

IS TOILET TRAINING AS EASY AS A B C?

by

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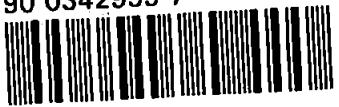
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Is Toilet Training As Easy As A B C?

John Doran

Toilet training is often viewed as a fairly straightforward process. This may be why much of the prescriptive literature available today has not been subject empirical investigation. This study followed twenty-six children through toilet training to investigate five factors that are assumed to be associated with a successful outcome to training - child readiness, parental readiness, behavioural style of parents, child temperament and the type of approach parent's use to train their child.

Three of these five factors - behavioural style of parent's, child temperament and the approach parent's use to train their child - were found to be associated with a successful outcome.

Advice for parent's who have difficulties with toilet training is presented along with recommendations for improving the measures used in this study for future research.

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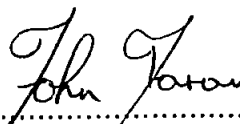
Last but not least thank you very much Claudia for enabling me to keep this study in perspective.

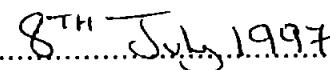
AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Clinical Psychology has the author been registered for any other University award.

The contents of this bound volume are identical to the volume submitted for examination in temporary binding except for the amendments requested at the examination.

This study was conducted while the author was a Trainee Clinical Psychologist in the South West Region based in Southmead Health Services N.H.S. Trust and the research was conducted in collaboration with Southmead Health Services N.H.S. Trust

Signed..........

Date..........

Chapter I

Why study toilet training?

Toilet training is the phrase commonly used to describe the steps most parents take in helping their children to develop bladder and bowel control (a physical achievement) and teaching them where to put urine and faeces (a self care and social skill). It is often viewed as a fairly straightforward process (Green, 1987). However, Luxem and Christopherson (1994) note that "*...many parents could use guidance and in fact would welcome help on how best to carry out this important parental duty*".

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Of course, not all parents and children have difficulties with toilet training but some do. Problems sometimes encountered include lack of success at home; lack of success across different settings; child non-compliance with training and emotional upset; parental dissatisfaction with training procedures and/ or training duration; and unpleasant toileting behaviours, for example, the child playing with faeces (Walker, 1978; Christopherson and Rapoff, 1992; Howe and Walker 1992). At the extreme, toileting problems at home are thought to provoke some child abuse (Krugman, 1985; Schmitt, 1987).

Prevalence of toileting problems

Empirical data on the general prevalence of toileting problems - exclusive of enuresis and encopresis - are rare in the research literature. One epidemiological survey that gives some indication of prevalence was conducted by Richman, Stevenson and Graham (1975). They estimated that the percentage of three-year-old children in a London Borough with day wetting (at least once a week) was 16 per cent. This was only exceeded by the percentage of children with poor appetite (17%) and night wetting (at least three times per week - 36%). Of twenty-two different behaviour problems listed, soiling (at least once a week) ranked seventh in terms of the highest percentage prevalence.

In another study, Mesibov, Schroeder and Wesson (1977), in conducting a paediatric psychology "drop-in" service found that parents questions about toileting problems (13%) were second only to their concerns about their child's negative behaviours such as disobedience (15%).

Finally, Weir (1982), in a study of 706 three-year-olds in an outer London borough, showed 23 per cent of boys and 13 per cent of girls were wet by day (at least once a week) and 21 per cent of boys and 11 per cent of girls had soiled at least once during the previous month.

From the available data, it appears that 15 - 20 per cent of three-year-olds have some difficulties with their bladder and bowel control. Since by this age most children are toilet trained (Berk and Friman, 1990), one can assume there are many parents who may need advice on how to work with difficulties that arise during toilet training (Seim, 1989).

Advice on toilet training

Health care providers, especially health visitors, are usually the ones most often asked for prescriptive advice about toilet training by inquiring or frustrated parents. Questions such as: "When should I start to toilet train my child?"; "How should I train my child?"; and "How can I keep my child from having so many accidents?" often receive replies such as "Wait until your child is ready"; "You must take control" or "Let them do it in their own time".

Much of the advice is therefore conflicting and confusing. This, however, is not the fault of health visitors or other professionals as very little prescriptive information is drawn from empirical investigation.

Hauck (1988), noted that in an extensive review of books in print exclusively devoted to toileting, only two out of fourteen cited an empirical basis for the prescriptive advice suggested by their authors (Azrin and Foxx, 1974; Cole, 1983). She concluded that "*Most of the information in all literature reviewed*

on toileting is based upon authors experiences with children." It is not surprising then that a confused picture emerges about how to advise parent's who experience toilet training problems.

Aims of the study

The main aim of studying toilet training, is to evaluate some of the factors identified from the literature, that are assumed to be associated with the successful outcome of training. This will provide an empirical basis from which advice can be given to assist parent's and children who experience toilet training difficulties. The need for such information is pressing in view of the tendency to include untested ideas derived from the existing literature into prevention programmes and other clinical work related to toileting problems.

Chapter II

Theory, Prescription and Research on toilet training

Theory and prescription for toilet training since 1900 has swung between passive permissiveness and systematic control (Stendler, 1950; Lieberman, 1972). At the advent of the twentieth century, "... *parents were assured that mature toileting behaviour, like many other characteristics of children, would emerge naturally.*" (Martin, King, Maccoby and Jacklin, 1984). This relaxed view of the early 1900's derived from the maturational perspective

Maturational perspective

Stemming from the nineteenth century child study movement that was aimed at charting the growth of the normal child, the maturational perspective assumed a simple, relaxed view of toilet training (Gesell and Amatruda, 1941; Gesell and Ilg, 1943). It suggested that like most developmental milestones, bladder and bowel control were naturally occurring, predictable outcomes of physiological development. The assumption was that voluntary control over micturition (the passing of urine) and anal sphincter muscles along with the overall developmental abilities of the child were inevitable.

Normative data about child developmental milestones including those associated with toileting has therefore become core knowledge for

maturationists. Following is a review of the descriptive research that has been based on maturational tennents.

The developmental sequence of toilet training.

Brazelton (1962) in a study of 1,170 children, reported the sequence of completed training was bladder and bowel control simultaneously in 79.5 per cent, bowel control first in 12.3 per cent and bladder control first in 8.2 per cent. MacFarlane, Allen and Honzik (1954) report similar findings to Brazelton and found bowel control was generally established before bladder control. In addition, daytime bladder control came before nighttime bladder control. Finally, Hauck (1988), in a study of 80 children, found 62 per cent obtained daytime dryness first compared to 19 per cent who achieved nighttime dryness first or both simultaneously.

The generally accepted developmental sequence today then is: First, bowel control at night. Next, bowel control during the day. Then, bladder control during the day. Finally, bladder control at night. There will of course be some exceptions to this (Herbert 1993).

Duration of training

Very few studies present data on both the onset and completion of toilet training. The emphasis is usually on the age of completion (Oppel, Harper, and

Rider, 1968; Largo and Stutzle, 1977; Bloom, Seeley, Ritchey and Mcguire, 1993). However, Sears, Maccoby and Levin (1957); Hauck (1988) and Seim (1989) provide data on both.

Sears, et al (1957), interviewed more than three hundred mothers in 1947. They found that the majority had initiated toilet training between nine and fourteen months and completed it at approximately a year and a half. Mothers who started training later required less time to train their child than did those who started earlier. Toilet training was accomplished with most ease when it was initiated after twenty months of age. Unfortunately no clear criteria are given for the onset or completion of training.

Hauck (1988), in a study of eighty children, interviewed their carers and asked them when their child "first wore underpants" (the onset) and when they were "dry almost always" (completion of training). She reported that on average children took 17 weeks to complete toilet training. The age at which children started ranged between 7 and 42 months and the age at which they completed ranged between 9 and 42 months.

Finally, Seim (1989), interviewed 266 parents and reported that the mean age for onset of training was 23 months with completion at 26 months. Duration of

training on average was 16 weeks. Again, unfortunately, there was no clear criteria for onset or completion of training.

Robson and Leung (1991), in summarising the data suggest "... *that the norm for initiating training now falls close to the child's second birthday, and that training duration typically varies from three to five months...If a child does not achieve dryness after three months of toilet training, the parents should discuss the situation with their physician*"

Summary

Studies based on maturational tenets provide a useful physiological basis for understanding the child's development of toileting skills. They suggest that bowel control is generally achieved before bladder control and that daytime bladder control comes before nighttime bladder control. These studies also place the acquisition of toileting skills within a given period of time.

Age of onset can be at any time between seven months after birth to three and a half years of age, with the norm being around two years old. Completion can occur between nine months and three and a half years of age, with the norm being around two and a half years old. Duration is generally believed to be between three and five months.

This data is important as it suggests that research into toilet training needs to take into account the developmental process; a broad age range of children and that training can take place over a period of months. It also shows that clear definitions of the onset and completion of training are needed so that there is some reliability and validity attached to these concepts when data is reported among parents who participate in a study.

A weakness of maturational studies is that the data they report is based solely on children who have succeeded with toilet training. They can give the impression that toilet training is a straightforward process and that given enough time all children will somehow succeed in achieving independent toileting skills. This is clearly not the case.

Even though the data is based on children who have succeeded with toilet training, maturational studies offer little help to parent's and children who do have difficulties as they do not provide sufficient details on any strategies parent's may have used to train their children.

The next perspective reviewed in this chapter - social learning theory - recognises that parent's and children may need help during toilet training and has provided a basis for developing strategies aimed at facilitating the toilet training process.

Social Learning Theory

According to social learning theory, learning to associate certain physiological signals with going to the toilet in a particular place and being rewarded for this behaviour are central to enabling successful toilet training. The child during training is considered a passive recipient of operant conditioning methods implemented by their parents. These methods can be highly structured and may include the use of positive reinforcers such as food, fluids, praise and physical contact for successfully achieving a certain goal (e.g. Doing wee in the potty), as well as the use of negative reinforcers such as scolding and emotional distancing if a goal is not achieved (e.g. doing wee in pants instead of the potty). It was assumed that the earlier the conditioning or training process begins, the earlier the desired behaviour pattern should appear.

Watson, in 1928, wrote a book on child rearing in which he recommended starting training when the child is three to five weeks old. He instructed parents to be unremitting in their training routine, promising a quick conditioned response as the result. No studies confirming the use or success of Watson's toileting recommendations were found in the literature.

Fox & Azrin (1973) also advocate the use of an intense toilet training procedure based on behavioural principles, but not until the child is about two years old. There's is the most detailed procedure for toilet training drawn from

social-learning theory and has been the one most subject to empirical investigation.

Foxx and Azrin, designed a laboratory based protocol for treating normally developing children who were experiencing toilet training problems. They reasoned that a rapid method for toilet training this population was indicated, because, " *...parental 'common sense' procedures have resulted in no more benefit than has occurred without training*". A summary of the method is given below:-

The general procedure aims to provide an intensive learning experience that maximises the factors known to be important for learning; then to fade out these factors once learning has occurred. The learning factors maximised are (1) a distraction free environment, (2) an increased frequency of urination by increased fluid intake, (3) continuous practice and reinforcement of the necessary dressing skills, (4) continuous practice and reinforcement in approaching the toilet, (5) detailed and continuing instruction for each act required in toileting, (6) gradual elimination of the need for reminders to toilet, (7) immediate detection of accidents, (8) a period of required practice of toilet approach after accidents as well as (9) negative reinforcement for the accident, (10) immediate detection of correct toileting, (11) immediacy of reinforcement for correct toiletings, (12) a multiple reinforcement system including imagined social benefits as well as actual praise, hugging and sweets, (13) continuing reinforcement for having dry pants, (14) learning by imitation, (15) gradual reduction of the need for immediate reinforcement and (16) post-training attention to cleanliness.

Foxx and Azrin were able to report that this method was not only rapid, but also "*...an effective method of training 'normal' children to toilet themselves*

without any prompting." This procedure was used for 34 children (22 boys and 12 girls). Their mean age was 25 months (range 20 to 36 months), with some of the children unable to speak more than a few words or dress themselves. According to the authors, all 34 children were toilet trained in an average of 3.9 hours, with accidents decreasing to near zero and remaining so during four months of follow up.

Foxx and Azrin interpreted these data to suggest that "*Virtually all healthy children who have reached 20 months of age can be toilet trained and within a few hours.*". Furthermore, they concluded that "*Toilet training is not a futile exercise; training can be achieved by intensive learning procedures.... Consequently, one can no longer defend an attitude of fatalistic permissiveness on the grounds that bladder and bowel control cannot be hastened.*" In 1974 the procedure was packaged for public consumption in the form of a book, *Toilet training in less than a day*.

