

Adaptation of a Home Inventory for Children in Simple Hindi

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ABSTRACT

Background: Physical surroundings and child rearing practices play important roles in the development of children. Preschoolers who develop well intellectually have homes rich in toys and books. There is a need to understand environmental influences upon children's behavior. In view of the need and importance of a Home Inventory in simple Hindi for use with our population, it was decided to adapt an existing Home Inventory by Bradley (1993) consisting of 55 items.

Methods: The scale was translated, discussed with experts, administered to forty-eight mothers and item analysis carried out resulting in the final shortened Hindi version with 35 items only. This is in Hindi and was well accepted by subjects. Further work with the scale is going on and will be reported in due course.

Results and Conclusions: The Home Inventory emerged to be a valid and reliable instrument and would be useful in assessing the home environment of the children in the Northern India.

Keywords: Adaptation, Home Environment, Hindi, Version

Introduction

Child development is a complex blend of hereditary and environment influences. Preschoolers differ markedly not only in their physical growth and motor skills but, also in their cognitive development. Early childhood experiences are important predictors for their later behavior. It is in childhood that progress is made from an organism with a very limited repertoire of motor and verbal behaviors, which are under poor environmental control, to an organism that has extremely complicated verbal and motor behaviors, under complex stimulus control including subtle social controls (Staats, 1964; Stakols & Altman, 1987).

Some environments offer little incentives to learn, others encourage most effective learning which the child is capable of. Child grows mentally as his environment makes reasonable demands on him. In addition to the significant others, in his family, the most important positive factors in the environment of children from 2-6 years of age are the appropriate play materials and equipments, playmates, instruction and guidance, and tasks that are challenging, but not too difficult (Weinstein & David, 1987). An organized, stimulating physical setting, and parental encouragement, involvement, and affection, repeatedly predict infant and early childhood I.Q.; no matter what the child's background (Bradley & Caldwell, 1982; Bradley et al, 1989). There is considerable evidence that poor

cultural environment retards intellectual growth. Programs offering a stimulating environment to young children have resulted in substantial improvements in intellectual functioning. The extent to which parents talk to infants and toddlers is very important in the development of early language. Language competence, in turn, predicts intelligence and academic achievement in elementary school (Hart & Risley, 1995). It is seen that parents higher in socioeconomic status talk to and stimulate their infants more and grant them greater freedom to explore (Luster et al, 1989). When their children are older, they use more explanations and verbal praise. In contrast, criticism and physical punishment occur more often in low socioeconomic status households (Dodge et al, 1994; Hoff-Ginsberg & Tardiff, 1995).

Physical surroundings and child rearing practices play important roles in the development of children. Preschoolers who develop well intellectually have homes rich in toys and books. Their parents are warm and affectionate, stimulate language and academic knowledge, and arrange outings to places where there are interesting things to see and do. They also make reasonable demands for socially mature behavior, for example, that the child performs simple chores and behaves courteously toward others. When conflict arises, these parents use reason to resolve them instead of physical force and punishment (Bradley & Caldwell, 1979, 1982). Poor quality care has been identified as a serious risk factor (Belsky & Rovine, 1988).

There is a need to understand environmental influences upon the behavior of children. It is only such information that one can specify the mechanisms through which the environment facilitates human development. Precise instruments for assessing the early home environment of children are not available. The sole index of measurement is probably inferring from their social economic class and available resources.

In India, there is a dearth of instruments for measurement of home environment and also all the available scales have certain limitations. Home Environment Inventory (Mishra, 2004) is too long as it contains 100 items. In Mohite Home Environment Inventory (Mohite, 2004) various important dimensions like stimulation through toys, games and reading material; modelling; pride, affection and warmth are not covered. Moreover, most of the scales are in English, which makes it difficult to use them in daily routine and to administer to the population living in rural areas with inadequate home environment.

Aims and Objectives

1. To adapt the Home Inventory of Bradley (1993) into Hindi for use in North-Indian speaking population.
2. To find out its reliability and validity.
3. To establish norms for local population.

Sample

Purposive sampling technique was used. Forty-eight mothers having children in the age range of 3-6 years were included in the study. The sample was drawn from the healthy women relatives accompanying the patients attending Psychiatry OPD of the Nehru Hospital, PGIMER. Mothers having any chronic physical illness or past history of psychiatric illness were excluded. Care was taken to include mothers from all education levels and social classes.

