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Influences on the Effectiveness of the National Population and Family Development Board's Parenting Module

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ABSTRAK

Secara umumnya kajian ini bertujuan untuk menentukan pengaruh keberkesanan Modul Keibubapaan Lembaga Penduduk dan Pembangunan Keluarga Negara (LPPKN) dengan meneliti kesan perbezaan individu (persediaan untuk perubahan caragaya keibubapaan dan perspesi keberkesanan keibubapaan) dan pendedahan kepada modul terhadap *KAPS* (pengetahuan, sikap, amalan, dan kemahiran keibubapaan) keibubapaan dan persepsi terhadap modul. Rangka bentuk penyelidikan Pra-uji dan Pos-uji dengan Kumpulan Kawalan telah digunakan untuk menilai modul keibubapaan LPPKN. Sejumlah 80 responden telah dibahagikan secara rawak kepada dua kumpulan, eksperimental dan kawalan. Hasil kajian menunjukkan bahawa *KAPS* bagi kumpulan eksperimental meningkat dengan signifikan selepas pendedahan kepada modul. Secara umum, didapati bahawa peserta mempunyai persepsi yang tinggi terhadap struktur modul dan kegunaannya. Hasil kajian menunjukkan bahawa perbezaan individu mempunyai korelasi signifikan dengan pengetahuan keibubapaan ($r=0.56$, $p<0.05$) dan sikap keibubapaan ($r=0.46$, $p<0.05$). Walau bagaimanapun tidak terdapat korelasi signifikan antara perbezaan individu dengan amalan dan kemahiran keibubapaan. Hasil kajian menunjukkan bahawa pendedahan kepada modul mempunyai korelasi yang positif dan signifikan dengan pengetahuan keibubapaan ($r=0.57$, $p<0.05$), sikap keibubapaan ($r=0.56$, $p<0.05$), amalan keibubapaan ($r=0.34$, $p<0.05$) dan kemahiran keibubapaan ($r=0.26$, $p<0.05$). Pendedahan peserta kepada modul dan perbezaan individu didapati mempunyai kesan langsung terhadap pengetahuan, sikap dan amalan keibubapaan. Walaubagaimanapun tidak terdapat bukti untuk menyokong kesimpulan bahawa pendedahan kepada modul dan perbezaan individu mempunyai kesan terhadap kemahiran keibubapaan peserta. Secara keseluruhannya, kajian ini membuat kesimpulan bahawa modul keibubapaan adalah berkesan dalam mengubah pengetahuan, sikap, amalan, dan kemahiran keibubapaan ibu bapa.

ABSTRACT

The general purpose of this study was to determine the influences on the effectiveness of the National Population and Family Development Board's (NPFDB) parenting module among parents by examining the effects of individual differences (expressed readiness for parenting change and perceptions of parenting self-efficacy) and exposure to the module on parenting knowledge, attitudes, practices, and skills (KAPS) and perceptions of the module. The Pre-test-Post-test Control Group Design was used for evaluating the parenting module. A total of 80

respondents were randomly assigned to the experimental and control groups. Results of the study showed that parenting KAPS improved significantly for the experimental group after exposure to the module. Generally, it was found that the participants had high perceptions of the module structure and its usefulness. Results also showed that individual differences was significantly related to parenting knowledge ($r=0.56$, $p<0.05$) and parenting attitudes ($r= 0.46$, $p<0.05$). However, there was no significant correlation between individual differences and parenting practices and skills. Results obtained suggested that exposure to the module was significantly and positively correlated with parenting knowledge ($r=0.57$, $p<0.05$), parenting attitudes ($r=0.56$, $p<0.05$), parenting practices ($r=0.34$, $p<0.05$) and parenting skills ($r=0.26$, $p<0.05$). The participants' exposure to the parenting module and individual differences were found to have direct effect on their parenting KAP. The study however, found no evidence to conclude that exposure to the module and individual differences had an effect on the parenting skills of the participants. Nevertheless, on the whole the study concluded that the parenting module was effective in changing the parenting KAPS of parents.

INTRODUCTION

The National Population and Family Development Board's (NPFDB) parenting module that was evaluated in this study attempts to accomplish the long term goal of 'developing happy families' through the enhancement of parenting knowledge and skills among parents. The parenting module is an innovative approach that has been developed and used since 1994. The NPFDB has expended a lot of resources on the formulation, production and implementation of this module. A team of experts in the field of family development and communication from the Universiti Putra Malaysia and the NPFDB were involved in the development of the parenting module. To-date, the NPFDB has trained a few hundred master trainers from various related government departments and non-governmental organisations in the utilisation of the module. These master trainers have in turn been involved in the training of their respective clientele.

The specific goals of the module are to enhance parenting knowledge, attitudes, practices and skills (parenting KAPS). The parenting module consists of five units: introduction to family life, husband-wife communication, pre-parenting, increasing child's self-esteem and building a happy family. The parenting module utilises various methodologies in imparting knowledge and developing the parenting skills of parents. Role playing, group discussions, individual assignments and videotapes observation and analysis are some of the techniques used. The module emphasises on experiential learning and interactive approach that are very suitable for topics such as communication, self-esteem, problem-solving and family values.

