



Impact of *Anganwadi* Workers' Soft Skills on *Anganwadi* Children's Developmental Milestones

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ABSTRACT

A study was conducted in urban and rural *anganwadi* centers (AWC), to assess the soft skills such as communication skills, time management, positive attitude, and teamwork of *anganwadi* workers (AWW) as well as how this relates to the children's developmental milestones. 60 AWW from 30 rural and 30 urban AWC and five 3-6-year-old children from each AWC by random sampling were chosen. There was a significant difference in communication skills, positive attitude, and teamwork. Gross motor skills of rural children were found significantly higher than in urban children and language skills were significantly higher in urban children rather than rural children. Teamwork of AWW was found positively correlated with cognitive skills and socio-emotional skills. It was imperative that need-based training programmes for AWWs, including early childhood education and other training initiatives, focus on improving soft skills of preschool education and developmental milestones can be maintained.

INTRODUCTION

The Integrated Child Development Services (ICDS) includes Non-Formal Pre-School Education (NFPSE) as an important component. Under the scheme pre-school education activities are to be organized for children between the ages of three and six (Arya et al., 2018). It is not intended to impart formal learning or teach 3 Rs, but to develop in the child a desirable social attitude, values, and environmental stimulation. A flexible approach to programme content and methods is employed, and the child is encouraged to develop at his own pace (Singh et al., 2019). Under ICDS, Non-Formal Pre-School Education provides a significant contribution to a strong foundation for development and to the universalization of primary education (Singh & Bisht, 2021). Children attending pre-school centers had significantly better scores on pre-reading, early number, and language skills than children who attended local schools. Hence, quality pre-school education is critical to the development of children's social, cognitive, and language skills (Arya & Vig, 2022). In spite of this, NFPSE

remains a weak component of the scheme. Although ICDS is supposed to approach the development of children in an integrated manner, its focus on health and nutrition remains more prominent in practice (Jadav et al., 2021). There is a low priority given to the visible key component of NFPSE by program implementers, which has resulted in low community participation and acceptance. The success of the ICDS program is greatly dependent on how the *anganawadi* workers (AWW) are trained, qualified, experienced and skilled. However, at *anganwadi* centre (AWC), lack of skill-based training of AWW is a major barrier to effective pre-school education (Arya et al., 2023). Thus, the government may not spend on physical amenities and pre-school activities. It is important that AWW develop soft skills such as teamwork ability, management skills, appropriate attitude, and communication skill to maintain good working relationships and workplace harmony. In addition, soft skills are the personal characteristics and aspects of an employee's character that motivate him or her to do their best (Singh, 2018). The *anganwadi* worker designs and carries out the activities in the *anganwadi* centre for encouraging the developmental

milestones in the children. The developmental milestones of a child are the skills a child learns at each stage of his or her life, which can be categorized as motor, social, emotional, physical, language and cognitive skills. In order to improve the quality of service in *anganwadi* centers, it is necessary to examine the status of the implementation of early childhood programs. *Anganwadi* centers must have adequate supervision, guidance, and training in the role of educators in order to incorporate pre-school education into their programs (Arya et al., 2018). In the present scenario where implementation of NFPSE programme is the least priority of the AWW as well as the government, it is essential to study the impact of these deplorable conditions on developmental milestones of *anganwadi* children. The present study assessed the soft skills of *anganwadi* workers as correlates with developmental milestones in *anganwadi* children.