Published responses to the book were initially reserved (Kimmel, 1974), and accounts of the book's effectiveness that followed thereafter were mixed. For example, in a one page case study report, Matson (1975), found that six mothers who used *Toilet training in less than a day* reported that "some training was ineffective". When it was successful, toilet training time on

average was 10.5 hours and the children maintained 'appropriate responses' for upwards of three months.

Although the approach was successful, all six mothers reported an "*...inability to cope emotionally with the tantrums induced by the steps of the toilet training method and by a lack of knowledge and skill with learning principles*" Mothers reported "*..fits of [child] crying and screaming in varying degrees the first few times their child was mandatoraly required to sit on the potty. Similarly, when the children had to correct their accidents by changing the wet pants and cleaning up the mess (restitution) and while practicing proper responses (positive practice), numerous tantrums - sitting down, hitting, and running away from the mother - were reported.*"

The mothers expressed bewilderment and frustration with their child's negative responses, as well as some dissatisfaction with the book's lack of guidance for dealing with these problems. Only after consultation with an experienced trainer were they able to complete the training. Perhaps not surprisingly the single recommendation by Matson was that mothers should not attempt to apply the 'dry-pants' method without the help of an experienced trainer. This has obvious difficulties in everyday settings.

Many other studies have been conducted on the 'dry-pants' method of training (Barnard and Erickson, 1976; Butler; 1976; Matson and Ollendick; 1977), and

they have all provided qualified support. It seems that it is most successful when parents are able to call on supervision or support from experienced trainers. However, even when parents receive this support failure can still occur.

A particular cause of failure appears to be attributed to severe emotional reactions by the children and their mothers to the 'positive practice' procedure. This procedure is described below as it provides some insight into the difficulties of using such a highly structured approach to toilet training. These difficulties also help explain why this method is not used in everyday settings today.

The 'positive practice' procedure requires the child to practice going to the potty from various locations in the house for a total of 10 rapidly conducted trials. During each trial, the child goes to the potty, lowers their pants, sits on the potty for about two seconds, stands up, pulls up their pants, then moves to another location. Thus it is used as an educational tool and a negative reinforcer.

Some of the reasons why 'positive practice' may cause difficulties are because firstly, it does not take into account the child's readiness for such an approach.

It assumes that any 'normal' two year old is able to be trained just because they are old enough to be trained. This may not always be the case.

A second problem is that it assumes the child is a passive recipient of toilet training procedures. It does not take into account their temperament and the possible difficulties of using such a highly structured approach with a child who is generally non-compliant. Insisting such a child does the same activity ten times may be very difficult for both the child and parent to achieve.

A third problem is that it does not consider the parent's readiness or ability to follow through with the approach both at a practical and emotional level. It is interesting that in a study by Butler (1976), parents reported difficulties in dealing with their child's negative responses to the 'positive practice' procedure. Matson and Ollendick (1977) also reported one mother withdrawing from training during the first four hour session after emotional distress elicited by her child's tantruming behaviour's. They went on to note "*all mothers [10] in fact, reported observing emotional effects in their children (e.g., tantrums and avoidance behaviour), and all reported experiencing discomfort in observing such effects*".

These reasons along with the difficulties of implementing the procedures correctly and without support in everyday settings, have probably contributed

to its non-existent use today. Although other authors have attempted to modify the approach (Caplan, 1978; Thurmond, 1978) the only differences are the age recommended for initiation (At least 24 months), and the author's beliefs and values about behaviour modification.

Summary

The advantages of approaching toilet training from a social learning theory perspective are that it recognises that parent's and children can have difficulties with toilet training. It has also enabled an objective description of behaviours involved in the toilet training process to be developed. This has led to a detailed procedure (the 'dry-pants' method) that has been subject to empirical investigations.

These investigations have shown that despite the many difficulties associated with the 'dry-pants' method, there is evidence that it can work and work quickly, with normally developing children. The component mechanisms by which it works however are unclear.

One possible area of future research could be to design a study that looks in depth at this method to identify the specific factors that facilitate successful training. However, it has already been stated that the 'dry-pants' method is not in everyday use at present.

It has been shown that for many parents and children the method becomes too distressing and so it is not used. Some of the possible reasons for this have been highlighted such as lack of child and parental readiness for such an approach, as well as a lack of consideration of the temperament of the child and the emotional and practical commitment needed by the parent. It may be of more benefit therefore to identify current toilet training practice and to evaluate critically some of the present recommendations for toilet training in every day non-experimental settings.

It will be seen that current advice on toilet training places just as much emphasis on thinking about the concerns of parents and children involved in the process as well as what to do during toilet training. These concerns stem from another influential theory that has influenced toilet training practice-psychoanalytic theory.

Psychoanalytic Theory.

Non-experimental psychoanalytic perspectives on the importance of toilet training appeared with increasing frequency in professional psychology and the popular press soon after world war II (Beloff, 1957). According to psychoanalytic theorists, the task of achieving bladder and bowel control occupies a central place in a constellation of psychosexual tensions and conflicts in the young child (Huschka, 1942; Kagan, 1971).

The resolution of these conflicts is seen as very important because they are assumed to be intrapsychically formative of lifelong personality traits as Dollard and Miller (1950) state "*Within a relatively short space of time the toddler must learn, under pain of losing his/ her mother's esteem, to attach anxiety to all the cues produced by excretory materials to their sight, smell and touch ... to deposit faeces and urine only in a prescribed and secret place, and to clean its body. It must learn later to suppress unnecessary verbal reference to these matters.*"

Failure to do this means that the child rather than attaching anxiety to excretory functions will instead attach it to the loss of their mothers esteem. This in turn is assumed to have a detrimental affect on their own personality development (e.g. becoming resentful), as well as their immediate and long term relationship with their mother.

Psychoanalytic prescriptions on toilet training therefore place much more emphasis on the relationship between the child and parent, as such they are much more cautionary in their approach. To help the child deal with the anxiety produced by tensions and conflicts, a 'nurturing and relaxed approach' to toilet training at a later age is recommended for a successful outcome (Brazelton, 1962; Corday, 1967; Schmitt, 1987; Robson and Leung, 1991). Schmitt

(1987), has provided the most recent detailed procedure on how to approach toilet training based on psychoanalytic concerns. This is summarised below.

(1) Toilet training should not start until the child has built a positive attachment to the potty. Parents can emphasise that this is the child's own special possession by putting his/ her name on it and encouraging the child to decorate it with stickers. (2) Parents can then encourage the child to sit on the potty with his/ her clothes on for fun activities. (3) Only after the child has used the chair in this way for at least one week and is completely comfortable with it should it be used as a place to put soiled nappies. (4) Practice runs can now begin. When the child signals that they need to relieve themselves the parent assists them too and on the potty. (5) Once the child understands the process and successfully uses the potty three or more times, parents should discontinue practice runs. (6) The whole training process must be upbeat. Looking upon episodes of wetting and soiling as "accidents", helps to keep the focus positive. (7) From now on liberal praise is given for any forward progress.

It can be seen that this approach incorporates aspects of Foxx and Azrin's 'dry-pants' method (e.g. use of praise, practice runs), however, it is also essentially different. It emphasises that the child and parent need to be ready and comfortable with the prospect of toilet training before they start. The whole process then takes place in a relaxed environment with co-operation between the parent and child at all times. The aim is to achieve a mutually desirable goal without damaging the relationship between them.

If this type of relaxed, co-operative approach does not take place, Schmitt argues that toilet training is unlikely to succeed as parent's can become

involved in a power struggle with their children. He refers to this as "... *the battle of the bowels*" and gives the following example of how this 'battle' may arise: "*In some cases, the parent has physically punished the child or forced them to sit for long periods on the potty. The dynamics usually fit a recognised interactional model. The child tends to be difficult and strong willed by temperament as well as caught up in the normal developmental stage of negativism. The parent tends to be a perfectionist, overly focused on cleanliness and neatness.*"

Parent's are therefore attributed causative power to produce anxious, unsuccessful children by the way they initiate and proceed with toilet training. This view has been supported by other authors from a psychoanalytic perspective (Corday, 1967; Robson and Leung, 1991).

Unfortunately, Schmitts advice and warnings on the process of toilet training have never been fully evaluated. No reliable data exists on children and their parent's, in non experimental settings, to confirm or disconfirm these characterisations.

Hauck (1988), in a retrospective study of eighty children who had been toilet trained, looked at parent and child readiness but found no evidence that they are associated with a successful outcome of training. She, concluded that a

prospective study may be preferable to obtain more accurate measurements of child and parental readiness before toilet training starts. Hauck, also recommends that a child temperament rating and a measure of parent's behavioural style might help explain more of the variance on an outcome measure of toilet training.

These recommendation's would seem to support Schmitt's assertion that as well as considering child and parental readiness as important factors for successful training, child temperament and the behavioural style of parents must also be considered.

Summary

Despite the absence of data to support the 'relaxed' approach to toilet training as recommended by Schmitt, "*..it enjoys broad, intuitive appeal as do most relaxed approaches.*" (Luxem and Christopherson, 1994). This is confirmed by the many pamphlets and books available today that suggest a relaxed approach is the way to successfully toilet train your child (Northamptonshire Health Promotion; Pontefract Health Authority; Green, 1987; Herbert, 1993).

It is likely that in everyday settings most parents use such an approach (Luxem and Christopherson, 1994), however, endorsements on scientific grounds are

unknown, as searches of PsycLIT, Medline Express and Cinahl data bases reveal no empirical evaluation of the method's effectiveness.

The main problem then with recommending 'relaxed' approaches to toilet training is that the particular training methods suggested have never been fully evaluated. Neither have other concerns that are associated with such approaches - child readiness; parental readiness; child temperament; behavioural style of parents - the degrees to which these factors are associated with the successful outcome of toilet training are also unknown.

Conceptual context of this study

It is clear from the literature reviewed that research into factors assumed to be associated with the successful outcome of toilet training in everyday settings needs to draw from all three theoretical perspectives. The maturational perspective provides information on what to expect in terms of physiological parameters as well as providing a time frame within which to focus the study. Social learning theory shows that clear definitions of the behaviours to be studied in the toilet training process are necessary to enable them to be evaluated empirically. Finally, the psychoanalytic perspective emphasises that it is not just the methods used to train the child that are important, studies must also consider certain aspects about the parent's and children involved in the toilet training process.

This study is therefore not a test of each individual theoretical perspective, rather it views them as complimenting each other to provide an overall context within which factors that are assumed to be associated with the successful outcome of toilet training in everyday settings can be researched.

Variables identified for this study

The independent variables identified for this study have been drawn from the literature reviewed, they are: child readiness; parental readiness; child temperament; behavioural style of parents and the type of methods used during training. Each one is assumed to be associated with the successful outcome of toilet training (the dependent variable). Operational definitions of all the variables in this study are presented below.

Independent Variables

Child Readiness.

Child readiness was defined by physiological/ physical, cognitive and emotional parameters. These parameters are recorded on the Child Readiness Profile (Hauck, 1988; Appendix A) and measured from parental reports of their child's behaviours prior to the child sitting on the potty for the first time. For the purpose of this study, the age at which the child first sits on the potty defined the criteria for onset of training.

Parental Readiness.

Parental readiness was defined by parental report of their own behaviours and attitudes indicating mental and physical preparedness for teaching toileting skills to their children before their child sat on the potty for the first time. Parental readiness was measured and operationally defined by the 13 items on the Parental Readiness Inventory (Hauck, 1988; Appendix B).

Child Temperament.

Child temperament was defined by parental report on nine parameters that refer to the manner in which their child interacts with her or his environment. The nine parameters - activity level, rhythmicity of body functions, approach, adaptability, intensity, mood, persistence (attention span), distractibility and sensory threshold - were measured and operationally defined by 97 items on the Toddler Temperament Scale (Fullard et al, 1978, Appendix C).

Behavioural style of parents.

Behavioural style of parents was defined by parental report on four parameters that refer to the manner in which they interact with their environment. The four parameters - cleanliness, neatness, checking and ruminations - were measured and operationally defined by 20 items on the Lynfield Obsessional/Compulsive Questionnaire - Interference (Allen and Tune, 1975; Appendix D).

Toileting training methods.

Toilet training methods were defined by parental reports on three parameters of toilet training behaviours - relaxed, planned and strict - demonstrated by themselves after their child sat on the potty for the first time. Toilet training methods were measured and operationally defined by 16 items on the Parent Toilet Training Report (Appendix E).

Dependent Variable

Successfulness of Toilet Training.

