in promoting digital inclusion. While a large percentage of households own the equipment, both large screen and small screen, the number of women who use these is relatively small. In particular, big screen devices computers/laptops (followed by touchpads) are not used by women in the households. Previous studies have suggested the economic value creating activities (e.g. applying for jobs, online education, buying/selling) that are promoted by big screen rather than small screen devices (World Bank, 2016).

*Awareness and digital literacy skills:* While a majority of South Asian women are aware of the range of functions that can be performed on various digital devices, the number who perform these activities on a regular basis (e.g. once in three months) is small. Activities regularly undertaken by a majority (>50%) are watching online films and using WhatsApp and video-chatting on mobiles. Advanced skills such as banking, paying bills online, filling online applications or using online help to solve problems, are the least executed (<25%) activities by South Asian women. Wide variation of skills was apparent amongst those surveyed.

*Barriers to digital literacy:* Lack of education and English language skills are often sighted as barriers in acquiring digital literacy. Existing gender norms in which women undertake domestic responsibilities, while men perform computer related activities appear to be barriers to digital literacy amongst women. Gender based discrimination and stereotyping are important factors that contribute to lower levels of use of digital tools by South Asian

women; this has also been previously shown by Rashid (2016) who conducted a study in six developing countries and found this to be particularly true for Bangladesh. These gender stereotypes also inculcate a fear amongst women that things can go wrong with the equipment if they use it. Being subjected to scams, hoaxes and viruses were strongly voiced concerns of South Asian women.

*Motivations to learning:* Completing online applications (followed by looking up online information) is the major motivation for digital literacy. Fulfilment of this aspiration will require ability to use big screen devices and English language skills.

*Trainers' needs:* Enhancement of digital literacy amongst South Asian women requires appropriately trained bilingual trainers. These trainers have their own aspirations which include enhanced understanding of digital tools. Consequently, training the trainers cannot be limited to them being able to help service users. In order to motivate the trainers their training needs to go significantly beyond what they would be expected to provide to other users.

*Self-directed learning:* There is a clear conflict between encouraging learners to undertake self-directed learning with the provision of one to one support. The latter is essential to initiate motivation while the former is more likely to help learners go beyond what is taught in the classroom and apply their learning to varied situations. Although there was no strong evidence, there was a feeling that early education of South Asian women did not cultivate self-directed learning in them.

*Learning discipline:* While there is clear motivation for enhanced digital skills, these are often not given priority over other domestic chores. Consequently, ensuring training sessions are attended with punctuality remains a challenge. However, appropriate incentives such as provision of childcare support are likely to help in this respect.

## **6.2 Recommendations**

*Programme for trainers:* A training programme for service users needs to be preceded by training the trainers. Advanced level training which goes beyond what the trainers are expected to provide the trainees will be a strong incentive for the trainers.

*Skills based variations:* Being taught skills that one is already competent in, or on the other hand assumes prior knowledge which may not exist can be extremely demotivating. Therefore, training classes need to be divided on the basis of learning needs and levels. The training programme should be flexible to cater to variable digital literacy skills.

*Programme content:* While what digital literacy programmes should contain in general has been well established by Digital Skills Academy (who are partners of NKS in this project), training programmes for South Asian women need to incorporate a number of additional features. Images and scenarios relevant to learners some of which could be from their country of origin need to be included. Programmes should encourage use of English in general – applications such as Google Translate will help. Programmes should include

confidence building measures to assure users that equipment cannot be readily damaged. Measures to avoid phishing attempts and hoaxes need to be highlighted without alarming the learners. Similarly, programmes could consider distinguishing between information from reliable and authoritative sources from those presented by dubious websites need to be included.

*Pre-training introductory session:* Prior to formal training commencing one or more pre-training introductory sessions need to be held to assess user skills, explain the content of training and the learning outcomes. These sessions need to clearly spell out expectations around punctuality and discipline. These sessions should be used to introduce the concepts of self-directed learning and consequent expectations from the learners (e.g. attempts on completion of tasks on their own). These sessions should also be used to explore specific needs (such as child care) for action.

*Delivery approach:* Small group classes (five to ten participants) are likely to be most successful. As discussed these need to be supported by bilingual trainers. Initial sessions will benefit from the presence and supervision of trainers from Digital Skills Academy. The delivery needs to consider sections of the training content where: (a) one to one support could be provided; (b) where learners are expected to follow on screen instructions; and (c) where learners are expected to show how they have applied their learning.

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## Appendix 1 – The survey questionnaire for South Asian women



### **Digital literacy: learning and support needs - A scoping study**

A survey for women from South Asian communities in Edinburgh

**Digital literacy is understood as those capabilities which fit an individual for living, learning and working in a digital society**

#### **Who is this survey for?**

This questionnaire is for women from South Asian communities to survey their use of digital tools in their day to day life. Higher levels of digital literacy (knowledge and skills) implies increased ability to communicate with family and friends, make use of information available online, become more aware of issues associated with their communities and seek/have a job.

#### **Purpose of the survey**

The purpose of the survey is to obtain a snapshot of the target group's access, current use and skills in using digital tools. The survey aims to assess existence of any barriers, support requirements and future learning needs. The findings will inform NKS to develop relevant learning resources to enhance digital literacy in South Asian women.

#### **Survey instructions**

The survey should take about one hour to complete. All responses will be treated confidentially in accordance with the Data Protection Act and individual feedback will not be traced back to participants.

Each individual should fill a separate form. Support is available for those needing interpretation.  
Thank you for taking time to fill in the survey.