METHODOLOGY

The present study was conducted in 30 Urban and 30 Rural AWC of Ludhiana district in Punjab and a sample of 60 AWW and 300 children were selected from these centers. The Ministry of Women and Child Development, Government of India, reports that Ludhiana Urban has 606 *anganwadi* centers and Ludhiana Rural has 213 *anganwadi* centers. Thirties *anganwadis* were randomly selected from 606 *anganwadis* located in Ludhiana Urban areas and 30 *anganwadis* were chosen at random from 213 *anganwadis* located in Ludhiana rural areas during December 01, 2020 to November 30, 2021. Among the selected each *anganwadi* centers, five children aged 3-6 years and one *anganwadi* worker was selected by using simple random method. With the permission of the District Program Officer (DPO) and the Child Development Project Officer (CDPO), the study was conducted in selected *anganwadi* centers by sending a letter of request explaining the purpose of the study. A self-structured checklist was pretested to provide an overview of the quality of the checklist, worksheet and questionnaire of the sample. The self-structured personal information sheet was designed to collect the personal profile details viz. age, marital status, educational qualification, work experience and number of trainings/refresher courses of the *anganwadi* workers selected for the study. In this selection process, soft skills such as communication skills was measured by Teacher Child Communication Scale (Erbay et al., 2012), time management skills measured by Time Management Questionnaire (Alay & Kocak, 2002), positive attitude was assessed by Positive Thinking Scale (Diener et al., 2009) and teamwork was assessed by Team Work Questionnaire (Kuras & Moran, 1997) for *anganwadi* workers. The developmental milestones checklist was used to collect information concerning various domains of developmental milestones checklist viz. physical and motor, cognitive, language and social and emotional development (ICDS Manual). The checklist included worksheets, activities and observation to be recorded related to each component of developmental milestones. The data were coded, tabulated, categorized, and analyzed using statistical package SPSS version 20.

RESULTS AND DISCUSSION

Table 1 illustrated the percentage distribution of *anganwadi*

Table 1. Different domains and levels of soft skills of *anganwadi* workers

Domains and levels of soft skills	Urban (n _u =30) f (%)	Rural (n _r =30) f (%)	Total (n=60) f (%)
Communication skills			
High	12(40)	6 (20)	18(30)
Average	12(40)	15(50)	27(45)
Low	6(20)	9 (30)	15(25)
Time management			
High	9(30)	7 (23.33)	16(26.67)
Average	15(50)	10 (33.33)	25(41.66)
Low	6(20)	13(43.33)	19(31.66)
Positive thinking			
High	12(40)	14 (46.66)	26(43.33)
Average	18(60)	16 (53.33)	34(56.67)
Low	0	0	0
Team work			
High	7(23.33)	8 (26.66)	15(25)
Average	14(46.66)	15(50)	29(48.33)
Low	9(30)	7 (23.33)	16(26.67)

workers across different domains and soft skill levels. There was an average level of communication skills (45%) and time management skills (41.66%) among *anganwadi* workers. More than half (56.67%) of the *anganwadi* workers had an average level of positive attitude and teamwork (48.33%). In the study, the majority of respondents had medium levels of communication behavior. However, the rural *anganwadi* workers are less proficient in time management than the urban *anganwadi* workers. In urban rural areas, there were no negative attitudes among *anganwadi* workers and average level of team work.

The data indicated that mean scores for communication skill of the rural *anganwadi* workers (109.43±10.62) were significantly higher (t=2.10, p≤0.05) than urban *anganwadi* workers (103.80±10.14), indicating rural *anganwadi* workers had better communication skills than urban *anganwadi* workers (Table 2). Similarly, rural *anganwadi* workers had significantly (t=2.30, p≤ 0.05) better teamwork skills than urban workers. There is no significance difference in time management. Whereas, positive thinking of urban *anganwadi* workers (21.23±1.63) were significantly higher (t=2.80, p≤0.05) than rural *anganwadi* workers (19.50±2.96). Communication skills and team work ability of rural AWW are significantly higher than urban *anganwadi* workers. In this study, AWW demonstrated adequate knowledge of communication skills, but were unable to apply them effectively.

