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Emotion, behaviour, and the structuring of home education in Israel: the role of routine

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Abstract
The practice of home education has expanded considerably and international research has shown that different families perform home education in very different ways. Nevertheless, there has been no examination to date of the relationship between the type of home education practised and the emotional and behavioural aspects of children. The research examined this question by investigating the structure of the home education practised—the degree of daily routine and educational goal orientation in the family—as well as the emotional and behavioural problems of 65 home-educated children in Israel. The results indicated that the existence of a daily routine and educational goal orientation in the home correlated with fewer emotional and behavioural problems. The findings suggest a relationship between the structure of home education and the emotional and behavioural world of the child. In the light of the absence of previous research on this relationship, the present results are relevant to both the theoretical understanding of this subject and the practice of those involved in home education in different countries of the world.

Keywords Emotional problems of children · Behavioural problems of children · Home schooling · Home education

Oz Guterman and Ari Neuman have contributed equally to this article.

Previously called: "The Relationship Between Structure of Activities at Home and Emotional and Behavioural Problems of Home-Educated Children in Israel"

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Introduction

The present research examined the relationship between the structure of home education and emotional and behavioural aspects of children. In recent years, the practice of home education has expanded considerably, but research on this practice has not increased correspondingly. The present article begins with a review of the literature, which indicates broad differences among the ways that families perform home education, and particularly in the degree of structure, that is, the degree of educational goal orientation and the degree to which a structured daily study routine exists. This is followed by a review of studies that have examined the impact of these differences on the academic achievements of home-educated children. Against the background of these reviews, the present research examined, for the first time, the relationship between the structure of home education and emotional and behavioural problems of children. As the first study of this kind, the research was explorative in nature. It was based on previous research that indicated differences between home-educated and school-going children in emotional and behavioural aspects; however, there were no existing findings on differences among different groups of home-educated children that might serve as the basis of hypotheses for the present study.

Background

In the past few decades, several different alternatives to the traditional education system, such as democratic education, anthroposophical education, and others, have been developing. One of the alternative educational frameworks that have been increasingly adopted in recent years is home education. In this alternative form of education, children do not attend school but undergo learning and educational processes within the family unit (Neuman and Guterman 2017).

Why do parents decide to home educate their children? Researchers who analysed the NHES (National Household Education Survey), a comprehensive review conducted in the United States once every few years on educational issues, in recent years have consistently reached the conclusion that the main factors in the decision of parents to home educate are pedagogical and associated with the school environment (Bielick 2008; Princiotta and Bielick 2006; Noel et al. 2013).

It is important to note that this finding refers to the majority of home-educating parents. In their analysis of the NHES for 2012, Noel et al. (2013) found that 91% of the parents who home educated said that concern about the school environment and climate was the most important reason for their choice to do so. Kunzman (2009), who summarised numerous studies of reasons for home education in several countries, claimed that most of the parents who home educated believed they could provide a better educational experience for their children than the schools could and were willing to sacrifice their time, money, and professional development for this purpose. The parents usually (though not always) were dissatisfied

with the conventional educational options, including private school. Studies on the reasons for home education in Australia produced similar findings (English 2015).

Although the practice of home education is not an accepted and routine manner of educating children, it is nevertheless quite widespread. It is estimated that in the United States, for instance, about two million children (about 3% of the children in the country) learn in home education frameworks (Kunzman and Gaither 2013). Moreover, although it is a relatively new practice, home education has been growing steadily over the last thirty to forty years in most Western countries as well as in Australia (Geary 2011; Noel et al. 2013; Reaburn and Roberts 2018). In Israel, where the present research was conducted, home education is newer compared with Australia and other Western countries; it began about two decades ago (Neuman and Guterman 2016a, b, 2017), and therefore, it is also less widespread. Previous research conducted in Israel has shown that the majority of families request permission from the education ministry, because the process is simple and the government policy is strict regarding failure to report (Neuman and Guterman 2016a, b). The Israeli ministry of education estimates that about 500 families engage in home education in Israel; as in other countries, reports reveal a steady and rapid growth in the number and percentage of families that home educate in Israel (Neuman and Guterman 2016a, b).