This is the first study that has been conducted to evaluate the effectiveness of the NPFDB parenting module. The findings from this study have important implications as it will enable the module to be further refined, improved or expanded in terms of approach or contents so as to increase its effectiveness. The study findings are also important as they can contribute to the formulation of future modules on parenting. A review of the literature indicates that parenting programmes have been effective in terms of their specific objectives. Eastman (1983) reviewed almost 60 published evaluations of family life education programmes and found that almost all of them showed positive gains. Research have shown that various factors such as the families in which one grew up, education, income, social networks, beliefs, values and media may influence one's parenting behaviour (Belsky, 1984; Luster & Kain, 1987). It could therefore be assumed that family life programmes would not be able to significantly alter parent's knowledge, attitudes and practices. However, the evaluations of various programmes have shown them to be effective. Numerous research have shown that parenting programmes have been able to increase parenting knowledge, change attitudes, enhance skills as well as change tendency to behave (e.g. Pfannensteil & Honig, 1995; Spoth et al., 1995; Thompson et al., 1993; Anderson & Nutall, 1987; Kramer & Washo, 1993; Witkin et al., 1983; Cleaver, 1987; McBride, 1991; Owen & Mulvihill, 1994; Devlin et al., 1992). Findings from these studies indicate that family life education should be developed further

and its coverage expanded to encompass a wider cross-section of society. Various types of family life education programmes have provided evidence that it is possible to increase knowledge, change attitudes, and teach skills through relatively simple and short programmes. The results of the Common Sense Parenting Programme that was carried out among parents of both middle and low income indicated that parental reports of child behaviour problems, parent attitudes and parent-problem solving skills improved significantly from before to after parent training (Thompson et al.; 1993).

The effectiveness of parent behaviour training for reducing child behaviour problems and enhancing parents' knowledge, skills and attitudes regarding child-rearing has been consistently documented (Kramer & Washo, 1993; Pfannenstiel & Honig, 1995; Thompson et al., 1993). Similarly, the ability of parent communication training to enhance parents' relationship skills such as reflection and expression of feelings, empathy, and to alter children's self-esteem and behaviour also has been empirically supported (Buetler, Buetler, & Mitchell, 1979).

The methodology used in presenting a training module may influence the effectiveness of the module. Research has shown that a combination of various methodologies such as role playing, skills practice, watching videotapes and group discussions are superior to didactic group training or written materials alone (Anderson & Nuttall, 1987; Cleaver, 1987; Warmbrod, 1982; Owen & Mulvihill, 1994; Devlin et al., 1992).

Giblin, Sprenkle and Sheehann (1985) concluded that programmes which emphasise skills and behavioural practice yielded much better outcomes than those which did not. Cleaver (1987) found that videotaped skill instruction helped marital couples maintain communication skills. Warmbrod (1982) found support for the hypothesis that the generation of alternatives in problem-solving came from specific training more than a generic communications skills approach.

In general, performance oriented teaching methods (role playing, behavioural rehearsal) have been rated as more useful than written materials. Parents' ratings of the value of performance oriented components were found to be significant predictors of parents' reported positive changes in parenting skills following the training experience (Anderson & Nuttall, 1987). Previous research in parent-training has provided evidence that experiential approaches add to treatment effectiveness in the general population (Eastman, 1983; Anderson & Nuttall, 1987).

A review of past evaluations of parent education programmes reveals that there is inadequate research on the relationship between individual differences and parenting outcomes in parenting programme evaluation literature (Spoth et al., 1995). Examination of such effects has been recommended in previous intervention literature (e.g. Buetler, 1991; Shoham-Salomon & Hannah, 1991). There has been limited study of the relationship of readiness for parenting change with skills training outcomes (Spoth et al., 1995). Expressed readiness for parenting change is defined as a commitment or willingness to change or may be interpreted as personal readiness to profit from particular treatment situations (Snow, 1991).

Another variable that can be predictive of changes in parenting behaviour is parenting self-efficacy (Spoth et al., 1995). Bandura (1977, 1989a) defined self-efficacy as a perception of one's ability to successfully perform behaviours required to produce given outcomes or one's ability to perform a desired behaviour. Self-efficacy has been significant in accounting for initiation and maintenance of behaviour in studies evaluating a wide range of domains (Bandura, 1977, 1982; Gecas, 1989; Teti & Gelfand, 1991; Berry & West, 1993; Pajares & Kranzler, 1995). This positive effect occurs due to increased motivation for and perseverance in behavioural change driven by self-efficacy. A number of studies have shown that self-efficacy can play an important role in parenting (Spoth et al., 1995; Teti & Gelfand, 1991; Luster, 1985; Luster & Kain, 1987; Jan, 1995).

A controlled parenting skills outcome study examining individual differences (expressed readiness for parenting change and parenting self-efficacy) and intervention exposure found that both fathers' and mothers' level of intervention attendance and expressed readiness for parenting change were sufficient predictors of the targeted parenting outcome, as was parental efficacy among mothers (Spoth et al., 1995). Luster and Kain (1987) found that parents with little education and/or low incomes are less likely than better educated parents to believe

that parents have a great deal of control over developmental outcomes. The study also found that high efficacy and low efficacy parents differ in how they view the parenting role. High efficacy parents emphasise the importance of providing their children with love and affection and good examples unlike low efficacy parents who stress on disciplinary actions (Luster & Kain, 1987).