Tools

Home Inventory (Bradley, 1993):

The Home Inventory was originally developed by R.H. Bradley and B.N. Caldwell. It comprised of 55 items in English. It measured home environment across various areas viz. Stimulation through toys, games and reading material; Language stimulation; Organization of the physical environment; Pride, affection and warmth; Stimulation of academic behavior; Modelling and encouragement of social maturity; Variety in daily stimulation; Avoidance of physical punishment.

Methodology

The Inventory was translated into simple Hindi by five psychologists independently. Expert opinion (from a consultant psychologist) was sought to finalize the first draft. The Hindi translation was then back translated into English by five different persons independently and was compared with the original scale to find out any significant differences. In a few items language had to be modified to suit Indian culture. After necessary modifications the translated scale was administered to 48 mothers. The mothers were asked to report or underline the difficult words encountered if any.

Means and SDs of Long and Short Versions of the Home Inventory		
Home Inventory	55 item scale	35 item scale
Mean	44.03	26.47
SD	7.18	7.02

Results

Item analysis was done using the E 1/3 method. The item total correlations, the difficulty level of the items and the spread of scores in the top, middle and bottom 1/3rd of the cases were taken into consideration before selecting the

items. Five words were reported to be difficult by some subjects, though majority of the subjects found no difficulty in comprehending the language of the items. Twenty statements were deleted because they had very low discriminatory value. In the final draft 35 items were retained. The language was modified for certain items.

To assess the correlation between the long and short versions of the Home Inventory, Pearson product moment correlation was computed. The correlation coefficient was found to be 0.96, significant at 0.01 level. Split half reliability (after correction for length by Spearman-Brown prophecy) was ascertained to be 0.41, the index of reliability was 0.64 and the relative reliability was 0.41.

Discussion

The importance of assessing home environment is undoubtedly tremendous because of the hampering effects of deficiencies of culture on the growing child. The instrument was developed in Hindi language and was easy to administer and score. The feasibility of the scale in terms of length would make it practically useful in clinical situations. However, further work needs to be done on a larger sample of mothers and correlating with different classes of mothers.

The Home Inventory emerged to be a valid and reliable instrument and would be useful in assessing the home environment of the children in the North India.

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Appendix

घर का वातावरण

- | | | |
|--|-----|------|
| 1- cPps ds ikl f[kykSus gSa ftuls jax :i rFkk vkdkj@ cukoV ds ckjs esa lh[kk tk ldsaA | हाँ | नहीं |
| 2- rhu ;k rhu ls vf/kd ¼it+yt+½ gSA | हाँ | नहीं |
| 3- fjdkMZ lys;j ¼dSlsV½ vkSsj rhu ;k rhu ls vf/kd cPpksa okys ¼dSlsV~l½ gSaA | हाँ | नहीं |
| 4- f[kykSus ;k [ksysa gSa] ftuls cPpk vius Hkko O;Dr dj lds tSls fd jax okys pkWd] lykLVjlhu] isaV ¼jax½ dkxt+ vkfnA | हाँ | नहीं |
| 5- ,sls f[kykSus ftlesa dqN ckjhdh dk dke djuk gks tSls IQkbZ ls jax djuk] QksVks /;ku ls dkVuk vkfnA | हाँ | नहीं |
| 6- f[kykSus ;k [ksysa tks cPpksa dks fxurh flk[kkus esa lgk;d gksa tSls fd uEcj okys Cykd] fdrkc ftlesa fxurh ds ckjs crk;k gks] uEcjksa okys [ksy gSA | हाँ | नहीं |
| 7- cPpksa okyh ¼dh½ nl fdrkcsaA | हाँ | नहीं |
| 8- de ls de nl fdrkcsa ?kj esa ekStwn gSaA | हाँ | नहीं |
| 9- ifjokj jkst+ lekpkj i= [kjhnrk vkSj i<+rk gSA | हाँ | नहीं |
| 10 ifjokj us de ls de ,d if=dk yxokbZ gqbZ | हाँ | नहीं |

- gksA
11 cPps dks vkdkj@cukoV lh[kus ds fy,
- izksRlkfgr fd;k tkrk gSA tSls ekj [ksy&[ksy
esa xsan ds vkdkj ds ckjs ;k fQj iSafly ls
dkxt+ ij vyx&vyx vkdkj cukdj fl[kkrh gSA
भाषा प्रोत्साहन