The child's degree of success in achieving independent toileting skills was operationally defined and measured by a 12 item scale of observable toileting behaviours (Child Toileting Behaviour Report, Appendix F). For the purposes of this study the child was considered completely and successfully toilet trained when they did poo/ wee only in their potty or toilet and not in their pants during the day for at least one week.

Hypotheses to be Tested

On the basis of the literature reviewed it is assumed that the successful outcome of toilet training in everyday settings is associated with the five independent variables outlined above. As a result the following hypotheses will be tested.

1. The degree to which children are ready for toilet training (as measured by the Child Readiness Profile - Hauck, 1988), will be associated with the successfulness of the outcome of training (as measured by the Child Toileting Behaviour Report, Appendix F).

2. The degree to which parents are ready for toilet training (as measured by the Parental Readiness Inventory - Hauck, 1988), will be associated with the successfulness of the outcome of training.

3. The degree to which children have an easy temperament (As measured by the Toddler Temperament Scale - Fullard et al, 1978) will be associated with the successfulness of the outcome of training.

4. The degree to which parents behavioural style is 'normal' (as measured by the Lynfield Obsessional/ Compulsive Questionnaire - Interference, Allen and Tune, 1975) will be associated with the successfulness of the outcome of training.

5. The degree to which children receive a 'relaxed' approach to toilet training (as measured by the Parent Toilet Training Report, Appendix E) will be associated with the successfulness of the outcome of training.

In addition to statistically testing each hypothesis, their clinical significance will also be assessed.

Chapter III

Methods

Design of the study

In the literature reviewed in the previous chapter studies on toilet training have been conducted in one of two ways either retrospectively (e.g. Hauck, 1988), or prospectively (e.g. Foxx and Azrin, 1974). It was decided that for a more rigorous testing of the hypotheses a prospective design would be used.

Ideally, information about a child's development of toileting skills could be collected over time using direct observations of the child and parent by a researcher. However, given the logistics of observing children learning toileting skills; problems of access and the amount of time and cost of such an approach, this option was not feasible for this study.

Instead, the decision was made to interview, on a face-to-face basis, the person who would be training their child just before they started the toilet training process. In all cases, in this study, the person interviewed was the child's mother.

This prospective design was chosen as it allowed the researcher to obtain the necessary information on the child and mother before training commenced

(measures of child and parental readiness, child temperament and the behavioural style of parent's), as well as information on what happened during the toilet training process (Child Toileting Behaviour Report; Parent Toilet Training Report). The aim was to gain as much accurate information as possible about what happened before and during the toilet training process in an unobtrusive way.

Participants.

The study population were parents with children who were about to start toilet training their child. All the children in the study were registered with health visitors that were based in one of two different health centres. At the 'two year health check' (children can range in age between 22 - 30 months), health visitors asked mothers - who were due to start toilet training their child - whether they would like to take part in a study about toilet training. Those who said yes were then contacted on the phone, at home, by the researcher, to confirm that they wished to take part. This technique obtained 36 potential participants (21 with male children and 15 with female children). The final number of participants involved in the analyses of this study was 26 (15 with male children and 11 with female children).

All the children who took part in the study had no obvious medical problems or learning difficulties and as such were functioning within the normal developmental range expected for their age.

Instruments.

Six sets of questions were used that operationally define the dependent and independent variables. Each set of questions is an instrument and each instrument is included in appendices A-F. This section includes information regarding each set of questions; a description of the resulting instruments; details of their psychometric properties; administration and scoring procedures and the rationale for their selection in this study.

Child Readiness Profile.

This instrument (Appendix A) was designed by Hauck (1988) to measure a child's readiness to demonstrate toileting skills. The items for measurement were selected on the basis of a review of the literature on toileting, and a previous qualitative descriptive study by Hauck (1987). Individual items were constructed from an exhaustive list of child readiness parameters that were grouped into the domains of physical/ physiological, cognitive and emotional. Sixteen individual items were chosen that reflect these domains and these became the Child Readiness Profile.

Psychometric properties (Full details in Hauck, 1988)

A pilot study was done to test and refine the instrument. A convenience sample of 23 parent's from Wisconsin-Milwaukee responded to instrument items and were asked to comment on both structure and content of items and the

instrument as a whole. Hauck and a paediatric nurse practitioner subsequently reviewed the list of questions to eliminate redundant and confusing items. The instrument was tested for readability and scored 88.3 on the Flesch reading ease score.

Reliability.

For a test of internal consistency alpha coefficients were calculated for the 16 readiness items. The overall α was .76. Test - retest reliability was applied to a subsample of 10 subjects. These parents responded to the child readiness questions a second time one to two weeks following the initial interview. No significant differences between test and retest scores were found, $t = (9) .94$, $p = .37$. The coefficient of stability was $r (9) = .67$.

Validity

The instrument was critiqued by two paediatric nurse practitioners and two master's prepared nurses experienced in working with child rearing families. These nurses assisted in establishing content validity by responding to questions about how well the instrument measures what it claims to measure and how well it captures the domain of child readiness. Parents included in the pilot study were also asked to critique the instrument for ease of completion, understandability, and content included regarding toileting as another means of

assessing preliminary content validity. Editorial changes were made on the basis of parental comments.

Administration

The parent is given a copy of the Child Readiness Profile to refer to. The interviewer then reads through the brief introduction before asking the first question. The interviewer reads each question and parent's are asked to state if their child did the behaviour before last week, within the last week, never or don't know. The interviewer records the response of the parent on an identical copy of the instrument until all sixteen questions have been asked. Additional probes or explanatory statements for selected items are included for the interviewer if the parent does not initially understand an item. Once all the questions have been asked the parent returns their copy of the instrument to the interviewer. It usually takes less than five minutes to complete.

The instrument is scored by counting the number of items the child reportedly demonstrated at least one week before they sat on the potty for the first time. Each item is equally weighted. Scores range from 0 to 16 with 0 indicating low readiness and 16 indicating high readiness.

Rationale for choosing the instrument

The items contained in the Child Readiness Profile have been drawn from an extensive review of the literature. They have also been subject to preliminary tests of reliability and validity, the results of which are encouraging. These factors combined with its easy administration (which is important when interviewing busy mothers) and the knowledge that no other instrument specifically measures a child's readiness for toilet training led to the decision to include it as an instrument in this study.

Parental Readiness Inventory

This instrument (Appendix B) was designed by Hauck (1988) to measure parental readiness for teaching toileting skills to a child. Individual items were developed from an exhaustive list of readiness parameters mentioned in the literature by researchers and practitioners (Sears, Maccoby and Levine, 1957; Brazelton, 1962; Stehbens and Silber, 1971; Azrin and Foxx, 1974; Erickson, 1976; Horner and McCellan, 1981).

Parental readiness parameters were subdivided into behaviour, thought processes and feeling categories. Parents are asked to consider what things they did, thought or felt before starting to toilet train their child. Thirteen individual items were chosen that reflect these three areas and these became the Parental Readiness Inventory.

Psychometric properties

(Full details in Hauck, 1988)

The piloting procedures and those for testing the reliability and validity of the Parental Readiness Inventory are the same as those reported for the Child Readiness Profile. What follows then is a brief report only on results of tests of reliability of the instrument as the information on piloting and validation is the same as that already described for the Child Readiness Profile.

Reliability.

For a test of internal consistency alpha coefficients were calculated for the 13 readiness items. The overall was .62. Test - retest reliability was applied to a subsample of 10 subjects. These parents responded to the parental readiness questions a second time one to two weeks following the initial interview. No significant differences between test and retest scores were found, $t(9) = .36$, $p = .72$. The coefficient of stability was $r(9) = .94$.

Administration

The parent is given a copy of the Parental Readiness Inventory to refer to. The interviewer then reads through the brief introduction before asking the first question. The interviewer asks each question and parent's respond on a 5 point Likert scale ranging for "never done this" to "done this a lot". The interviewer records the response of the parent on an identical copy of the instrument until

all thirteen questions have been asked. An additional explanatory statement for one item (question 3) is included for the interviewer if the parent does not initially understand the question. Once all the questions have been asked the parent returns their copy of the instrument to the interviewer. It usually takes less than five minutes to complete.

The instrument is scored by totalling the responses. Each item is equally weighted. The possible score for each parent ranged from 13 to 65 with 13 indicating low parental readiness and 65 indicating high parental readiness.

Rationale for choosing the instrument.

The rationale for choosing the Parental Readiness Inventory is the same as that already given for choosing the Child Readiness Profile.

Toddler Temperament Scale

This instrument (Appendix C) was designed by Fullard, McDevitt and Carey (1978) to measure temperamental characteristics in 1 - 3 year old children. The items for measurement were based on the ideas of Thomas, Chess, Birch, Hertzog and Korn in the New York Longitudinal Study (1963). Individual items were constructed from a list of child temperament parameters that were grouped into the following nine domains: activity level, rhythmicity of body functions, approach, adaptability, intensity, mood, persistence (attention span),

distractibility and sensory threshold. Ninety-seven items were chosen that reflect these domains and these became the Toddler Temperament Scale.

Psychometric properties

(Full details in Fullard, McDevitt and Carey, 1984)

Subjects were obtained by selecting all children from 12 to 36 months of age from the office files of two private paediatric practices in suburban Philadelphia. Both practices are highly heterogeneous having representatives from all social levels. An initial 115 item questionnaire was sent to mothers of 340 one-to-three-year-old children, 309 were returned. The age distribution of the sample was: 12-23 months (n = 167), 24-36 months (n = 142). Subjects were evenly distributed over the age range. The standardisation sample consisted of 161 males and 148 females. Data were analysed for internal consistency with items correlating poorly being dropped. The final version of the instrument was composed of 97 items; the number of items per category ranged from 8 to 13, with a median of 11.

Reliability

Fifty of the respondents were randomly selected for an assessment of 1-month test-retest reliability with the constraint that each month over the 2-year age span be represented. Forty-seven of these forms were returned, with a mean retest interval of 32 days and with a range from 17-48 days. Re-test reliability's for all categories ranged from .69 to .89 with a median of .81.

For a test of internal consistency of categories, alpha coefficients were calculated. For the one-year-old sample, alpha coefficients for the nine categories ranged from .59 to .86 with a median of .7. For the two-year-old sample, alphas ranged from .53 to .85 with a median of .72.

Validity

Three studies specifically testing the concurrent validity of the instrument have been completed (Treisman, 1980; Garcia Coll, 1981 and Wilson and Matheny, 1983). All three studies using different comparison measures have reported correlation's ranging from .37 to .54 with the Toddler Temperament Scale.

Administration

The parent is given a copy of the Toddler Temperament Scale to refer to. The interviewer then reads through the front information sheet before asking the first question. The interviewer reads each question and parent's are asked to respond on a 6 point Likert scale ranging from "almost never" to "almost always". The interviewer records the response of the parent on an identical copy of the instrument until all ninety-seven questions have been asked. Once all the questions have been asked the parent returns their copy of the instrument to the interviewer. It usually takes 20 minutes to complete.

Scoring of the instrument is done in three stages. The process is explained clearly on the scoring sheet at the end of the questionnaire. The possible end score for each child ranges from 1 to 5 with 1 indicating very difficult temperament and 5 very easy temperament.

Rationale for choosing this instrument

This instrument was chosen because it provides a well-established measure of toddler temperament and is also efficient to administer. It is widely regarded as a reliable method of collecting and summarising data and it has been administered in recent British and international studies (Small, Astbury, Brown and Lumley, 1994; Lochary, Wilson, Griffen and Coury, 1993; Ludman, Lansdown and Spitz, 1992). It is therefore robust across different cultures.

The Lynfield Obsessional/ Compulsive Questionnaire (Interference)

This instrument (Appendix D) was designed by Allen and Tune (1975). It provides a subjective assessment of obsessiveness/ compulsiveness and the degree to which these factors interfere with daily activities. The items for measurement are drawn from the Leyton Obsessional Inventory (Cooper, 1970) which has been shown to discriminate successfully between three groups of subjects Cooper refers to as - 'normal' women; house-proud house-wives and obsessional patients.

Individual items were constructed from a range of obsessional parameters with particular emphasis upon domestic topics. The items are grouped into cleanliness; neatness; checking and ruminations. Twenty items were selected that reflect these four areas and these became the Lynfield Obsessional/Compulsive Questionnaire (Interference).

Psychometric properties

(Full details in Allen and Tune, 1977)

Subjects were selected from people who live in Bradford or were in-patients at Lynfield Mount Hospital in Bradford. Three groups were chosen: non-psychiatric (n = 30); randomly selected psychiatric patients (n = 9) and obsessional patients (19). The selection of questions was re-examined in the light of further data and no reason to modify the choice appeared.