Parents' attitudes and perceptions about child-rearing affect parental behaviour and, as a result, this influences the developmental outcomes of the child (Belsky, 1984; Luster, 1985; Luster & Kain, 1987; Teti & Gelfand, 1991). Teti and Gelfand (1991) found that maternal self-efficacy beliefs related significantly to behavioural competence among mothers on infants in the first year. Results suggested that maternal self-efficacy mediates relations between maternal competence and other psychosocial variables and may play a crucial role in determining parenting behaviour. This finding is consistent with Bandura's (1982, 1989a) view that self-efficacy is the mediating link between knowledge and behaviour. Mothers who feel efficacious in the parenting role would be successful in establishing a warm and harmonious relationship with their infants (Teti & Gelfand, 1991).

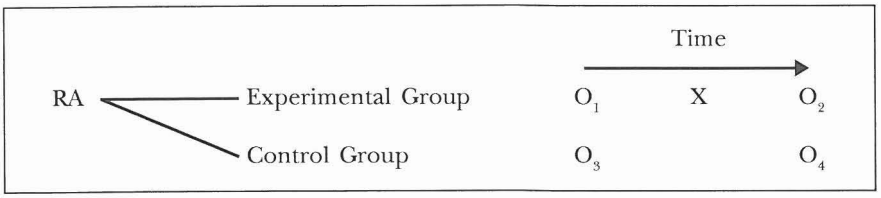
The general objective of the current study was to evaluate the influences on the effectiveness of the NPFDB's parenting module among parents by examining the effects of individual differences (expressed readiness for parenting change and perceptions of parenting self-efficacy) and exposure to the module on parenting KAPS and perceptions of the module. Specifically, the objectives of the study are as follows:

1. To determine the changes in the respondent's KAPS after exposure to the NPFDB parenting module.
2. To determine the respondent's perceptions of the parenting module.
3. To determine the relationship between exposure to the parenting module and parenting KAPS.
4. To determine the relationship between respondent's individual differences (experessed readiness for parenting change and/or perceptions of parenting self-efficacy) and parenting KAPS.
5. To determine whether individual differences mediate the relationship between exposure to the module and parenting KAPS.

METHODOLOGY

Research Design

The research design employed in the present study was the Pretest-Posttest Control Group Design. The greatest virtue of this design is that, when it has been properly implemented, it will be possible to draw strong conclusions about the effect of the intervention (parenting module) on posttest scores (Fitz-Gibbon & Morris, 1978). A prerequisite for a true group experimental design is that there be both control and experimental groups that are equivalent (Miller, 1986). The study design (Fisher et al., 1991) is represented in Figure 1. This Pretest-Posttest Control Group design was used for evaluating the module. This design randomly assigned subjects (RA) from a single population to the experimental group and the control group. Both the experimental and control groups received an initial measurement observation (the pretests O1 and O3). However, the experimental group



Note:
RA = Random assignment of subjects to the experimental and control group
Time = The passage of time. The extreme left of the design is the beginning of the course (pretest) and the extreme right is the end (posttest).
X = Programme intervention (parenting module).
O = An observation measurement. The subscript is used to distinguish one observation measurement from another. For example O_1, O_2, O_3, O_4.

Figure 1 : Pretest-posttest control group design

then further received the intervention of parenting module (X).

Finally, a second set of observations were made (O_2 and O_4). Since the experimental group received the intervention (X), O_2 is expected to be greater than O_1. Also, since both the experimental and control group cases were randomly assigned, we would expect that O_1 would be equal to O_3 on such key variables as parenting knowledge, attitudes, practice and skills (Fisher et al., 1991). These design have been noted to be the strongest in terms of controlling (or accounting for) threats to validity (Fisher et al., 1991). The intervention effects were assessed by comparing the average group scores on dependent variables of the subjects in the experimental and control groups. Experiments are designed to allow an investigator to infer functional or causal relationships between independent and dependent variables (Miller, 1986).

The FELDA Serting scheme in the state of Negeri Sembilan was purposively selected as the study site. The population for the study was the FELDA settlers and their spouses. Initially, based on the study's criteria, about 150 settlers or their spouses were short-listed for the experimental study with the help of the FELDA personnel in Serting. Random sampling procedures were then employed to select 80 respondents for the experimental study and to assign them to one of two groups, 41 were assigned to the control group and 39 to the experimental group.

Procedure

The parenting module (treatment) was conducted by two facilitators from the NPFDB over a period of three days, from 21nd to 24th April 1996, for the experimental group. The module which comprised 5 units was conducted over a period of 15 hours. The post-test was conducted about a week later, that is, from 3rd to 6th of May, 1996. The timing of the post-test was consistent with past research (Thompson et al., 1993; Pfannensteil & Honig, 1995; Kramer & Washo, 1993; Devlin et al., 1992; Mcbride, 1991).

