

Validation of a play package
to facilitate the development of
communication-related skills

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ABSTRACT

TITLE	The validation of a play package for the facilitation of communication-related skills
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The needs of the severely disabled, especially in communities where there is a paucity of professional manpower inspired this research aiming at the refinement and validation of a play package consisting of a daily multiple measurement instrument and a package of play activities for the facilitation of communication-related behaviours.

This intervention programme is based on theoretical underpinnings derived from various scientific disciplines' explanations of sensorimotor, cognitive, communication and social-emotional development, as well as the role of play as a facilitator of childhood development. Within this theoretical context a model for the development of communication-related behaviours as adaptive responses is put forward. Through a process of operationalisation of the relevant constructs, observable behavioural indicators are identified and applied to the developmental needs of the intellectually impaired.

Play is described as a tool for the facilitation and measurement of communication-related behaviours and within this framework an authentic daily multiple measurement instrument

(DMMI) was developed and a package of play activities (previously developed) refined for validation through experimentation.

The main aim of the empirical research was to validate the play package for the facilitation of communication-related skills by the refinement of the play package consisting of specifically selected activities and presentation methods during a pre-experimental phase, as well as experimentation to establish a cause-effect relationship between the activities and changes in single, gradually acquired behaviours of children with intellectual impairments.

In the pre-experimental phase face and content validity were investigated by a group of experts who evaluated the daily multiple measurement instrument and the package of play activities, as well as the audio-visual recordings of the measurement and treatment of intellectually impaired children in two pilot studies.

During the experimental phase construct and convergent validity were investigated. Data were collected from five intellectually impaired participants over an eight week period in which week 1 was used for pre-intervention measurements, weeks 2, 3 and 4 for intervention, week 5 for post-intervention measurements, weeks 6 and 7 for a period of withdrawal and week 8 for post-withdrawal measurements. External raters were involved to assure reliability and three additional authentic measurement instruments were included for the establishment of convergent validity.

Based on the findings of the research face, content, construct and convergent validity of the play package was established, thus proving that the daily multiple measurement instrument measures the behaviour that it claims to measure and the package of play activities facilitates the development of communication-related behaviours that it claims to facilitate.

A valid and reliable play package, catering for the individual needs of the heterogeneous population of disabled children, was thus established. The play package is structured in such a way that it can be applied by any member of a transdisciplinary team, and even (with some prior training) by non-professional caregivers and parents, thus alleviating the

burden on a handful of professional therapists who cannot cope with the needs of the large population of severely disabled children.

Key words Play, early childhood intervention, validation, measurements, adaptive response, adaptive behaviour, intellectual impairment, communication-related skills, developmental domains, play package, assessment.

OPSOMMING

TITEL	Die validering van ‘n spelpakket vir die fasilitering van kommunikasie-verwante vaardighede
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PROMOTOR	Prof E Alant
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Die behoeftes van erg gestremdes, veral in gemeenskappe met ‘n tekort aan professionele mannekrag, het gelei tot hierdie navorsing, wat gerig is op die verfyning en validering van ‘n spelpakket bestaande uit ‘n daaglikse veelvuldige metingsinstrument en ‘n pakket van spelaktiwiteite.

Hierdie intervensieprogram is gegrond op ‘n teoretiese onderbou wat verkry is uit verskeie wetenskaplike dissiplines se verduidelikings van sensories-motoriese, kognitiewe, kommunikasie en sosiaal-emosionele ontwikkeling, sowel as die rol van spel as fasiliteerder van kinderontwikkeling. Binne hierdie teoretiese konteks is ‘n model vir die ontwikkeling van kommunikasie-verwante gedrag as aanpassingsresponse daargestel. Deur ‘n proses van operasionalisering van die relevante konstrunkte is waarneembare gedragsaanduiders geïdentifiseer en toegepas op die ontwikkelingsbehoefte van van die intellektueel-belemmerde.

Spel word beskryf as ‘n medium vir die fasilitering en meting van kommunikasie-verwante gedrag en binne hierdie raamwerk is ‘n outentieke veelvuldige metingsinstrument (DMMI)

ontwikkel en 'n pakket van spelaktiwiteite, wat voorheen ontwikkel is verfyn vir validering deur eksperimentering.

Die hoofdoel van die empiriese navorsing was juis om die spelpakket vir die fasilitering van kommunikasie-verwante vaardighede te valideer deur die verfyning van die spelpakket bestaande uit spesifieke geselekteerde aktiwiteite en aanbiedingsmetodes. Gedurende 'n pre-eksperimentele fase, sowel as eksperimentering is 'n oorsaak-gevolg verhouding tussen die aktiwiteite en veranderinge in enkel, geleidelik verworwe gedrag van kinders met intellektuele belemmerings vasgestel.

In die pre-eksperimentele fase is gesigs- en inhoudsgeldigheid ondersoek deur 'n groep deskundiges wat die daaglikse veelvuldige metingsinstrument en die pakket van spelaktiwiteite, sowel as die oudio-visuele opnames van meting en behandeling van intellektueel-belemmerde kinders in twee loodsstudies geëvalueer het.

Gedurende die eksperimentele fase is konstruk- en konvergensiegeldigheid ondersoek. Data van vyf intellektueel-belemmerde deelnemers is oor 'n periode van agt weke versamel, waar week 1 benut is vir pre-intervensie meting, weke 2, 3 en 4 vir intervensie, week 5 vir post-intervensie meting, weke 6 en 7 vir onttrekking en week 8 vir post-onttrekking meting. Eksterne gradeerders is betrek om betroubaarheid te verseker en drie outentieke metingsinstrumente is ingesluit vir die vaststelling van konvergensiegeldigheid.

Gegronde op die resultate van die navorsing is die gesigs-, inhouds-, konstruk- en konvergensiegeldigheid van die spelpakket vasgestel. Daar is dus bewys dat die daaglikse veelvuldige metingsinstrument wel die gedrag wat dit veronderstel is om te meet, meet en dat die pakket van spelaktiwiteite wel die kommunikasie-verwante vaardighede fasiliteer wat dit veronderstel is om te fasiliteer.

'n Betroubare en geldige spelpakket, wat voorsiening maak vir die behoeftes van die heterogene populasie van gestremde kinders is dus daargestel. Die spelpakket is op so 'n wyse gestruktureer dat dit deur enige lid van 'n transdissiplinêre span, insluitende nie-professionele versorgers en ouers (na vooraf opleiding) toegepas kan word om sodoende die las van die handjievul professionele persone, wat nie aan die behoeftes van die groot populasie van erg gestremde kinders kan voldoen nie, te verlig.

Sleutelwoorde Spel, vroeë intervensie by kinders, validering, metings, aanpassingsrespons, aanpassingsgedrag, intellektuele belemmering, kommunikasieverwante vaardighede, ontwikkelingsdomeine, spelpakket, bepaling.