Reliability

Internal consistency scores have been calculated by comparing the subjective negative responses, i.e. 'No, not at all answers' on both halves of the test. On the protocols of the nineteen obsessional patients both halves correlate + 0.76, $p < 0.01$. Insufficient data has been collected as yet to calculate adequately test re-test correlation coefficients.

Validity

Concurrent validity has been tested by comparing scores obtained from fifteen obsessional patients on both the Lynfield and Leyton Obsessional Inventory. The scores correlated significantly at the 1 per cent level (i.e. + 0.77). Although the Lynfield was derived from the Leyton, the wording of some of the questions and the selection of possible answers has been altered. Therefore, the correlation between the scores could not easily have been predicted.

The Leyton Inventory was validated on its discriminatory powers. The Lynfield is also able to do this. Statistical comparison shows a significant difference between non-psychiatric scores and randomly selected psychiatric patients at the 5 per cent level. However, the obsessional scores exceed those of the randomly selected patients at the 1 per cent level of significance.

A final test of validity was made by which the power of each question to discriminate between high and low scorers was tested. All twenty questions successfully passed the test at the 1 per cent level of significance.

Administration

The parent is given a copy of the Lynfield Obsessional/ Compulsive Questionnaire (Interference) to refer to. The interviewer then reads through the brief introduction before asking the first question. The interviewer reads each

question and parent's are asked which one of five possible responses applies particularly to them. Each response is coded with a letter (a, b, c, d, or e). The interviewer records the response of the parent on an identical copy of the instrument until all twenty questions have been asked. Once this is done the parent returns their copy of the instrument to the interviewer. It usually takes less than five minutes to complete.

The instrument is scored by totalling the responses. Each item is equally weighted. The possible score for each parent ranged from 0 to 80 with 0 indicating 'normal' behaviour and 80 indicating 'high obsessional' behaviour.

Rationale for choosing this instrument

A measure was needed in this study that looked at a particular aspect of parent's behavioural style. This instrument was chosen because its parameters have a particular emphasis on domestic obsessionalism and it provides a subjective assessment on the degree to which this interferes with daily activities. These two factors make it an appropriate instrument to provide a measure of the particular aspect of parental behavioural style that was needed for this study.

This instrument has been developed and administered in British studies and used internationally in the USA and France (Ross and Anderson, 1988;

Hantouche and Guelfi, 1993). It is quick to administer and is increasingly becoming a reliable and valid measure.

Parent Toilet Training Report

This instrument (Appendix E) was designed to measure the degree to which parent's used a 'relaxed' approach to toilet training their child. It was specifically developed for this study by the researcher. Individual items were selected on the basis of a study by Hauck (1988) and a review of the literature on suggested approaches to toilet training (Brazelton, 1962; Corday, 1967; Azrin and Foxx, 1974; Green, 1987; Schmitt, 1987; Hauck, 1991; Seim, 1989; Robson and Leung, 1991; Herbert, 1993). Toilet training parameters were grouped into the domains of relaxed, planned and strict. Sixteen individual items were chosen that reflect these domains and these became the Parent Toilet Training Report.

Psychometric properties

A small pilot study was done to test and refine the instrument. A convenience sample of nine parent's responded to instrument items and were asked to comment on both structure and content of items and the instrument as a whole. The researcher and two experienced health visitors subsequently reviewed the list of questions to eliminate redundant and confusing items. The instrument was tested for readability and scored 94.5 on the Flesch reading ease score.

Reliability

Insufficient data has been collected as yet to calculate adequately the alpha coefficients to estimate the internal consistency of the 16 toilet training items. Also no tests have been conducted to date on test-retest reliability of the instrument.

Validity

The instrument was critiqued by three different pairs of experienced health visitors independent of each other. They assisted in establishing content validity by responding to questions about how well the instrument measures what it claims to measure and how well it captures the three domains it claims to represent. Parents included in the pilot study were also asked to critique the instrument for ease of completion, understandability and content included regarding parent's toilet training behaviours as another means of assessing preliminary content validity. Editorial changes were made on the basis of comments from both health visitors and parents.

Administration

The parent is given a copy of the Parent Toilet Training Report to refer to. The interviewer then reads through the brief introduction before asking the first question. The interviewer asks each question and parents respond on a 5 point Likert scale ranging from 'never' to 'always'. The interviewer records the

response of the parent on an identical copy of the instrument until all sixteen questions have been asked. Additional probes or explanatory statements for selected items are included for the interviewer if the parent does not initially understand an item. Once all the questions have been asked the parent returns their copy of the instrument to the interviewer. It usually takes about five minutes to complete.

The instrument is scored by totalling the responses. Each item is equally weighted. Items 1, 5, 7, 8, 10, 11, 12 and 16 are scored from left to right with 'Never' scoring 1 and 'Always' scoring 5. Items 2, 3, 4, 6, 9, 13, 14 and 15 are scored from right to left with 'Never' scoring 5 and 'Always' scoring 1. The possible score for each parent ranged from 16 to 80 with 16 indicating a 'strict' approach to training and 80 indicating a 'relaxed' approach.

Rationale for developing the instrument

It has already been stressed in chapter II that it is important to identify the particular type of approach parent's use to toilet train their child in everyday settings to see whether or not it is associated with the outcome of toilet training. This instrument was therefore developed specifically for this study as searches of PsycLIT, Medline and Cinahl databases revealed no checklist or questionnaire designed to elicit information on parental approaches to toilet training their children.

Child Toileting Behaviour Report

This instrument (Appendix F) was designed to measure the child's level of success at achieving bladder and bowel control during the day, which is the dependent variable in this study. It was specifically developed for this study by the researcher. Item selection was based on Tierney's (1973) work describing the steps involved with developing toileting skills. The twelve items are observable toileting behaviours of varied complexity. Children who are more successful in developing their toileting skills will demonstrate more of the behaviours than children who are less successful.

Psychometric properties

The piloting procedures and those for testing the reliability and validity of the Child Toileting Behaviour Report are the same as those previously given for the Parent Toilet Training Report.

Administration

The parent is given a copy of the Child Toileting Behaviour Report to refer to. The interviewer then reads through the instructions to ensure that the parent fully understands how they should complete it. The report is then left with the parent and is first completed by them one month after they have started toilet training their child. The date they must complete the report and the number of

months since training started (at this stage 1) is recorded on the report at the initial visit. It is then collected by the interviewer on the recorded date.

The interviewer then repeats this process on a monthly basis until the child has successfully completed training or for a maximum of four months after toilet training has started.

The instrument is scored by counting the number of items the child reportedly demonstrates at least one week before bladder and bowel control was successfully achieved during the day (i.e. before the child scores 1 for item L), or at least one week before the last report is collected four months after toilet training had started. Each item is equally weighted. The possible score for each child ranged from 0 to 12 with 0 indicating low success in achieving bladder and bowel control during the day and 12 indicating high success in achieving bladder and bowel control during the day.

Rationale for developing this instrument

This instrument was developed specifically for this study as searches of PsycLIT, Medline and Cinahl databases revealed no checklist or questionnaire designed to elicit information on a child's success or failure at achieving daytime bowel and bladder control.

Procedures.

Participant recruitment

A total of twelve health visitors from two different health centres asked parent's at their child's two year health check - Are you due to start toilet training your child?. If they said yes, parents were then asked - Would you like to take part in a study about toilet training being conducted by a trainee clinical psychologist?. If the parent said yes again, they were then asked - Can he (the researcher) contact you on the phone to provide you with details of the study?. Providing the parent's said yes, the health visitor then noted the parent's name, address and a contact number and placed the information in a sealed envelope in a designated pigeon hole in their particular health centre. These were collected weekly by the researcher.

Parent's who were interested in taking part in the study were contacted on the telephone by the researcher and asked several screening questions (Telephone protocol, Appendix G). These were asked to ensure that the parent and their child met the study criteria.

During the phone call parent's were invited to participate in an interview if they and their child met the study criteria. If they agreed to participate, the researcher set up a time and place to interview them.

Visiting the parent's

On the first visit to see parent's, the researcher took with them an Identification badge and copies of the subject information sheet (Appendix H), consent form (Appendix I) and each instrument (Except the Parent Toilet Training Report, Appendix E).

Parent's were given a copy of the subject information sheet to read. They then had the opportunity to ask any questions about the study and the researcher answered them. If the parent's were still interested in taking part, they were then given a copy of the consent form to read. Again if they had any queries these were addressed by the researcher. If they were still interested at this stage, parent's were asked to sign two copies of the consent form to confirm that they agreed to take part in the study. The parent retained one copy of the consent form as well as a copy of the subject information sheet. The researcher retained the other signed copy of the consent form.

Once consent had been granted, the researcher interviewed the parent to complete the Child and Parental Readiness questionnaires as well as the Toddler Temperament Scale and the Lynfield Obsessive/ Compulsive - Interference - Questionnaire. After the data was obtained on these four instruments, the parent was then instructed on how to complete the Child Toileting Behaviour Report (Appendix F).

This was initially completed by the parent one month after their child sat on the potty for the first time. The parent recorded the date when they would complete the report and the researcher agreed to collect it on this date.

When the researcher returned to collect the Child Toileting Behaviour Report, another copy was left for the parent to complete (in one month's time), if the child had not yet successfully completed toilet training. This procedure was repeated on a monthly basis until a maximum of four reports had been collected. If the child successfully completed toilet training before four months then fewer reports were collected.

On successfully completing training (or at the end of four months), the parent was then asked to complete The Parent Toilet Training Report (Appendix E). Once this was done (or if the parent withdrew at any stage) the parent was thanked for taking part in the study.

Data Management

All the raw data collected for this study was kept on the Questionnaires. These were shredded on completion of the study. Totals of raw scores and analyses of the data were kept on computer files. Names were deleted on completion of the study.

Approval of the study and Ethical considerations

This study was approved by the Course Team providing the Postgraduate Professional Training Course in Clinical Psychology at The University of Plymouth. It also received ethical approval from Southmead Medical Research Ethics Committee (S.M.R.E.C.). A letter of ethical approval from S.M.R.E.C. is enclosed in the appendices (Appendix J).

Chapter IV

Results

Description of the participants in the study

The participants in this study were drawn from two health centres located in busy conurbation's on the outskirts of a large city. Thirty-six potential participants were initially recruited at their child's two year health check. Telephone calls were subsequently made to each one (Telephone Protocol, Appendix G) by the researcher.

Non participants

Of the initial thirty-six potential participants, ten did not participate or complete the study. The reasons for their non participation or failure to complete the study are as follows: (1) Two were unobtainable despite repeated attempts to contact them on the phone. (2) Three who initially agreed to participate did not do so because: a) two of them were not in when the researcher visited their home b) one decided not to participate due to personal difficulties. (3) Five who initially participated in the study dropped out part way through because: a) two gave birth to new babies; b) two moved house; (c) one changed their mind and stated that they no longer wanted to take part. This resulted in 26 participants being included in the final analyses.

Participants

Mothers

The analyses included twenty-six participants, all of whom were mothers of the children in the study. Their ages ranged from 19 through to 34 years of age ($M = 26$ years). Fifteen (58%) were married, Six (22%) were divorced, three (12%) were single and two (8%) were living with a partner. All the mothers were white. Sixteen (61.%) were at home full-time, eight (31%) had part-time paid employment and two (8%) had full-time paid employment. Each participant was the main person responsible for toilet training their child.

Children

There were fifteen boys and eleven girls in this study, their ages ranged from 25 months through to 32 months ($M = 29.6$ months). All of them were cared for primarily in their own home. To meet the criteria for inclusion in the study all the children had not been on the potty prior to the researcher making their first visit. All the children who took part in the study had no obvious medical problems or learning difficulties and as such were functioning within the normal developmental range expected for their age.

Findings of the study

Description of specific toileting behaviours

Of the twenty-six children who participated in this study, fifteen (58%) successfully completed toilet training, six (23%) achieved partial success and five (19%) achieved little success within four months of starting toilet training. Table 1 shows the mean, standard deviation and age range of children who succeeded with toilet training in relation to specific toileting behaviours.

Table 1.

Specific toileting behaviours of children by age who succeeded with training

<u>Toileting Behaviour</u>	<u>Mean</u>	<u>Age Standard Deviation</u>	<u>Range</u>
Age first sat on potty (months)	30.1	1.4	28-32
Age when completely successfully trained (months)	33.4	1.5	31-36
Duration of training (in weeks)	14.3	4.2	3-18

Note n = 15. All data is reported in months except duration which is in weeks

It can be seen that the mean age of onset for children who succeeded with toilet training was 30.1 months or two and a half years of age. This is later than has been reported in recent studies (Hauck, 1988; Seim, 1989; Robson and

Leung, 1991). The mean time for duration of training was 14.3 weeks, this is similar to findings that have been reported in recent studies (Hauck, 1988; Seim, 1989; Robson and Leung, 1991).