Measures

Parenting Knowledge (PK) was assessed using a Likert scale adapted from Gilbert and Hanson's (1983) Perception of Parental Role Scale (PPRS) and Rozumah's (1995) Parenting Knowledge Scale. The knowledge scale consisted of 15 (12 positive and 3 negative) items. An example of a positive statement is: A person's self-concept influences his behaviour. An example of a negative statement is: Playing with a child (e.g., by tossing or shaking his body roughly) will not harm the child. The responses appeared on a 4-point Likert format ranging from 4 (strongly agree), 3 (agree), 2 (disagree) and 1 (strongly disagree). Reliability assessment of the Parenting Knowledge Scale in the present study yielded an alpha coefficient of 0.7.

Parenting Attitudes was measured using an attitude scale consisting of 15 (8 positive and 7 negative) Likert-type items. The scale was adapted from the Schludermann and Schludermann (1979) Parent Attitude Research Instrument (PARI Q4). The attitude scale assessed parents' attitudes about child-rearing, parent-child relationships, communication, importance of self-esteem and roles of family members. An example of a positive statement is: Parents must earn the repect of their children through their own action. An example of a negative statements is: Parents do not have to respect their children's opinions. The response format consisted of a 4-point Likert scale on which respondents indicated whether they, agree, disagree or strongly disagree with each attitude statement. Reliability assessment of the Attitude Scale yielded an alpha coefficient of 0.5.

Parenting Practices was assessed using a Likert-type scale consisting of 10 items constructed by the researcher. The Cronbach alpha coefficient for the scale was 0.4. Respondents were asked to indicate how frequently they practised ten parenting behaviours on a 5-point Likert scale ranging from never, seldom, sometimes, often and very often.

Parenting Skills was measured using a scale consisting of 20 items developed by the researcher. The alpha coefficient for this scale was 0.59. The response format consisted of two sub-formats. Respondents were first asked whether they have 10 specific parenting skills (they had to answer yes or no). Subsequently, they were asked how effective they perceived themselves to be in using the parenting skills on a 5-point Likert scale. The responses ranged from never, seldom (1-2 times out of 10), sometimes (3-5 times out of 10), often (6-8 times out of 10) and very often (9-10 times).

The General Perceptions of the Module Scale which consisted of 2 sub-scales was adapted from the scale used by Kramer and Washo (1993) to evaluate the respondents' perceptions of the parenting module. The alpha coefficient for the overall scale (General Perceptions of Module Scale) was 0.74. The Perceptions of Module Structure Sub-scale alpha coefficient was 0.67 while the alpha coefficient for the Perceptions of Usefulness of Module Sub-scale was 0.75. In the first sub-scale (Perceptions of Module Structure) which consisted of six items, respondents indicated on a 4-point Likert scale (1=strongly disagree to 4=strongly agree) their perceptions of the parenting module. In the second sub-scale (Perceptions of Usefulness of Module) consisting of 6 items, respondents indicated on a 4-point Likert scale (1=strongly disagree to 4=strongly agree) their general perceptions of whether the parenting module had been helpful/useful to them.

The Perceptions of Methodologies Scale (8 items) was developed by the researcher based on the methodologies used in the module. Respondents were asked to rate their perceptions of the effectiveness of the methodologies used on a four-point Likert scale (4=very effective, 3=effective, 2=not effective and 1=not at all effective. The alpha reliability coefficient for this scale was 0.72.

The Individual Differences Scale consisted of two sub-scales: Expressed Readiness for Parenting Change Sub-scale and Perceptions of Parenting Self-efficacy Sub-scale. The scale which was based on the contents of the module was measured on a 4-point Likert scale (1= strongly disagree to 4=strongly agree). The Expressed Readiness for Parenting Change sub-scale which consisted of five items was adapted from the scale used by Spoth et al. (1995). Reliability assessment of this sub-scale yielded an alpha coefficient of 0.69. The Perceptions of Parenting Self-Efficacy Sub-scale was adapted from Luster's (1985) Perception of Parental Self-Efficacy Scale (POPE) and Simons's et al. (1993) three-item Parental Influence Scale. The Perception of Parenting Self-Efficacy Sub-scale used in the present study consisted of 7 items concerning parents' beliefs about their ability to perform the specific type of behaviours targeted by the intervention. Reliability assessment of this scale yielded an alpha coefficient of 0.54.

RESULTS AND DISCUSSIONS

Sample Characteristics

Table 1 and 2 present the background characteristics and differences between the experimental and control groups. The experimental group consisted of nine (23%) males and 30 (77%) females. As shown in Table 1, the respondents' ages ranged from 26 to 45 years with a mean age of 36.7. The respondents had an average level of education with a majority (44%) of the respondents having completed at least primary or lower secondary level (33%) of education. The control group consisted of 16 (39%) males and 25 (61%) females. As shown in Table 1, the respondents' ages ranged from 26 to 46 years with a mean age of 38.3 for the control group. Independent t-test analyses contrasting the background characteristics of the experimental and control groups revealed no significant differences in age, level of education, household income, number of children, and years of marriage among the respondents (see Table 1).

The first objective of the study was to determine the changes in the participant's KAPS after exposure to the module. The results as shown in Table 2, indicate that parenting KAPS improved significantly after exposure for the experimental group participants. The fact that these changes were consistent across all the four parenting measures suggests that the parenting module was effective in enhancing the parenting KAPS of the respondents.