The closing date for this survey is **30th November 2017**

If you have any questions please contact [vibhbj1@gmail.com](mailto:vibhbj1@gmail.com)  
[NKS Edinburgh](#)

## Section 1 - About you

**Q1.** What is your age (in years)? *Please tick one that applies*

Less than 25	25-34	35-44	45-54	55-64	65 or above
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**Q2.** Which of the following describes you best? *Please tick one that applies*

I am a housewife	I work part-time	I work full-time	I am retired	Anything else
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**Q3.** If you work *or* have previously worked, please describe what you do/did

**Q4.** Which of the following do you identify with? *Please tick one that applies*

Pakistani, Pakistani Scottish or Pakistani British	Indian, Indian Scottish or Indian British	Bangladeshi, Bangladeshi Scottish or Bangladeshi British	Other ethnic group, <i>please specify</i>
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**Q5.** What is your level of English? *Please tick one that applies*

I do not speak or understand any English	I can say and understand a few things in English	I can communicate simply and understand in familiar situations but only with some difficulty	I can make simple sentences and can understand the main points of a conversation but need much more vocabulary	I speak and understand very well but sometimes have problems with unfamiliar situations and vocabulary	I am proficient in English
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**Q6.** What is your highest education? *Tick any one of the following that apply*

a. I have no formal school education

b. I have school education

c. I have university education

**Section 2 - Access to equipment**

**Q7.** Which of the following do you have at home? *(Tick all that apply)*

Computer/laptop	YES <input type="checkbox"/> NO <input type="checkbox"/>
iPad/ Tablet/ Touchpad	YES <input type="checkbox"/> NO <input type="checkbox"/>
Smart phone (Android / iPhone)	YES <input type="checkbox"/> NO <input type="checkbox"/>
Other <i>(Please specify)</i>	.....

**Q8.** Which of the following do you use? *(Tick all that apply)*

Computer/laptop	YES <input type="checkbox"/> NO <input type="checkbox"/>
iPad/ Tablet/ Touchpad	YES <input type="checkbox"/> NO <input type="checkbox"/>
Smart phone (Android / iPhone)	YES <input type="checkbox"/> NO <input type="checkbox"/>
Other <i>(Please specify)</i>	.....

**Q9.** If you have access to any of the above equipment but don't use it, then please state if any of the following reasons apply. *(Tick all that apply)*

My English is not good enough	
I am afraid that if I use computer on my own something will go wrong	
I ask my family to do computer related activities for me <i>(e.g. buy tickets, look for directions etc.)</i>	
I think learning to use computer / tablet is too difficult	
My family is not keen that I use the computer	
My family discourages me to use the computer	
I am too busy with family	
NA	

Section 3 - Skills assessment						
Skills	Action	Could you do this?			Have you done this in the past 3 months?	
		I don't know what this is	I could do this if I was asked to	I couldn't do this if I was asked to	I have done this in the past 3 months	I haven't done this in the past 3 months
Q10. Using the computer	I know how to switch on a computer/tablet					
	I know how to use a mouse/touch screen					
	I know how to use a keyboard					
Q11. Basic functions	I know how to open a programme/app <i>(e.g. Internet Explorer, Photo Viewer, Outlook, Skype, YouTube)</i>					
	I know how to use the navigation buttons <i>(e.g. go to previous page; clicking links; moving from one folder to another)</i>					
	I know how to connect to the WiFi					
	I know what a website is					
	I know what a search engine is <i>(e.g. Google, Yahoo, Bing)</i>					
Q12. Managing/ accessing information	I can search for information online <i>(e.g. health information, prices of goods, news)</i>					
	I can download/save a photo I find online					
	I can look for maps and directions					
	I can watch films <i>(e.g. on YouTube)</i>					
	I can check for weather updates					
	I can access my bank account details online					
	I can use computer/tablet/mobile to translate what I have to say in English					
Q13. Communication	I can send personal message to another person via email or online messaging service <i>(e.g. Outlook)</i>					
	I can use WhatsApp on my mobile					
	I can do video chat on my mobile					
	I can use Skype					
	I can use Facebook					
Q14. Transacting	I can buy items or services from a website/app <i>(e.g. online shopping, food, clothes, cinema)</i>					

	tickets)						
	I can pay my bills online						
Q15. Problem solving	I can solve a problem I have with a device or service using online help						
Q16. Creating	I can complete online application/registration forms which include personal details (including job applications)						

**Section 4 - Future learning**

Q17. What would you be interested in learning about?

Communicating with family using instant messaging/ WhatsApp or video calls	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Online shopping	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Watching TV programmes / films on computer/tablet	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Looking up for information (news, health)	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Paying bills or looking up account information	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Ordering groceries	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Reading the news	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Completing application forms (e.g. health and job applications)	YES <input type="checkbox"/>	NO <input type="checkbox"/>
Looking for directions and maps	YES <input type="checkbox"/>	NO <input type="checkbox"/>
<u>Anything else</u> (please specify)		

Q18. Please specify why you think this learning will be benefit you?

**Section 5 - Previous learning experience**

Q19. Have you taken computer classes before? YES  NO

If YES, then please elaborate on your experience of these classes? *Please provide some examples.*

**Focus group discussions – Call for participation**

As part of the research we will also be conducting focus groups to gather views on barriers, support requirements and future learning needs on digital literacy.

These group discussions will last for about an hour and will be held at NKS (dates to be confirmed).

If you wish to participate, then please provide your contact details so that we can get in touch with you about the details of the focus groups.

Name .....

Email .....

Mobile.....

**Supported by**  
**The Scottish Government**  
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