Eleven of the children who participated in this study did not successfully complete toilet training. The mean age of onset for these children was 29.1 months (s.d. = 2.0, range 25-31 months). To see if age of onset was associated with level of success (as measured by the Child Toileting Behaviour Report), a Pearson product moment correlation coefficient was calculated, the association was not statistically significant: r (d.f. = 24) = .3 $p > 0.05$ (2-tailed).

Statistical analyses of the five hypotheses

The Pearson Product Moment Correlation Coefficient was calculated to see if there was a statistically significant correlational relationship between the independent and dependent variable in each of the five hypotheses.

This statistical procedure was chosen as it was assumed that the variances in the scores of the independent variable are comparable to variances in the scores of the dependent variable. It also provides a measure of association between two variables each of which is at the interval or ratio level. All the data obtained for this study met these criteria. The mean, standard deviations and ranges of scores for each of the variables are shown in Table 2.

Table 2.
Means, Standard Deviations and Ranges of scores for each of the study variables.

<u>Variable</u>	<u>Scores</u>		<u>Range</u>	
	<u>Mean</u>	<u>Standard Deviation</u>	<u>Obtained</u>	<u>Possible</u>
Child Readiness	9.1	2.5	6 -14	0-16
Parental Readiness	36.7	8.2	24-53	13-65
Toddler Temperament	3.6	0.9	2-5	1-5
Parent's Behavioural Style	25.5	11.5	6-46	0-80
Parental Toilet Training Methods	45.5	14.5	22-71	16-80
Child Toileting Behaviour Report	9.4	2.9	4-12	0-12

Note n = 26

Hypothesis 1

The first hypothesis states that the degree to which children are ready for toilet training, will be associated with the successfulness of the outcome of training (as measured by the Child Toileting Behaviour Report). In relation to this and subsequent hypotheses, successfulness was measured by the Child Toileting Behaviour Report. The result of the analysis did not support the first hypothesis: r (d.f. = 24) = .01 $p > 0.05$ (2-tailed). This suggests there is no

significant relationship between the readiness of the child and the successfulness of the outcome of toilet training.

Hypothesis 2

The second hypothesis states that the degree to which parents are ready for toilet training, will be associated with the successfulness of the outcome of training. The result of the analysis $r (d.f. = 24) = .20$ $p > 0.05$ (2-tailed) did not support this hypothesis. This suggests that there is no significant relationship between the readiness of the parent and the successfulness of the outcome of toilet training.

These findings are similar to those reported by Hauck (1988), who conducted a retrospective study of eighty children who had completed training. She found no association between child and parental readiness and the level of the child's independent toileting skills.

It was thought that the same measures of child and parental readiness would have a better association with the outcome of toilet training in this study as they were taken just before training commenced. This proved not to be the case. The concepts of child and parental readiness will need to be reviewed if they are to have a closer association with the outcome of toilet training.

Hypothesis 3

The third hypothesis states that the degree to which children have an easy temperament, will be associated with the successfulness of the outcome of toilet training. The result of the analysis r (d.f. = 24) = .41 $p < 0.05$ (2-tailed) supports this hypothesis.

This finding is consistent with the literature reviewed in chapter II. It is important to note, that the analysis also shows the clinical significance of child temperament is fairly small. It accounts for just 16 per cent of the total variance in the outcome measure.

Hypothesis 4

The fourth hypothesis states that the degree to which parent's behavioural style is 'normal' (compared to obsessive), will be associated with the successfulness of the outcome of toilet training. The result of the analysis supports this hypothesis r (d.f. = 24) = -.45 $p < 0.05$ (2-tailed).

This finding is also consistent with the literature reviewed in chapter II. Again, it must be noted that the clinical significance of the result is small. It accounts for just 16 per cent of the variance on the outcome measure.

Hypothesis 5

The fifth hypothesis states that the degree to which children receive a 'relaxed' approach to toilet training, will be associated with the successfulness of the outcome of toilet training. The result of the analysis supports this hypothesis $r (d.f. = 24) = .51 p < 0.01$ (2-tailed).

The clinical significance of this factor is the highest reported in this study. It accounts for twenty-five per cent of the variance on the outcome measure.

Emergent properties of the data

The results of the analyses shows that three of the independent variables - child temperament, parent's behavioural style and the type of approach parent's use to train their child - are associated with the outcome of toilet training. As a consequence, it was considered that a multiple regression equation could be calculated to develop a predictive linear model. This could then be tested on a subsequent group of parents and children in a future study.

A multiple regression analysis, however, was not appropriate for the available data, as there were too many sources of collinearity among the study variables to produce a dependable multiple regression equation. Table 3. shows the Pearson correlation coefficients among the study variables.

Table 3.
Pearson product moment correlation's among study variables (N = 26)

Variables	Variables					
	1	2	3	4	5	6
1. Child Readiness	1.0					
2. Parental Readiness	.61**	1.0				
3. Toddler Temperament	.05	-.10	1.0			
4. Parent's Behavioural Style	.35*	-.44**	-.15	1.0		
5. Parental Toilet Training Report	.50**	.59**	.01	-.83**	1.0	
6. Child Toileting Behaviour Report	.01	.20	.41*	-.45*	.51**	1.0

Note. p Values are 2-tailed. *p .05, **p .01

Although a multiple regression calculation was not appropriate, the data in Table 3. does show some important associations between the study variables.

1) There was a high correlation between parents perceiving both themselves and their child as ready for toilet training. This may suggest that parents are more likely to start training when they perceive both themselves and their child are ready.

2) The behavioural style of parents was significantly associated with child and parental readiness. An interesting finding is that high scores on parental readiness correlated with low scores on parent's behavioural style. This suggests that the less focus parents have on cleanliness and neatness at home, the easier it may be for them to perceive themselves as ready to train their child.

3) Parent's scores on the Toilet Training Report were also highly correlated with child and parental readiness. This suggests that the more parent's perceive themselves and their child as ready to start training the more relaxed is their approach. Low scores on the Toilet Training Report were also correlated with high scores on the measure of parent's behavioural style. This suggest parent's who used a strict approach to training are also highly focused on cleanliness and neatness in the home.

4) Finally, it should be noted that child temperament is significantly associated only with the outcome of training. This suggests that parent's perception of their child's temperament is not associated with readiness to start training, their own behavioural style or the type of approach they used to train their child.

All the results presented here can be viewed as providing the first level of analyses of the main factors assumed to be associated with the successful

outcome of toilet training. The next step is to identify the possible clinical implications of these findings for parent's and children who experience toilet training difficulties. The next chapter provides a detailed discussion of the implications of these findings for future practice and research.

Chapter V

Discussion

This chapter is in three sections. A discussion of the results in terms of their clinical implications will be covered first, followed by suggestions of how the methods used in this study could be improved. Finally recommendations for future research will be presented.

Discussion of the results

Twenty-six children were followed through the process of toilet training until they had either successfully completed training or for a maximum of four months. The average age at which they started was two and a half years old (range 25 - 32 months).

Fifteen children (58%) took an average of fourteen weeks to complete training successfully and six (23%), achieved partial success after four months of toilet training. These six children were using the potty regularly but were still doing poo/wee in their pants once or twice a week. Finally, five children (19%), achieved little success after four months of training. Three were doing poo/wee more often in their potty than in their pants, but they were still wetting or soiling themselves more than twice a week. Two were using the potty when placed on it but they were still doing poo/ wee in their nappy or pants at all other times.

The assumption that toilet training is a fairly straightforward process (Green 1987) is therefore questioned by the findings in this study.

The results showed that eleven children did not achieve daytime bladder and bowel control four months after starting toilet training. Five of these children were still wetting or soiling their pants more than twice a week. Lane et al (1991) argue that if a child does not achieve dryness after three months of toilet training then parent's should discuss the situation with a professional (e.g. Health visitor, G.P., Clinical psychologist).

It is because some children do have difficulties achieving bowel and bladder control and are referred to professionals that this study was conducted. Five main factors identified from the literature that are assumed to be associated with a successful outcome of toilet training - child readiness; parental readiness; child temperament; behavioural style of parents and type of approach used during training - were investigated to see if they could provide an empirical basis from which advice could be given to assist such children.

This process is necessary as the vast majority of the literature available today is based on untested ideas that can lead to conflicting and confusing information being given to parent's. A discussion of the results of this study in terms of their clinical implications now follows.

Child Readiness

Many authors have suggested that it is important to wait until the child is ready before toilet training starts (Brazelton, 1962; Barnard and Erickson, 1976, Schmitt, 1987, Lane et al 1991). Readiness is generally conceptualised as the child being sufficiently aware of their bladder and bowel movements so that they can indicate they have done poo/wee in their nappy or that they want to do these in a potty. Having waited until the child is ready it is expected that a successful outcome of training will follow.

In fact, in this study, child readiness was not associated with the outcome of toilet training. There was no relationship between childrens scores on the Child Readiness Profile and their level of success. This finding is similar to that reported by Hauck (1988), who, in a retrospective study, found no significant relationship between child readiness and the level of independent toileting skills in toddlers.

It was thought that a measure of child readiness would have a better association with the outcome of toilet training in this study as it was taken just before toilet training commenced. This proved not to be the case. Perhaps then it is not when the measure is taken that is the issue but what it is measuring that needs to be considered further.

The Child Readiness Profile contains many measures of physiological and cognitive readiness but few measures of emotional readiness. It will be seen that emotional components such as the temperament of the child does have a strong association with the outcome of toilet training.

It may be that questions about the child's willingness to co-operate with the parent or how the child reacts to new situations or demands being placed on them need to be included in a more comprehensive readiness questionnaire. If this is done it may improve the Child Readiness Profile as a measure of association with the outcome of training.

Although child readiness was not found to be associated with the outcome of training, it is probably still advisable to recommend to parents that they wait until the child is physically and cognitively ready before starting toilet training. Discussion of readiness, however, may need to be widened to include a conversation about how well the child responds emotionally to changing situations and demands made on them by their parent's.

Parental Readiness

The same authors who suggested that child readiness was important for the outcome of toilet training also recommend that parent's need to be ready if they are going to be successful with toilet training. Parental readiness is measured in

terms of how much time parent's have set aside to train their child; how much they may have read about or asked others for advice on toilet training and how much they feel ready in themselves that it is the right time to start training.

Parental readiness, however, like child readiness was also found not to be associated with the outcome of toilet training. Hauck (1988) reports similar findings as she found no association between parental readiness and childrens level of independent toileting skills in a retrospective study of children who had completed training.

Again it was thought that the measure of parental readiness (like child readiness) would have a stronger association with the outcome of training since it was taken just before toilet training began. This did not happen. Hauck has suggested that the construct of parental readiness may need to include measures of parental motivation for training as well as their commitment to teach toileting skills if it is to improve as a measure of association with the outcome of training. This seems likely as parental readiness, as it is presently conceptualised, may only measure parent's readiness to start training. It asks few questions on parent's willingness or abilities to follow the process through.

It is probably still advisable to suggest to parent's that they need to think about their own readiness before they start toilet training their child, however, it may

also be necessary to talk through with parent's how they perceive the process developing overtime. This may enable them to determine not only if they are ready to start training but are also able to follow the process through.

Child Temperament

Studies that replicated Foxx and Azrin's (1974) 'dry pants' method stated that some of the main reasons for an unsuccessful outcome of toilet training were tantrums and non-compliant behaviour from some children. Schmitt (1987), also warned of the difficulties of toilet training a child who is strong willed by temperament.

It is assumed that if a child has a difficult temperament then there may be problems with toilet training as the process invariably requires them to co-operate with the parent. If a child is generally non-compliant then co-operation with training could be affected. This study found a significant association between the temperament of the child and the outcome of training. The more difficult the temperament of the child the less successful was the outcome of training.

This finding is therefore similar to those reported in studies that replicated the 'dry pants' method (Matson, 1975; Barnard and Erickson, 1976; Matson and Ollendick, 1977), which suggested that lack of success may be associated with

children who have a difficult temperament. The important difference in this study is that this is the first data available to suggest that temperament is associated with the outcome of training even when such an approach is not used.

Having empirical data to support the hypothesis that child temperament is associated with the outcome of training in everyday settings provides a useful basis from which advice can be given to parent's who may have a child with a difficult temperament.

The first information that parent's can be given is that the process of toilet training may take longer than they expect. This at least gives them an opportunity think about how they might approach the prospect of toilet training taking place over a period of months. It has already been suggested that if parents are able to think the process through then this may help facilitate a successful outcome.