हाँ नहीं

12 cPps ds ikl ,sIs f[kykSus ;k fdrkcsas gksA
- ftuesa og tkuojksa ds ckjs esa lh[k ldsA

हाँ नहीं

13 cPps dks v{kj Kku fl[kkus dh dksf'k'k djrs
- gSa tSls fdrkcksa ls ;k fy[k djA

हाँ नहीं

14 cPps dks [kkus ;k uk'rs esa mldh ilUn iwNh
- tkrh gSA

हाँ नहीं

आसपास भौतिक का वातावरण

15 ?kj ds vUnj vU/ksjk ugha gSA
-

हाँ नहीं

16 de ls de 100 oxZ QqV] $\frac{1}{4}10$ QqV X 10
- QqV $\frac{1}{2}$ txg ifjokj ds gj O;fDr ds fy;s gSaA

हाँ नहीं

17 dejk vf/kd QuhZpj ls Hkjk ughas gqvka
-

हाँ नहीं

18 ?kj ds lkeus fn[kus okys dejs lkQ lqFkjs
- fn[kkbZ nsrs gSaA

हाँ नहीं

गर्व, प्यार, मैत्री-भाव

19 ,d fnu esa de ls de iUnzg feuV cPps dks
- vius lkFk yxkdj j[krh gSA tSls Vh0 oh0 ds

हाँ नहीं

- le;] dgkuh lqukus ds le;] [kkuk f[kykus ds le;A
- 20 ekj cPps ds lkFk de ls de nks ckj ckrphr
- djrh gSA ¼Mk;V&QVdkj ds le; ugha½
- 21 ekj cPps ds lokyksa@fourh dk tokc nsrh
- gSA
- 22 ekj LokHkkfod rkSj ls ,slh ifjfLFkfr;kj cuk
- ysrh gS] tgtkj cPpk fdlh ckr ij viuh dkcfy;r fn[kk ldsA
- पढ़ाई-शिक्षा के लिए प्रोत्साहन
- 23 cPps dks jaxksa dh tkudkj c<+kus ds fy,
- izksRIkfgr fd;k tkrk gSA
- 24 ?kj esa Vh0oh0 gS vkSj Vh0 oh0 ns[kus dk
- le; fu/kkZfjr gSA
- 25 ekj cPps dks MkDVj ls feykrh gSaa A
-
- 26 cPpk viuh ukjktxh fcuk fdlh Mk;V QVdkj ;k Mj
- ds izdV dj ldrk gSA
- भिन्न-भिन्न प्रकार के प्रोत्साहन
- 27 vlyh ;k f[kykSuk & tSlS ctk] ckj!qjh] M^ae
- vkfn ?kj esa gSaA
- 28 ?kj ds lnL;] gj iUnzg fnu esa ,d ckj] cPps dks
- ckgj ?kqekus ysdj tkrs gSaaA
¼tSlS fidfud] ctkj vkfn½

- 29 fiNys ,d lky ds nkSjku ?kj ds lnL;] cPps dks] ? हाँ नहीं
 - kj ls 50 ehy ls vf/kd dh nwjh rd ?kqekus ysdj
 x;s gSA
- 30 fiNys lky esa] cPps dks] fdlh ifjokj ds lnL; }kjk हाँ नहीं
 - fdlh oSKkfud] ,sfrgkfld ;k vkVZ laxzgky; ys
 tk;k x;k gSA
- 31 ekj viuh ckrphr esa dfBu Hkk"kk dk iz;kssx हाँ नहीं
 - djrh gSA
- 32 cPps }kjk cukbZ gqbZ phtsa ¼dqN Hkh½ हाँ नहीं
 - ltkdj nhokj ij Vk;x nh tkrh gSA
- 33 ekrk&firk cPps dks mldh ilan ds [kk] inkFkZ हाँ नहीं
 - nqdku ls pquus dh btktr nsrs gSaA
- 34 ekj] vkids lkeus] vius cPps dks ,d ckj ls T;kknk हाँ नहीं
 - ugha MkjVrh gS vkSj uhpk ugha fn[kkrhA
- 35 fiNys g¶rs esa] ,d ckj ls vf/kd cPps dks dksbZ हाँ नहीं
 - 'kkjhfd ltk+ ugha feyh ¼tSlS FkliM+] pkjVk½