Table 2. Mean score (±SD) difference of *anganwadi* workers' soft skills

Domains of soft skills	Urban (n _u =30) Mean±SD	Rural (n _r =30) Mean±SD	t-value
Communication skills	103.80±10.14	109.43±10.62	2.10*
Time management	115.60±26.47	104.36±24.29	1.71
Positive thinking	21.23±1.63	19.50±2.96	2.80**
Team work	2.75±0.42	2.98±0.32	2.30*

*Significant at 5% **Significant at 1%

The result indicated that rural AWW performance has been lower than the urban AWW for activities related to time management. *Anganwadi* workers should be trained in the use of time management so that they can perform their jobs more efficiently and effectively (Phillips and Kurian, 1989). In urban *anganwadi* workers, positive perceptions were found to be higher than in rural *anganwadi* workers, as a variety of factors influence their perceptions, including their socioeconomic status, family support, performance, knowledge, job satisfaction, as well as their salaries and other benefits.

The finding revealed that at average level of gross motor skills percentage (72.67%) of rural children were found significantly ($Z=2.43$, $p\leq 0.05$) higher than urban children (59.33%) indicating that rural children had better performance in gross motor activities like jumping, running, hopping and marching against the urban children (Table 3). Similarly, at the average level of fine motor skills, significantly ($Z=2.68$, $p\leq 0.05$) higher proportion of rural children (73.33%) were found as compared to urban children (58.66%). It was observed that in case of cognitive skills in the rural children were found significantly ($Z=3.39$; $p<0.01$) at high level (32%) than urban children (15.33). Whereas, the urban children (78%) at average level was found significantly ($Z=4.05$; $p<0.01$) than rural children (56%) in cognitive skills. Further language skills were significantly ($Z=2.22$; $p<0.05$) higher in urban children (32%) rather than 20.66 per cent in rural children. In contrast of language skill, this average level was found significantly ($Z=2.22$; $p<0.05$) in rural children. Whereas socio-emotional skills were found significantly ($Z=3.44$; $p<0.01$) at high level in urban children but at average level were found significant ($Z=3.44$; $p<0.01$) in rural

Table 3. Centre-wise difference in developmental milestones of the *anganwadi* children across different domains and levels

Domains and levels of developmental milestones	Urban ($n_u=150$) Frequency (%)	Rural ($n_r=150$) Frequency (%)	Z-value
1. Physical and motor development			
(a) Gross motor skill			
High	49(32.67)	36 (24)	1.66
Average	89(59.33)	109(72.67)	2.43*
Low	12(8)	5(3.33)	1.74
(b) Fine motor skill			
High	50(33.33)	35(23.33)	1.52
Average	88 (58.66)	110(73.33)	2.68**
Low	12 (8)	5(3.33)	1.74
2. Cognitive skill			
High	23(15.33)	48(32)	3.39*
Average	117(78)	84(56)	4.05**
Low	10(6.66)	18(12)	1.58
3. Language skill			
High	48(32)	31(20.66)	2.22*
Average	102 (68)	119(79.33)	2.22*
Low	0	0	0
4. Social and emotional skill			
High	63 (42)	35(23.33)	3.44**
Average	87(58)	115(76.66)	3.44**
Low	0	0	0

*Significant at 5%, **Significant at 1%

Table 4. Mean scores difference (\pm s.d) of the *anganwadi* children at different domains of developmental milestones

Domains of developmental milestones	Urban ($n_u=150$) Mean \pm SD	Rural ($n_r=150$) Mean \pm SD	t-value
1.(a) Gross motor skill	11.90 \pm 2.69	13.11 \pm 1.81	2.68*
b) Fine motor skill	13.38 \pm 3.51	12.32 \pm 3.28	1.24
2. Cognitive skill	12.86 \pm 3.48	11.65 \pm 3.10	1.78
3. Language skill	10.90 \pm 2.75	10.30 \pm 2.17	2.09*
4. Social-emotional skill	15.38 \pm 2.79	16.58 \pm 3.50	3.27**

*Significant at 5%, **Significant at 1%

children (76.66%) rather than urban children (58%).