Parent's could also be advised to delay toilet training until the child has moved through the normal development stage of negativism, otherwise known as the "terrible two's". Again, it has already been suggested that readiness of the child may need to take into account their emotional state. The finding that

temperament is associated with the outcome of training would seem to support this suggestion.

Once parents do decide to start training, one approach that could be used is that recommended by Schmitt (1987). This approach is described in detail in chapter II. Schmitt, suggests children who are strong willed by temperament should not start training until they have built a positive attachment to the potty. Parents are encouraged to use a relaxed approach to toilet training and to let the child initially see the potty as something to have fun with. Only when the child is comfortable with the potty in their environment should it be gradually introduced to them as a vessel for doing poo/ wee in.

The results of this study show that a relaxed approach to training is strongly associated with a successful outcome, and this type of approach may work for children who have a difficult temperament. Unfortunately, there was insufficient data in this study to evaluate fully the hypothesis that children who have a difficult temperament but receive a relaxed approach to training will succeed with toilet training. This needs further research.

Parent's behavioural style

Authors (Schmitt, 1987; Hauck, 1988) have suggested that parents who are overly focused on cleanliness and neatness may have problems during toilet

training as they strive to maintain a clean and neat environment at a time when their child is having difficulties or is reluctant to do poo and wee in their potty.

This study found a strong association between parents scores on a measure of attention to cleanliness and neatness and the outcome of training. The less focused they were on cleanliness and neatness the more successful they were with training.

No other studies have empirically evaluated parent's behavioural style to see if it is associated with the outcome of training. Also there are no recommendations available in the literature to offer advice to parent's where attention to cleanliness and neatness may be an issue. This study will therefore offer some tentative suggestions based on some of the possible concerns such parent's may have.

It may be suggested to parent's that disposable trainer pants could be used during training. These can serve two functions. First they keep urine and faeces in the pants and reduce the chances of clothes and household items being soiled. Second they can be disposed of easily and do not require soaking and washing. If parent's do choose to use disposable training pants then the financial considerations also have to be addressed.

If parents are concerned that their children's clothes or household items may be permanently stained or damaged by their child having accidents, then they can be reassured that there is no evidence that urine or faeces leave permanent stains or cause damage to clothes or household items.

Some parents may be concerned with health issues related to children having 'accidents'. Again they can be informed that using readily available household cleaners will be adequate for safely clearing up any urine and faeces the child may deposit in an inappropriate place.

A final suggestion is that parents who may be reluctant to talk about their concerns of trying to maintain a clean, neat home at the same time as toilet training their child can be informed that their concerns are important and need to be addressed. This may help them to achieve a more satisfactory outcome to toilet training for themselves and their child.

It must be stressed that all this advice is aimed at a non-clinical population of parents who are concerned with cleanliness and neatness in the home. Parents who are clinically diagnosed as being obsessive compulsive would require much more detailed and specifically targeted interventions. The scope of this study does not allow these issues to be addressed.

Approaches used during toilet training.

The main thrust of the prescriptive literature on toilet training suggests that a relaxed approach is the key to a successful outcome (Northamptonshire Health Promotion; Pontefract Health Authority; Herbert, 1993, Green, 1987). Such an approach assumes that a gradual introduction to training; regular praise for successes and neutral responses when 'accidents' occur result in less conflicts between the parent and child thus facilitating toilet training.

This study found a strong association between the type of approach parent's use and the outcome of training. The more relaxed their approach the more successful the outcome. Much of the present literature that suggests a relaxed approach to toilet training would seem to be supported by the findings in this study, however, for some parent's this advice may be difficult to implement.

A high correlation was found between scores reflecting a strict approach to training and those showing high attention to cleanliness and neatness in the home. This suggests that parent's who are more focused on cleanliness and neatness may have difficulties with the idea of adopting a relaxed approach to training. The previous section offers some advice on how to approach some of these parent's possible concerns.

This finding highlights the issue that it is not enough just to offer advice that is shown to be useful, it needs to be checked that it is useful for the particular person it is aimed at helping. Much of the prescriptive literature available today is based on the false assumption that a relaxed approach to training can be implemented very easily by anybody and should not pose any difficulties. This may not be the case.

Summary

The findings of this study have shown that toilet training is not always straightforward and that it can take many months to complete. Some of the main factors assumed to be associated with the successful outcome of toilet training were investigated to see if they could provide an empirical basis from which advice could be given to assist children who have difficulties with training.

The results of these investigations suggest that a successful outcome of toilet training is associated with (1) parents who approach toilet training in a relaxed way and who are not overly focused on cleanliness and neatness in their day-to-day lives and (2) children who have an easy temperament.

Suggestions for assisting parent's and children who may have difficulties were discussed and it was emphasised that it is not enough to offer advice just

because it is shown to have worked in other cases, it is important to check first that it is useful for the particular person it is aimed at helping.

Finally, Child and parental readiness as they were conceptualised in this study were not associated with the successful outcome of toilet training. Recommendations were given for improving the content validity of the child and parental readiness questionnaires for use in future studies.

Discussion of methodological issues

Participant recruitment

Although much has been written on toilet training very little is research based. One reason given for this is parental reluctance to volunteer information about family toileting problems (Walker, Kenning and Faust-Campanile, 1989). With this in mind it was decided that health visitors would be the most appropriate people to ask parent's if they wished to take part in this study. This was done to respect possible parental sensitivities to toileting issues being researched by the investigator.

Using health visitors to recruit participants proved to be very successful however, there were drawbacks with this method. First, it was not possible to obtain a completely random sample of children registered with each health

visitor. Instead this study used a quasi-random sample. Second, the potential number of participants was reduced as health visitors admitted that there were occasions when they forgot to ask parent's about their willingness to take part in this study.

The implication of these difficulties is that the generalisability of the findings in this study are limited. For future studies, a larger random sample that might better reflect the experiences of families with toddlers in the general population could be used. An example of how this sample could be selected now follows.

A list of children due to attend for two year health checks could be generated from health visitor's caseloads. The list could be numbered consecutively starting at 1 at the top. A list of random numbers could then be generated and applied to the list of names. Potential participants could then be selected in the order of the random number sequence. When a particular child drawn from the list attends their two year health check the health visitor would then know which parent's to approach to determine the child's eligibility to take part in a study.

This process would enable a random sample to be selected from all those registered with the health visitors. The list of names given to each health visitor would also enable them to focus on which parent's to ask to take part.

Another aspect of recruitment this study had to consider was how to contact parent's who agreed to take part. It was decided that a phone call would be appropriate for two reasons, (1) Time was limited in this study and quick access to parent's was needed (2) It reduced the number of visits the researcher had to make. Again this was an important consideration given the limited time available. This approach was quite successful although two potential participants were never contacted as the phone was not answered.

Methods used in the study

Another reason given for the lack of research into toilet training is the absence of established procedures available for systematic evaluation of toilet training issues (Birk and Friman, 1990). Only two of the six questionnaires in this study had been used once before in previous research into toilet training. These were the Child Readiness Profile and the Parental Readiness Inventory.

These two questionnaires were developed on an American population. They could, therefore, be criticised on the basis of cultural bias. However, the parameters of child and parental readiness for toilet training are likely to be very similar for American and British populations.

Recommendations for improving the content validity of these instruments has already been discussed in this chapter. Another way these questionnaires could

be improved is to make them more comprehensive in their coverage of the different parameters they measure so that sub-scales can be developed. These would provide more detailed information enabling the analyses of the data to be more focused. This would also allow more precise hypotheses to be formulated and tested.

The Toddler Temperament scale and the Lynfield Obsessional/ Compulsive Questionnaire (Interference) are both well established measures. Both have been used on an international basis. In contrast, the two questionnaires designed by the researcher for this study have not been subject to tests of reliability and have only been subject to establishing content validity. It is important therefore that the psychometric limitations of these questionnaires are highlighted before they are used in future studies.

As well as improving the psychometric properties of these two instruments it can also be suggested that the Parent Toilet Training Report, like the readiness questionnaires, should be developed to make it more comprehensive in its coverage of the different parameters it measures. This would provide the same benefits that have been given for improving the readiness questionnaires.

A final but important consideration that must be addressed is the amount of time that parent's of young children can be expected to provide follow up data

for research purposes. Pumroy and Pumroy (1965) note that a major problem with studying toilet training in everyday settings is the difficulty of collecting data on young children over extended toilet training periods.

In this study four months of follow up data was requested as the literature suggests that this is the average time that toilet training can be expected to take with children over two years old (Lane et al, 1991). Despite keeping to this tight timetable five potential participants dropped out: two gave birth; two moved house and one decided not to provide the required follow up data. These events demonstrate that parent's with the young children can pose particular problems when trying to conduct longitudinal research.

Recommendations for future work

The questionnaires used in this study enabled the researcher to determine whether some of the main factors assumed to be associated with the successful outcome of toilet training could be supported on the basis of empirical investigation. The next step in the research process is to develop the measures that specifically address toilet training issues (Child and Parental Readiness; Approach used for Training) in the ways that have been suggested. This would provide more detailed information on which particular aspects of readiness or approach used for training are associated with a successful outcome.

If these suggestions were followed through then the new revised instruments would not only facilitate future research into toilet training but they could be used as formal assessment tools for clinicians and professionals working in child health services.

The instruments used in this study, as they are presently constructed, provide a useful framework for discussing some of the concerns parent's may have about toilet training. Health visitors at a child's two year health check or on home visit's may use them as sources of discussion. Nurseries and other child care centres may also require some formal input or advice on issues related to toilet training.

As well as the instruments providing a framework for discussion, it is hoped that the findings of the study may also be of benefit for clinicians and parent's. The averages and ranges for accomplishing toileting are useful information to pass on to parent's. Letting parent's know that many children are not fully toilet trained by two and a half and that training is not usually achieved in days may provide some reassurance to parent's who perceive themselves as struggling with the process.

The advice that has been suggested based on the findings of this study is the first that has been drawn from empirical investigations of toilet training in

everyday settings. It is therefore speculative in nature. Future research needs to be carried out to evaluate the effectiveness of this advice in clinical practice.

Concluding Remarks.

There are many parent's who may need advice with toilet training and this study has shown that there is no one simple answer that can be given which is guaranteed to help. Clinicians need to assess a range of child and parental factors before offering advice. It is hoped that this study has established a useful basis from which future practice can be informed and future research can be conducted.

Appendix A

Child Readiness Profile (Hauck, 1988)

I'm going to read you a list of behaviours some children do between the ages of about 6 months and 3 years of age. Please tell me if your child has done the following things before one week ago; within the last week; never or don't know.

Before one week ago = 1 Within the last week = 2 Never = 3 Don't Know = 4

A. Walked unsupported?	1	2	3	4
B. Stayed dry during the day?	1	2	3	4
C. Could release a toy he/she is holding when asked?	1	2	3	4
D. Stayed dry for more than two hours at a time?	1	2	3	4
E. Stayed dry through the night?	1	2	3	4
F. Removed own clothing from lower half of body?	1	2	3	4
G. Told you he/she had already gone "potty" in nappy/pants?	1	2	3	4
H. Told you he/she had to go to the toilet?	1	2	3	4
I. Was able to follow simple directions? (put the cup on the table)	1	2	3	4
J. Started having bowel movements (poop, stool) at predictable times.	1	2	3	4
K. Usually urinated (pee) when placed on the toilet/ potty?	1	2	3	4
L. Showed an interest in learning to use the toilet?	1	2	3	4
M. Had a word, symbol or gesture indicating he/she needed to use the toilet?	1	2	3	4
N. Could sit still for 5 to 10 minutes playing with toys?	1	2	3	4
O. Did things to please you? (picked up toys, did something for a hug)	1	2	3	4
P. Was willing to sit on a potty when placed without crying, fussing or trying to get off?	1	2	3	4

(Q) Total (Leave Blank) _____

Appendix B

Parental Readiness Inventory (Hauck, 1988)

I am going to read you a list of things you may or may not have done in preparation for toilet training your child. Tell me which number best describes what you have done on this scale.

	never done this			done this a lot	
1. Read about toilet training	1	2	3	4	5
2. Asked people about toilet training	1	2	3	4	5
3. Bought or borrowed things to help with training (potty, chair, step stool, underpants, treats)	1	2	3	4	5
4. Bought or borrowed easy to remove clothing	1	2	3	4	5
5. Planned for TIME needed to train child	1	2	3	4	5

Next are some things that you may or may not have thought about in preparation for toilet training your child. Tell me which number best describes how much you have thought about the following things.

	never thought about this			thought about this a lot	
6. Making a plan for training your child	1	2	3	4	5
7. Considered whether or not your child is ready to be trained	1	2	3	4	5
8. Thought about how you may handle accidents	1	2	3	4	5
9. Thought about whether or not <u>you</u> are ready to take your child out of nappies.	1	2	3	4	5
10. Considered how long the process might take	1	2	3	4	5
11. Thought about ways to get your child to cooperate	1	2	3	4	5

Last are some things that you may or may not feel about toilet training your child. Tell me which number best describes the way you feel about the following:

	never feel this			feel this a lot	
12. Feel that it is time to train your child	1	2	3	4	5
13. Feel that people are pressuring you to toilet train your child	1	2	3	4	5

(14) Total (Leave Blank) _____

Appendix C

TODDLER TEMPERAMENT SCALE

(for 1 to 3 year old children)

by

William Fullard, Ph.D., Sean C. McDevitt, Ph.D. and William B. Carey, M.D.