Results of the analysis of variance for repeated measures on parenting KAPS showed that the time by group effect is significant (see Table 3). A statistically significant F-ratio for the parenting KAPS indicates that the pre-test-post-test score of one group is significantly greater than that of the other group. This was followed by the paired t-test and independent t-test to identify which group had significant gains in knowledge scores. The detailed findings from the paired t-test and independent t-test support that the module was effective in increasing the parenting KAPS score of the respondents exposure to the module (see Table 2, 3 and 4).

This finding is consistent with the findings of other evaluations of family life education programmes which have shown that it is possible to increase knowledge, change attitudes and teach skills through relatively simple and short

TABLE 1
Background characteristics and differences groups (n=80)

Variables	Control (n=41)		Experimental (n=39)		t-test (p)
	n	%	n	%	
Age					t=1.49 (0.14)
26-30 years	4	9.8	2	5.1	
31-35 years	5	12.2	13	33.3	
36-40 years	16	39.0	16	41.0	
41-45 years	15	36.6	8	20.5	
>46 years	1	2.4	–	–	
Mean		38.30		36.74	
SD		5.10		3.97	
Education (Respondent)					t=1.40 (0.16) *(years of education)*
No formal education	2	4.9	1	2.6	
Primary	23	56.1	17	43.6	
Lower Secondary	10	24.4	13	33.3	
Upper Secondary	6	14.6	7	17.9	
Others			1	2.6	
Years of Marriage					t=1.29 (0.20)
<10 years	6	14.6	4	10.3	
11-15 years	12	29.3	21	58.8	
16-20 years	14	34.2	9	23.1	
21-25 years	8	19.5	5	12.8	
>25 years	1	2.4	–	–	
Mean		15.90		14.80	
SD		6.20		4.32	
Number of children					t=1.10 (2.70)
< 2	4	9.8	3	7.6	
3 - 5	22	53.7	29	74.4	
6 - 8	12	29.3	6	15.4	
> 8	3	7.2	1	2.6	
Mean		4.85		4.41	
SD		1.98		1.58	
Monthly Fam. Income					t=1.10 (0.28)
< than RM400	2	4.9	8	20.5	
RM401 – RM800	25	61.0	18	46.2	
RM801 – 1200	6	14.6	7	17.9	
RM1201 – 1600	4	9.8	6	15.4	
> RM1600	4	9.8	–	–	
Mean		RM800		RM748	
SD		RM415		RM376	

programmes (Eastman, 1983; Pfannensteil & Honig, 1995; Spoth et al., 1995; Owen & Mulvihill, 1994; Kramer & Washo; 1993, Thompson et al., 1993).

Fang's (1992) study demonstrated that participants' child development knowledge increased after having attended the Parent Education Programme During the Transition to

TABLE 2
Independent t-tests comparisons of for parenting KAPS variables (n=80)

Scales	Pre-test		Post-test	
	mean (sd)	t-value (p)	mean (sd)	t-value (p)
Parenting Knowledge				
Control Group	44.63 (3.21)	0.45 (0.65)	43.88 (2.51)	6.11 (0.00)
Experimental Group	44.37 (2.71)		48.46 (3.99)	
Parenting Attitudes				
Control Group	42.93 (2.34)	1.01 (0.32)	43.37 (2.17)	5.96 (0.00)
Experimental Group	43.51 (2.83)		47.31 (3.55)	
Parenting Practices				
Control Group	27.10 (3.25)	2.36 (0.02)	26.61 (2.59)	3.18 (0.00)
Experimental Group	25.51 (2.71)		28.56 (2.91)	
Parenting Skills				
Control Group	25.05 (3.87)	1.71 (0.09)	25.15 (3.83)	1.53 (0.13)
Experimental Group	23.39 (4.82)		26.44 (3.70)	

Note: sd = standard deviation; p = level of significance

TABLE 3
Means, Standard deviations and repeated measures analysis of variance for parenting KAPS (n=80)

Variable	Control (n=41)		Experimental (n=39)		Interaction	
	Pre (sd)	Post (sd)	Pre (sd)	Post (sd)	F	p
Parenting Knowledge	44.63 (3.21)	43.88 (2.51)	44.37 (2.71)	48.46 (3.99)	37.27	0.00
Parenting Attitudes	42.93 (2.34)	43.37 (2.17)	43.51 (2.83)	47.31 (3.55)	18.32	0.00
Parenting Practices	27.10 (3.25)	26.6 (2.6)	25.51 (2.71)	28.56 (2.91)	23.87	0.00
Parenting Skills	25.05 (3.87)	25.15 (3.83)	23.39 (4.82)	26.44 (3.70)	7.12	0.01

Note: sd = standard deviation; p = level of significance

Parenthood. The increase in knowledge can be considered as a positive effect of the module because changes in knowledge affects attitudes, which in turn have an impact upon behaviour (Pfannensteil & Honig, 1995). Parks and Smeriglio (1986) found that parents with high level of child development knowledge know and are sensitive towards the needs of the child. Thus, they are able to carry out their parental role more confidently. Knowledge on child development is vital because it will enable parents to understand and interpret their child's needs and demands (Chiam, 1994). Parenting knowledge is also important because the family serves as the children's first context for learning the language, cognitive skills, and social and moral values of their culture (Berk, 1994).