The Table 4 revealed that rural *anganwadi* children had higher mean score (13.11 \pm 1.81) than urban *anganwadi* children with a significance difference ($t=2.68$; $p<0.05$) in gross motor skills (Table 4). In case of language skills, the mean scores (10.90 \pm 2.75) of urban *anganwadi* children had superceded than rural *anganwadi* children with a significance difference ($t=2.09$; $p<0.05$). Whereas, in socio-emotional skills rural *anganwadi* children scored comparatively greater mean score (16.58 \pm 3.50) than urban *anganwadi* children with a significance difference ($t=3.27$; $p<0.01$).

In developmental milestone, children's creativity and intellectual development are positively impacted. Children from 3-6 years old, attending the *anganwadi* centers, develop physically, cognitively, socially, emotionally, and self-help by reaching milestones. Rural children scored significantly higher in gross motor activities such as jumping, skipping walking etc. than urban children because they have more open spaces that allow them to engage in physical activities, sports and play (Egger & Angod, 2006). Similarly in socio-emotional activities such as developed friendships and cooperation with others etc, as compared to urban children. However, urban *anganwadi* children more fluent in verbal communication like reciting poems and storytelling than rural children.

The data revealed that communication skills of *anganwadi* workers were found to be positively correlated with language development skills ($r=0.27$; $p<0.01$) as well as socio-emotional skills ($r=0.18$; $p<0.05$) of the children (Table 5). Time management of AWW found positively correlated with gross motor skills ($r=0.17$; $p<0.05$), fine motor skills ($r=0.18$; $p<0.05$) as well as socio-emotional skills ($r=0.25$; $p<0.01$) of the *anganwadi* children. Positive attitude of *anganwadi* workers also showed a significant positive correlation with gross motor skill ($r=0.27$; $p<0.01$) and cognitive skill ($r=0.22$; $p<0.05$) of the *anganwadi* children. However, further team work was also found positively correlated with cognitive skills ($r=0.22$; $p<0.05$) and socio-emotional skill ($r=0.31$; $p<0.01$).

In the present study, the gross motor skill and socio-emotional skill of rural *anganwadi* children is more advanced than that of urban *anganwadi* children, while the language skill is more advanced than that of urban *anganwadi* children. The data showed that higher was the communication skills of *anganwadi* worker and more was the language skill and socio-emotional skills of the children. It can be concluded that higher was the communication skill of the rural *anganwadi* workers and more was the command in language like sound, gestures, sentences and build a positive

Table 5. Correlation between soft skills of *anganwadi* workers and developmental milestones of the *anganwadi* children (n=300)

Soft skills	Domains of developmental milestones				
	Gross motor (r) skill	Fine motor skill (r)	Cognitive skill (r)	Language skill (r)	Social and emotional skill (r)
Communication skills	0.06	0.06	0.13	0.27**	0.18*
Time management	0.17*	0.18*	0.02	0.01	0.25**
Positive attitude	0.27**	0.03	0.22*	0.13	0.03
Team work	0.15	0.12	0.22*	0.02	0.31**

*Significant at 5%, **Significant at 1%

relationship, experience, manage and express emotions of the child. The result indicated that time management skills of *anganwadi* workers made a positively impacted to gross motor, fine motor and socio-emotional skills of children. Positive perceptions towards the work of the AWW were noted to be highly concerned not only with promoting gross motor skills such as jumping, running, hopping, etc. but also with developing children's cognitive skills, which include reading, writing and arithmetic. It has been demonstrated that the teamwork activities of *anganwadi* workers enhance children's cognitive and socio-emotional development. The correlation analysis revealed that better soft skills among *anganwadi* workers will lead to an increase in the development milestones of the children.

CONCLUSION

The research demonstrated that focusing on soft skills such as communication skill, time management, positivity, and teamwork improves not only job competence, work efficiency, and quality of life, but also actively engaging the center. Thus, the government should provide AWWs with need-based and quality training programs to enhance their soft skills. By improving their soft skills, pre-school education and developmental milestones can be maintained. A preschool education component needs to be integrated into *anganwadi* centers through adequate supervision, guidance, and training to ensure that they are performing well as educators. A much greater emphasis will be placed on NFPSE first and foremost by reviewing the scheme's priorities.

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