DATA SHEET

Child's Name _____ Sex _____

Date of Child's Birth _____ Present Age _____
 month day year

Rater's Name _____

Relationship to Child _____

Date of Rating _____
 month day year

RATING INFORMATION

1. Please base your rating on the child's recent and current behavior (the last four to six weeks).
2. Consider only your own impressions and observations of the child.
3. Rate each question independently. Do not purposely attempt to present a consistent picture of the child.
4. Use extreme ratings where appropriate. Avoid rating only near the middle of the scale.
5. Rate each item quickly. If you cannot decide, skip the item and come back to it later.
6. Rate every item. Circle the number of any item that you are unable to answer due to lack of information or any item that does not apply to your child.

USING THE SCALE SHOWN BELOW, PLEASE MARK AN "X" IN THE SPACE THAT TELLS HOW OFTEN THE CHILD'S RECENT AND CURRENT BEHAVIOR HAS BEEN LIKE THE BEHAVIOR DESCRIBED BY EACH ITEM.

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6			
1. The child gets sleepy at about the same time each evening (within 1/2 hour).	almost never	1	2	3	4	5	6	almost always
2. The child fidgets during quiet activities (story telling, looking at pictures).	almost never	1	2	3	4	5	6	almost always
3. The child takes feedings quietly with mild expression of likes and dislikes.	almost never	1	2	3	4	5	6	almost always
4. The child is pleasant (smiles, laughs) when first arriving in unfamiliar places.	almost never	1	2	3	4	5	6	almost always
5. A child's initial reaction to seeing the doctor is acceptance.	almost never	1	2	3	4	5	6	almost always
6. The child pays attention to game with parent for only a minute or so.	almost never	1	2	3	4	5	6	almost always
7. The child's bowel movements come at different times from day to day (over one hour difference).	almost never	1	2	3	4	5	6	almost always
8. The child is fussy on waking up (frowns, complains, cries).	almost never	1	2	3	4	5	6	almost always
9. The child's initial reaction to a new baby after is rejection (crying, clinging to mother etc.)	almost never	1	2	3	4	5	6	almost always
10. The child reacts to a disliked food even if it is mixed with a preferred one.	almost never	1	2	3	4	5	6	almost always
11. The child accepts delays (for several minutes) for desired objects or activities (snacks, treats, gifts).	almost never	1	2	3	4	5	6	almost always
12. The child moves little (stays still) when being dressed.	almost never	1	2	3	4	5	6	almost always
13. The child continues an activity in spite of noises in the same room.	almost never	1	2	3	4	5	6	almost always
14. The child shows strong reactions (cries, stamps feet) to failure.	almost never	1	2	3	4	5	6	almost always

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6
----------------------	-------------	--------------------------	----------------------	-----------------	-----------------------

- | | |
|--|---|
| <p>. The child plays continuously for more than minutes at a time with a favorite toy.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child ignores the temperature of food, ether hot or cold.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child varies from day to day in wanting bottle or snack before bedtime at night.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child sits still while waiting for food.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child is easily excited by praise (laughs, yells, jumps).</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child cries after a fall or bump.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child approaches and plays with familiar pets (small dogs, cats).</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child stops eating and looks up when person walks by.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child seems unaware of differences in taste of familiar liquids (type of milk, different juices).</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child moves about actively when he/she explores new places (runs, climbs or jumps).</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child fusses or whines when bottom cleaned after bowel movement.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child smiles when played with by unfamiliar adults.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child looks up from play when mother enters the room.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child spends over an hour reading a book or looking at the pictures.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |
| <p>. The child responds intensely (screams, yells) to frustration.</p> | <p>almost _____ : _____ : _____ : _____ : _____ : _____ almost
never 1 2 3 4 5 6 always</p> |

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6
----------------------	-------------	--------------------------	----------------------	-----------------	-----------------------

- | | | | |
|--|-----------------|-----------------------|------------------|
| 30. The child eats about the same amount of solid food at meals from day to day. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 31. The child remains pleasant when hungry and waiting for food to be prepared. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 32. The child allows face washing without protest (squirring, turning away). | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 33. The amount of milk or juice the child takes at mealtime is unpredictable from meal to meal (over 2 oz. difference). | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 34. The child practices physical activities (climbing, jumping, pushing objects) for under 5 minutes. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 35. The child vigorously resists additional food or milk when full (spits out, clamps mouth closed, bats at spoon, etc.) | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 36. The child plays actively (bangs, throws, runs) with toys indoors. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 37. The child ignores voices when playing with a favorite toy. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 38. The child approaches (moves toward) new visitors at home. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 39. The child plays outside on hot or cold days without seeming to notice differences in temperature. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 40. The child continues playing with other children for under five minutes and then goes elsewhere. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 41. The child continues to look at a picture book in spite of distracting noises (car horns, doorbell). | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 42. The child wants a snack at a different time each day (over one hour difference). | almost
never | _ : _ : _ : _ : _ : _ | almost
always |
| 43. The child is pleasant (smiles) when put down for nap or at night. | almost
never | _ : _ : _ : _ : _ : _ | almost
always |

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6
----------------------	-------------	--------------------------	----------------------	-----------------	-----------------------

- 1. The child takes several days to get used to (how usual behavior in) new situations away from parent (play group, day care center, sitter.)
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 2. The child speaks (or vocalizes) right away unfamiliar adults.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 3. The child reacts strongly (cries or screams) when unable to complete a play activity.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 4. The child enjoys games with running and jumping over games done sitting down.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 5. The child notices wet clothing, and wants to be changed right away.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 6. The child is fussy or moody throughout a cold or an intestinal virus.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 7. The child ignores parent's first call while watching a favorite T.V. program.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 8. A child loses interest in a new toy or game within an hour.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 9. The child runs to get where he/she wants to go.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 10. For the first few minutes in a new place (store, home or vacation place) the child is wary (clings to mother, holds back).
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 11. The child takes daytime naps at differing times (over 1/2 hour difference) from day to day.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 12. The child reacts mildly (frown or smile) when his/her play is interrupted by parent.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 13. The child accepts being dressed and undressed without protest.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 14. The child is outgoing with adult strangers outside the home.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always
- 15. The child runs ahead when walking with the parent.
almost ___ : ___ : ___ : ___ : ___ : ___ almost
never 1 2 3 4 5 6 always

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6
----------------------	-------------	--------------------------	----------------------	-----------------	-----------------------

- | | | | | | | | | |
|---|-----------------|---|---|---|---|---|---|------------------|
| . The child's period of greatest physical activity comes at same time of day. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child can be coaxed out of a forbidden activity. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child stops play and watches when someone walks by. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child goes back to the same activity after brief interruption (snack, trip to toilet). | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child laughs or smiles when meeting other children. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child sits still while watching TV or listening to music. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child will avoid repetition of misbehavior if punished firmly once or twice. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child continues to play with a toy in spite of sudden noises from outdoors (car horn, lawn mowers, etc.). | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child ignores dirt on himself/herself. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child's time of waking in the morning varies greatly (by 1 hour or more) from day to day. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child has moody or "off" days when he/she is fussy all day. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child reacts mildly (frown or smile) when another child takes his/her toy. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child stays with a routine task (dressing, picking up toys) for 5 minutes or more. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child stops eating and looks when he/she hears an unusual noise (telephone, doorbell). | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |
| . The child sits still (moves little) during procedures like hair brushing or nail cutting. | almost
never | 1 | 2 | 3 | 4 | 5 | 6 | almost
always |

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6			
4. The child shows much bodily movement (stomps, thrashes, swings arms) when upset or crying.	almost never	1	2	3	4	5	6	almost always
5. The child is pleasant (smiles, laughs) during face washing.	almost never	1	2	3	4	5	6	almost always
6. The child's initial reaction at home to approach by strangers is acceptance (looks at, reaches out).	almost never	1	2	3	4	5	6	almost always
7. The child is hungry at dinner time.	almost never	1	2	3	4	5	6	almost always
8. The child continues to get into forbidden areas or objects in spite of parents' repeated warnings.	almost never	1	2	3	4	5	6	almost always
9. The child stops to examine new objects thoroughly (5 minutes or more).	almost never	1	2	3	4	5	6	almost always
10. The child ignores odors (cooking, smoke, perfume) whether pleasant or not.	almost never	1	2	3	4	5	6	almost always
11. The child looks up from an activity when /she hears the sounds of children playing.	almost never	1	2	3	4	5	6	almost always
12. The child falls asleep at about the same length of time after being put to bed.	almost never	1	2	3	4	5	6	almost always
13. The child greets babysitter loudly with much expression of feeling whether positive or negative.	almost never	1	2	3	4	5	6	almost always
14. The child is moody for more than a few minutes when corrected or disciplined.	almost never	1	2	3	4	5	6	almost always
15. The child sits still (little squirming) while traveling in car or stroller.	almost never	1	2	3	4	5	6	almost always
16. The child watches TV for under 10 minutes, then turns to another activity.	almost never	1	2	3	4	5	6	almost always
17. The child is shy (turns away or clings to mother) on meeting another child for the first time.	almost never	1	2	3	4	5	6	almost always

Almost never 1	Rarely 2	Usually does not 3	Usually does 4	Frequently 5	Almost always 6		
3. The child is still wary of strangers after 15 minutes.							
almost never	1	2	3	4	5	6	almost always
4. The child frets or cries when first learning new task (dressing self, picking up toys).							
almost never	1	2	3	4	5	6	almost always
5. The child sits quietly in the bath.							
almost never	1	2	3	4	5	6	almost always
6. The child practices a new skill (throwing, rolling, drawing) for 10 minutes or more.							
almost never	1	2	3	4	5	6	almost always
7. The child ignores differences in taste or consistency of familiar foods.							
almost never	1	2	3	4	5	6	almost always
8. The child sleeps poorly (restless, wakeful) in new places for first 2 or 3 times.							
almost never	1	2	3	4	5	6	almost always
9. Child is fearful of being put down in an unfamiliar place (supermarket cart, new stroller, playpen) with parent present.							
almost never	1	2	3	4	5	6	almost always
10. The child frowns or complains when left to play by self.							
almost never	1	2	3	4	5	6	almost always
11. The child accepts within 10 minutes (feels at home, at ease) new surroundings (home, store, play area).							
almost never	1	2	3	4	5	6	almost always
12. The child looks up from play when the telephone or doorbell rings.							
almost never	1	2	3	4	5	6	almost always

TODDLER TEMPERAMENT SCALE - PROFILE SHEET (1978)

PART I - for one year old children (12-23 months)

by William Fullard, Ph.D., Sean C. McDevitt, Ph.D., & William B. Carey, M.D.

Name of child _____ Date of rating _____

Age at rating: _____ years _____ months _____ days. Sex _____

Category score from Scoring Sheet: _____

Profile: Place mark in appropriate box below:

Activity	Rhythm.	App/With	Adapt.	Intens.	Mood	Persist.	Distract.	Thresh
high	arryth.	withdr.	slowly adapt.	intense	negative	low per.	high distr.	low
4.93	3.30	3.97	4.28	4.79	3.65	4.28	5.15	4.49
4.13	2.49	2.97	3.42	4.03	2.96	3.45	4.39	3.61
3.33	1.68	1.97	2.56	3.27	2.27	2.62	3.63	2.73
low	very rhyth.	app.	very adapt.	mild	positive	high per	low distr.	high

Diagnostic clusters:

	rhyth.	app.	adapt.	mild	positive			
	arryth.	withdr.	slowly adapt.	intense	negative			
low		withdr.	slowly adapt.	mild	negative			

Definition of diagnostic clusters used for individual scoring:

Easy- Scores greater than mean in no more than two of difficult/ easy categories (rhythmicity, approach, adaptability, intensity, & mood) and neither greater than one standard deviation.