Thompson et al. (1993) found that parent attitudes improved significantly from before to after parent training. However, Owen and Mulvihill (1994) who evaluated the attitudes of parents towards child-rearing issues found no significant effects of the programme on parents attitudes, probably because they were already practising healthy and appropriate parenting. First and Way (1995) who used the phenomenological approach to investigate the nature of outcomes of a parent education programme found that participants changed their thinking and patterns of behaviour.

Table 4
Paired t-test comparisons for parenting KAPS variables before and after exposure to the module (n=80)

Scales	Control Group (n=41)		Experimental Group (n=39)	
	mean (sd)	t-value(p)	mean (sd)	t-value (p)
Parenting Knowledge				
Pre-test	44.63 (3.21)	1.60 (0.12)	44.37 (2.71)	6.34 (0.00)
Post-test	43.88 (2.51)		48.46 (3.99)	
Parenting Attitudes				
Pre-test	42.93 (2.34)	1.04 (0.31)	43.51 (2.83)	5.67 (0.00)
Post-test	43.37 (2.17)		47.31 (3.55)	
Parenting Practices				
Pre-test	27.10 (3.25)	1.00 (0.32)	25.51 (2.71)	5.68 (0.00)
Post-test	26.61 (2.59)		28.56 (2.91)	
Parenting Skills				
Pre-test	25.05 (3.87)	1.4 (0.89)	23.39 (4.82)	3.50 (0.01)
Post-test	25.15 (3.83)		26.44 (3.70)	

Note: sd = standard deviation; p = level of significance

Effective parenting skills can help parents face the challenges of parenting as well as avoid negative parenting (Spoth et al., 1995). The findings on the increase in parenting skills after exposure to the intervention is consistent with the findings of previous studies (Thompson et al., 1993; Witkin et al., 1983; Cleaver, 1987, Devlin et al., 1992).

The second objective of the study was to determine the repondents' perceptions of the parenting module. Results obtained indicate that the respondents had high perceptions of the module structure with almost all the parents agreeing that the module contents were well-structured, easy to understand and was relevant to their needs as parents (see Table 5). This perception is important because although most of the participants had less than nine years of formal education and were already parents with an average of three to five children, they could understand the contents of the module as well as finding it relevant to their needs. Parents could identify with what was taught in the module. These findings are consistent with past research (Cleaver, 1987; Kramer & Washo, 1993) which also found that the programmes evaluated were perceived as organised and understandable and would be useful to other parents.

The participants who disagreed (36%) with the time allocated for module sessions and disagreed (42%) with the time allocated for discussions felt that more time would have enabled them to have more in-depth discussions and further enhanced their learning (see Table 5). This is one probable reason why the mean for these two items is relatively lower than the mean score for the other two items on the Perceptions of Module Structure Sub-scale. This finding supports past research that has shown that longer programmes (over 12 hours) tend to yield better results than shorter programmes (Guerney & Maxson, 1990; Eastman, 1983).

The positive perceptions of the module structure may have enhanced the process of experiential learning among the participants. The findings on the participants' perceptions of the module are consistent with the findings of an evaluation workshop by Devlin et al. (1992) and the PAT programme by Owen and Mulvihill (1994). They found that a majority of the participants expressed high levels of satisfaction with the programme and would recommend the programme to others.

Overall, the participants' high scores indicate that parenting knowledge and specific skills such as active listening to assist parents can be taught efficiently and effectively through the modular or experiential learning approach. The participants' high levels of satisfaction and their perceptions of the helpfulness of the module is consistent with past research (Owen & Mulvihill, 1994; Devlin et al., 1992).

As shown in Table 6, the participants' perceived that the three most effective methodologies were large group discussions (mean=3.31), role-playing (mean=3.28), and

TABLE 5
Participants' general perceptions of the parenting module (n=39)

Scale item	strongly agree %	agree %	disagree %	strongly disagree %	mean (sd)
Perceptions of Module Structure Sub-scale					
1. The module contents were presented in an organised and easily understandable manner	33.3	64.1	2.6	–	3.31 (0.52)
2. The contents of the module were relevant to the needs of parents	41.0	59.0	–	–	3.41 (0.51)
3. The time allocated for units was sufficient	10.3	53.8	33.3	2.6	2.72 (0.70)
4. There was sufficient time for discussions	10.3	48.6	38.5	2.6	2.67 (0.70)
Mean Score of Sub-scale = 12.10 Std Deviation = 1.73					
Perceptions of Usefulness of the Module Sub-scale					
5. The module helped you to be more sensitive to your	43.6	53.8	2.6	–	3.41 (0.55)
6. The module did not give you many ideas on how to talk effectively to your children	-	2.6	92.3	5.1	3.03 (0.28)
7. The module gave you new ideas on what to do and not do with your children	30.8	69.2	–	–	3.31 (0.47)
8. The module gave you new ideas on how to communicate effectively with your spouse	33.3	66.7	–	–	3.33 (0.48)
9. The module did not give you new ideas on how to enhance the self-esteem of your child	2.6	17.9	74.4	5.1	2.82 (0.56)
10. This module would be useful for other parents	51.3	48.7	–	–	3.51 (0.51)
Mean Score of Sub-scale = 19.41 Std. Deviation = 1.92					
Total Mean Score of General Perceptions Scale = 31.51 Std Deviation = 2.93					

individual assignments and watching videotapes (mean=3.26). Past research has demonstrated that a combination of methodologies is effective in disseminating parenting knowledge and skills (Anderson & Nuttall, 1987; Duncan, Box, & Silliman, 1996; Cleaver, 1987).