Difficult- 4 or 5 scores greater than mean in difficult/easy categories (rhythmicity, approach, adaptability, intensity, & mood). These must include intensity and two scores must be greater than 1 standard deviation.

Slow-to-warm-up- as defined above, but, if either withdrawal or slow adaptability is greater than 1 standard deviation, activity may vary up to 4.53 and mood may vary down to 2.62.

Intermediate- all others. Intermediate high- 4 or 5 diff./ easy categories above mean with one > 1 standard deviation, or 2 or 3 above mean with > 1 standard deviation. Intermediate low- all other intermediates.

This child's diagnostic cluster _____ Date of scoring _____

Comments: _____

Score: _____

TODDLER TEMPERAMENT SCALE - PROFILE SHEET (1978)

PART II - for two year old children (24-36 months)

by William Fullard, Ph.D., Sean C. McDevitt, Ph.D., & William B. Carey, M.D.

Name of child _____ Date of rating _____

Age at rating: _____ years _____ months _____ days. Sex _____

Category score from Scoring Sheet:

Profile: Place mark in appropriate box below:

Activity	Rhythm.	App/With	Adapt.	Intens.	Mood	Persist	Distract.	Thresh
high	arryth.	withdr.	slowly adapt.	intense	negative	low per.	high distr.	low
4.85	3.55	3.95	3.83	4.88	3.55	3.57	4.93	5.30
3.99	2.78	2.91	3.04	4.06	2.90	2.82	4.20	4.45
3.13	2.02	1.87	2.25	3.24	2.25	2.07	3.47	3.56
low	very rhyth.	app.	very adapt.	mild	positive	high per	low distr.	high

Diagnostic clusters:

	rhyth.	app.	adapt.	mild	positive			
	arryth.	withdr.	slowly adapt.	intense	negative			
low		withdr.	slowly adapt.	mild	negative			

Definition of diagnostic clusters used for individual scoring:
 Easy- Scores greater than mean in no more than two of difficult/ easy categories (rhythmicity, approach, adaptability, intensity, & mood) and neither greater than one standard deviation.
 Difficult- 4 or 5 scores greater than mean in difficult/easy categories (rhythmicity, approach, adaptability, intensity, & mood). These must include intensity and two scores must be greater than 1 standard deviation.
 Slow-to-warm-up- as defined above, but, if either withdrawal or slow adaptability is greater than 1 standard deviation, activity may vary up to 4.42 and mood may vary down to 2.58.
 Intermediate- all others. Intermediate high- 4 or 5 diff./ easy categories above mean with one > 1 standard deviation, or 2 or 3 above mean with 2 or > 1 standard deviation. Intermediate low- all other intermediates.

This child's diagnostic cluster _____ Date of scoring _____

Comments:

Scorer: _____

Appendix D

The Lynfield Obsessional/ Compulsive Questionnaire (Interference) Allen and Tune (1975)

I am going to read the following questions carefully and I would like you to tell me which letter a, b, c, d, or e, applies particularly to you. Please respond quickly according to how you feel about each question at the present time. Try not to hesitate too long as it is your first impression that is required.

1. Are you very systematic or methodical in your daily life ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

2. Do you regard cleanliness as a virtue in itself ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

3. Does your stock of supplies, at home or at work, get large because you find yourself ordering more than you actually use ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

4. Do you always fail to explain things properly, in spite of having planned beforehand exactly what to say ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

5. Do you feel unsettled or guilty if you haven't been able to do some thing exactly as you would like ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

6. Even when you have done something carefully, do you often feel that it is somehow not quite right or complete ?
 - a. No, not at all
 - b. Yes, but I don't waste time over it.
 - c. Yes, and I do waste a little time over it.
 - d. Yes, and I waste more than a little time over it
 - e. Yes, and It wastes a great deal of my time.

7. Are you ever over-conscientious or very strict with yourself? a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
8. Do you ever get behind with your work because you have to do something over again several times? a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
9. Do you ever have to do things over again a certain number of times before they seem quite right? a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
10. Do you get a bit upset if you cannot do your work at set times or in a certain order? a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
11. Do you dislike having a room untidy or not quite clean for even a short time. a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
12. Are you very strict about the house always being kept very clean and tidy. a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.
13. Do you take care that the clothes you are wearing are always clean and neat, whatever you are doing? a. No, not at all
b. Yes, but I don't waste time over it.
c. Yes, and I do waste a little time over it.
d. Yes, and I waste more than a little time over it
e. Yes, and It wastes a great deal of my time.

14. Are you fussy about keeping your hands clean ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
15. Do you ever have to go back and check door's, cupboards or windows to make sure that they are really shut ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
16. Do you ever have to check gas or water taps or light switches after you have already turned them off ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
17. Do you often have to check things several times ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
18. Do you ever have persistent imaginings that your children or other members of your family might be having an accident or that something might be happening to them ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
19. Do unpleasant or frightening thoughts or words ever keep going over and over in your mind ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time
20. Are you often inwardly compelled to do certain things even though your reason tells you it is not necessary ?
- No, not at all
 - Yes, but I don't waste time over it.
 - Yes, and I do waste a little time over it.
 - Yes, and I waste more than a little time over it
 - Yes, and It wastes a great deal of my time

21. Total (Leave Blank)

Appendix E

Parent Toilet Training Report

Below is a list of behaviours that parents may demonstrate when toilet training their child. I would like to know if you have done any of these things while toilet training your child on a scale of Never, Sometimes, Often, Very Often, Always.

	Never = 1	Sometimes = 2	Often = 3	Very often = 4	Always = 5
1. Let child play with their potty.	1	2	3	4	5
2. Made child sit on potty for lengths of time. (e.g. for at least five minutes without getting off)	1	2	3	4	5
3. Ignored child after they did poo/ wee in pants/ on floor.	1	2	3	4	5
4. Used a pre-set routine to train child.	1	2	3	4	5
5. Let child decide when to go on the potty.	1	2	3	4	5
6. Praised child when they did poo/ wee in the potty. (e.g. kisses, hugs, saying good girl/ good boy)	1	2	3	4	5
7. Explained to child what to do on the potty.	1	2	3	4	5
8. Put contents of dirty nappy into potty in front of child.	1	2	3	4	5
9. Told child no treats if they did poo/ wee on pants/ floor.	1	2	3	4	5
10. Asked child if they needed to go on the potty.	1	2	3	4	5
11. Gave treat's to child when they did poo/ wee in potty. (e.g., sweets, biscuits, trip out e.t.c.)	1	2	3	4	5
12. Watched child for signs that they wish to go poo/ wee. (e.g. facial expressions, tugging at clothes)	1	2	3	4	5
13. Told child to go and sit on the potty.	1	2	3	4	5
14. Placed child on potty at certain times.	1	2	3	4	5
15. Told off child after they did poo/ wee on pants/ floor.	1	2	3	4	5
16. Let child watch how others go to the toilet. (e.g. mother, father, brother, sister e.t.c.).	1	2	3	4	5
17. Total (Leave Blank)	<hr/>				

Appendix F

Child Toileting Behaviour Report

Month 1 / 2 / 3 / 4 (Appropriate month is ticked)

I would like you to complete this form in one month's time on (date is written here)

Below is a list of toileting behaviours that most children eventually learn to do. I would like to know if your child has done any of these behaviours during the day before one week ago, within the last week, never or not applicable. Please circle the number that you think matches your child.

Before one week ago = 1 Within the last week = 2 Never = 3 Not Applicable = 4

- | | | | | |
|--|---|---|---|---|
| A. Child is taken to potty*. | 1 | 2 | 3 | 4 |
| B. Child is placed on potty and is made to stay. | 1 | 2 | 3 | 4 |
| C. Child does poo/ wee on potty when placed on it but does 1
poo/ wee in nappy or pants at all other times | 2 | 3 | 4 | |
| D. Child indicates need to poo/ wee. | 1 | 2 | 3 | 4 |
| E. Child is placed on potty and stays on their own. | 1 | 2 | 3 | 4 |
| F. Child does poo/ wee in potty more often than in nappy/
pants. | 1 | 2 | 3 | 4 |
| G. Child asks to go on the potty. | 1 | 2 | 3 | 4 |
| H. Child is helped by the potty then stays on their own. | 1 | 2 | 3 | 4 |
| I. Child does poo/ wee in potty regularly but also does poo/ 1
wee in nappy/ pants at <u>most</u> twice a week. | 2 | 3 | 4 | |
| J. Child goes to the potty on their own. | 1 | 2 | 3 | 4 |
| K. Child stays on the potty on their own. | 1 | 2 | 3 | 4 |
| L. Child does poo/ wee <u>only</u> in the potty and not in pants. | 1 | 2 | 3 | 4 |

*Potty can also mean toilet

Thank you for completing this form.

Appendix G

Telephone Protocol

Hello, my name is John Doran. I'm the trainee clinical psychologist conducting research into toilet training in toddlers. I understand that at your child's recent two year health check you told (Health visitor's name goes hear) that you would like to take part in a study about toilet training - is that correct? Yes / No

If yes go on to next stage.

If no thank the person for their time and note non - participant.

Before I go any further I need to ask you 4 questions to see if you and your child can participate in this study.

1. Has your child been on a potty or toilet yet? Yes / No

If yes explain that the study only involves children who have not done this yet and thank the person for their time. Note non - participant.

If no then ask question 2.

2. Will you be the main person toilet training your child. Yes / No

If no explain that the study will only involve parent's that are the main people involved in toilet training their child. Thank the person for their time. Note non - participant.

If yes then ask question 3.

3. When do you think your child will start going on the potty or toilet ? (Date goes here)

4. Are you still interested in being interviewed for this study ? Yes / No

If no thank the person for their time and note non-participant.

If yes: I'll need to set up a time and place for an interview. I can either come to your home or we can meet in the health centre.

Home / Health Centre (Circle as appropriate)

When would be a good time for you*? (Date and Time goes here)

*Arrange a time to meet within a week of the date given in response to question 3 above.

Verify the time and place, say thank you and good-bye

Appendix H

Subject Information Sheet **Research Project on Toileting in Toddlers**

Dear Mrs/Ms/Miss/Mr.....

My name is John Doran and I am a trainee clinical psychologist and doctoral candidate in the department of psychology at the university of Plymouth. I am doing a research project on the experiences of parents and children during toilet training. Because you are the parent of a child who is about to start training I would like to interview you. If you agree, then this will be entirely voluntary.

The aim of the study is to learn more about what happens for both parents and children during toilet training so that health visitors and others may be able to give more help to parents with questions about toilet training in the future.

The interview will take about 45 minutes. I will be asking you questions about when your child was able to do certain things; questions about things you may have done to prepare for toilet training; and questions about your style of parenting and the temperament of your child.

One month after training has started I would like you to keep a brief record of the stage of training your child has reached and to repeat this on three further occasions at monthly intervals. If training is completed at any time before four months then this will be the last recording taken. At the completion of training or at the end of four months after training has started, I will then ask you questions about how you toilet trained your child. At this stage your participation in this study will end.

The information you tell me will be recorded on a form but your name will not appear anywhere on the form, it will be confidential and it will not be possible to identify you in any way. I do not think that the study will present any serious inconvenience to you other than the time needed for the interviews and the brief follow up recordings of stage of training.

If you do not wish to take part in this study or want to withdraw at any time you may do so. You do not have to give any reason for this and this would not affect any current or future services you receive from the National Health Service.

If you have any questions then please contact me:-

John Doran, Psychology Department,
Gloucester House, Southmead Hospital,

Tel 9595807

Appendix I

Consent Form

Study Title: Is Toilet Training As Easy As A B C?

Please cross out
as necessary

Have you read the Subject Information Sheet? Yes / No

Have you had an opportunity to ask questions and discuss this study? Yes / No

Have you received satisfactory answers to all your questions? Yes / No

Have you received enough information about the study? Yes / No

Who have you spoken to?
.....

Do you understand that you are free to withdraw from the study:

- At any time Yes / No
- Without having to give a reason for withdrawing Yes / No
- And without affecting your future medical care Yes / No

Do you agree to take part in this study?

Signed..... Date.....

(Name in block letters).....

Signed (Researcher) Date.....

10 September 1996

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Mr J Doran
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Dear Mr Doran

PROJECT 79/96: "IS TOILET TRAINING AS EASY AS A-B-C?"

I am pleased to confirm that at its meeting on 4 September 1996, the Southmead Medical Research Ethics Committee ratified without further comment the provisional Sub-Group approval given to the above project.

Yours sincerely



Mrs S B Bowman
Secretary
Southmead Medical Research Ethics Committee

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