The third objective was to determine the relationship between exposure to the parenting module and parenting KAPS. Results obtained in the study indicate that exposure to the module was positively and significantly correlated with parenting knowledge ($r=0.57$, $p<0.05$), parenting attitudes ($r=0.56$, $p<0.05$), parenting practices ($r=0.34$, $p<0.05$) and parenting skills ($r=0.26$, $p<0.05$) (see Table 7). The findings imply that those who were exposed to the module were also more likely to have more parenting knowledge, more favourable parenting attitudes and better parenting practices and skills.

TABLE 6
Participants' perceptions of the effectiveness of the methodologies used (n=39)

Methodology	very effective %	effective %	not effective %	not effective at all %	mean (sd)
1. Lectures	28.2	61.5	10.3	-	3.18 (0.60)
2. Role-play	33.3	61.5	5.2	-	3.28 (0.56)
3. Small-Group Discussions	23.1	69.2	7.7	-	3.15 (0.49)
4. Large-Group Discussions	23.1	66.6	10.3	-	3.31 (0.57)
5. Slides	17.9	82.1	-	-	3.18 (0.39)
6. Individual Exercise	12.8	66.7	20.5	-	3.26 (0.50)
7. Video	28.2	69.2	2.6	-	3.26 (0.50)
8. Additional Readings	23.1	71.8	5.1	-	3.18 (0.51)
Mean Score = 26.46 Std Deviation = 2. 95					

Note: sd = standard deviation; p = level of significance

Table 7
Correlation between the independent and dependent variables for the experimental group after exposure (n=39)

	Knowledge r (p)	Attitudes r (p)	Practices r (p)	Skills r (p)
1. Exposure to Module	0.57 (0.00)	0.56 (0.00)	0.34 (0.00)	0.26 (0.05)
2. Total Perceptions of Module (general perceptions and relevance of content areas)	0.46 (0.00)	0.44 (0.01)	0.17 (0.31)	0.06 (0.70)
3. General Perceptions of Module (perceptions of structure and perceptions of usefulness of module)	0.43 (0.01)	0.65 (0.00)	-0.09 (0.58)	-0.19 (0.24)
4. Perceptions of Module Structure	0.2 (0.23)	0.43 (0.01)	-0.36 (0.02)	-0.31 (0.06)
5. Perceptions of Usefulness of Module	0.47 (0.00)	0.60 (0.00)	0.19 (0.25)	-0.02 (0.93)
6. Relevance of Content Areas	0.37 (0.02)	0.22 (0.17)	0.27 (0.10)	0.19 (0.26)
7. Perceptions of Methodologies Used	0.22 (0.19)	0.31 (0.06)	-0.13 (0.94)	-0.22 (0.91)

Note: r = correlation value; p = level of significance

The fourth objective was to determine the relationship between participants' individual differences (expressed readiness for parenting change and/or perceptions of parenting self-efficacy) and parenting KAPS. Results obtained in the study indicate that individual differences, expressed readiness for parenting change and perceptions of parenting self-efficacy are significantly and positively correlated with parenting knowledge and parenting attitudes (see Table 8). There was low correlation with a definite but small relationship between the individual differences and parenting practices. The relationships did not reach the accepted level of significance. However, there was a positive and significant correlation between the

perceptions of parenting self-efficacy and parenting practices (r=0.33, p<0.05). The findings failed to demonstrate a significant relationship between individual differences and parenting skills. Based on the results, it was found that the participants' individual differences (expressed readiness for parenting change and/or perceptions of parenting self-efficacy) influenced their parenting KAP but not their parenting skills.

Multiple regression analysis using the 'forced-entry procedure' was used to determine whether the hypothesis that individual differences mediate the relationship between exposure to the module (dummy-coded measure) and parenting KAPS is tenable. The study examined whether the data are consistent with the following causal sequence: exposure to the module → individual differences → parenting KAPS. Three sets of analyses were done for each of the parenting KAPS after examining the correlation data on each of the links in the chain or causal sequence.

The percentage of variance accounted for by each of the three models for parenting KAPS is presented in Table 9. The data is inconsistent with the assumption that the relation between exposure to the module and parenting KAPS is indirect, via individual differences or that the individual differences mediate the relation between exposure and parenting KAP. Based on the results, the null hypothesis that there is no significant effect of the participants' individual differences (expressed readiness for parenting change and/or perceptions of parenting self-efficacy) and exposure to the parenting module on parenting KAP is rejected. There is significant effect of exposure and individual differences as shown by the increase in R square when both variables are entered together. This implies that both exposure to the module and individual differences have a direct effect on parenting KAP. There is no mediating effect because there is low correlation (r=0.36) between individual differences and exposure to the

TABLE 8
Correlation between the individual differences and dependent variables for the experimental group after exposure to the module (n=39)

Variables	Knowledge r (p)	Attitudes r (p)	Practices r (p)	Skills r (p)
Individual Differences	0.56 (0.00)	0.57 (0.00)	0.31 (0.06)	-0.04 (0.83
Expressed Readiness for Parenting Change	0.49 (0.00)	0.46 (0.00)	0.27 (0.10)	-0.01 (0.97)
Perception of Parenting Self-Efficacy	0.49 (0.00)	0.49 (0.00)	0.33 (0.04)	-0.04 (0.79)

Note: r = correlation value; p = level of significance

TABLE 9
Multiple regression analysis on the effect of exposure to module and individual differences (n=80)

	Exposure (entered alone)		Individual differences (entered alone)		(Exposure and individual differences entered together)	
	R2	F (p)	R2	F (p)	R2	F (p)
1. Parenting Knowledge	0.33	38.17 (0.00)	0.31	16.80 (0.00)	0.53	42.48 (0.00)
2. Parenting Attitudes	0.32	36.38 (0.00)	0.33	18.07 (0.00)	0.52	41.57 (0.00)
3. Parenting Practices	0.11	10.10 (0.10)	0.09	3.80 (0.10)	0.17	7.95 (0.00)
4. Parenting Skills	0.03	2.34 (0.13)	0.00	0.07 (0.79)	0.03	1.31 (0.28)

parenting module. As suggested by Baron and Kenny (1986), to demonstrate mediation, there must be strong relations between the mediating variable (individual differences) and the predictor variable (exposure to the module).

For parenting skills, based on the findings, the null hypothesis that there would be no significant effect of the participants' individual differences (expressed readiness for parenting change and/or perceptions of parenting self-efficacy) and exposure to the parenting module on parenting skills failed to be rejected (see Table 9). There is no evidence to conclude that exposure to the module and individual differences explain the variation in parenting skills.

CONCLUSION AND IMPLICATIONS

Findings from the present study suggest that parenting programmes such as the one assessed may be an effective means of increasing the parenting KAPS of parents. These results support previous research suggesting that parent education can have positive effect on various aspects of parenting. Based on the findings it can be concluded that the participants had high perceptions of the module's structure, usefulness, and methodologies used. These findings have important implications on the module since according to Bandura (1989b) people are able to increase their knowledge and skills on the basis of information conveyed by modelling influences.

It can be concluded that the individual differences were able to significantly influence the parenting knowledge and attitude but not the parenting practices and skills outcomes focused on in the study. These findings lend support to the work of previous researchers who have reported significant relationships between self-efficacy and related parenting KAPS. In general, the study found that individual differences, exposure to the parenting module and perceptions of the module were found to have positive relations with the parenting KAPS of the respondents in the study. Based on the findings, the study concluded that an exposure to parenting module could directly affect parent's KAPS in parenting. However, data from the study failed to support the hypothesis that individual differences functioned as a mediating variable between exposure to the module and parenting KAPS.

Results from this study may have some major implications for family life educators and parenting programme developers. The findings illustrated the effectiveness of the parenting module in terms of increasing the parenting KAPS of parents. The results suggest that the parenting module should be disseminated more widely and efforts to reach out to a greater number of parents, especially those in need of such interventions should be intensified.

Parenting programme developers and implementers should also pay attention to parents' individual differences such as perceptions of parenting self-efficacy and expressed readiness for parenting change as they are important in predicting parenting behaviours and skills. Efficacy training should also be considered in future interventions as parents who value parenting but lack parenting skills may benefit greatly from such training in that their skills and confidence about performing their parenting role would well increase.

Findings from the current study hold implications for future research on the impact of parenting programmes on the child, parents and the family. The current study collected data from a homogeneous group of respondents; therefore the generalisability of the findings are limited to parents having similar characteristics to those who participated in the study. Future studies should focus on the effectiveness of the parenting module with a more diverse, heterogeneous and representative sample of parents. The majority of respondents in this sample were women. Thus, the findings reported here may better reflect the effectiveness of the parenting module on the parenting KAPS of women than of men. Future research with samples including higher proportions of fathers should enable an examination of differences associated with parents' gender.

It is important to note that although no mediating effects of individual differences on parenting KAPS were found in the current study, the direct effects of individual differences and exposure to the parenting module on parenting KAPS are interesting enough to guide future research in this area. The possible interaction effects of perceptions of parenting self-efficacy and parenting behaviour should be assessed in future studies. The study of parenting change processes, including variables mediating parent training outcomes is recommended.

The study was conducted within a very short time. Thus, the two-week time lapse between pre-test and post-test may not be adequate to assess a longer term impact of the parenting module. Future research is needed to study module effects at the child and family levels as the findings do not provide any insights on these aspects. The present study utilised the interview schedule as the main tool for gathering data. Future research may wish to focus on both quantitative and qualitative evidence regarding the effectiveness of the parenting module so as to overcome the weaknesses associated with one methodology.

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