Home education offers a variety of advantages. For example, the possibility of private instruction adapted to the specific child may be a significant advantage for individual development. Indeed, several studies conducted in different Western countries have shown that home education is advantageous for children in terms of cognitive and academic abilities (Martin et al. 2012; Murphy 2012; Ray 2010; Riley 2016). Additional advantages of home education indicated by research include strengthening family ties and reducing psychological difficulties (Neuman and Guterman 2016a, b). However, research has also considered the potential negative effects of this framework on children (Fineman and Shepherd 2016; Green 2014). One question that might be raised in this regard is that home education is not a uniform framework. In fact, the definition of home education is based on what it is not—in this setting, the children do not attend school. This leaves wide room for diversity among the families that practise home education, among other things, with regard to their reasons for choosing this type of education, its objectives, and the methods used. The most prominent aspect in the literature on differences among the ways in which families carry out home education is the structure of the educational process.

In an early study of home education, Van Galen (1988) suggested a division into two types of home education, according to the structure of the educational process. Nowadays, most researchers in Western countries refer to home education as a continuum, with most families at neither end, but rather somewhere along it (Ray and Riley 2013). One end of the continuum represents the least structured framework. In this type of home education, the parents totally refrain from initiated learning and turn learning into an incidental process or one that stems solely from the child's desire to learn (Klein and Poplin 2008; Ray and Riley 2013; Safran 2012). This is defined as unstructured home education or unschooling. The other end of the

continuum represents the most structured framework of home education, in which families fully reconstruct the method of education used in the schools in their homes (Neuman and Guterman 2016a, b). In this situation, the lessons follow a predetermined schedule, with recess and exams, and in some cases, the children sit as desks, much as they do in classrooms (Taylor-Hough 2010). As noted, different studies conducted in Western countries have found that most families that home educate choose neither of these extremes, but combine them to one extent or another (e.g. Barratt-Peacock 2003,).

The distinction by structure was further broadened by a study of the attitudes and perceptions of parents who home education (Neuman and Guterman 2016a, b). This research, which examined how parents perceived the structure of home education, suggested that it is possible to examine this structure in terms of two dimensions: content and process. Structured content refers to learning oriented towards specific, predefined goals, compared with random, incidental learning. Structured process refers to learning in which there is a set daily schedule in the home (Neuman and Guterman 2016a, b).

It is important to note that the present research focused on the impact of structure in home education on the emotional and behavioural aspects of children. However, before examining these relationships, it is important to understand that a broader perspective on this subject should be based on the understanding that the choice of a family to home educate is associated with many different aspects. For example, it may well be that the manner of practising home education corresponds with the reasons the family chose this type of education; families that choose to home educate for religious reasons, for instance, might opt for more structured home education.

Naturally, it is impossible to encompass all aspects in one study. Nevertheless, it is important to understand the theoretical background when addressing these questions.

There have been several references in international research literature to the relationship between the type of home education practised and different aspects of the life of children and their families. Scholars vary in their views of how different types of home education affect the emotional and behavioural world of children. On the one hand, for instance, unschooling provides an opportunity to cultivate children's natural curiosity, sense of interest, and inquiry of reality, and makes it possible to direct resources to learning that is meaningful to them (Holt 1981). According to this approach, the natural curiosity of children encourages them to study the field in which they can express themselves fully and authentically and creates less conflict with the close environment regarding the process.

Alongside these advantages, there are also concerns about potential problems associated with unschooling. For example, structured learning that is repeated daily may give children a sense of daily routine. From this perspective, the lack of structure in unschooling could lead to a lack of stability in the child's environment. Early writers in the field of home education, including those who promoted home education (Holt 1981), addressed this issue of how lack of structure affects the stability of the child's environment. While other educational approaches create structured times alongside unstructured times, unschooling might create a situation in which the child's entire day, or a large part of it, is comprised

of unstructured time, so that it does not enable a sense of a stable, permanent routine.

In all countries, families vary widely in terms of the structuring of home education, but no research to date has examined these questions directly among families that home educate. However, much research has suggested the importance of this issue in the home education framework, based on findings of an association between the structure of children's environment and their emotional and behavioural world.

For example, in several studies conducted in different countries, lack of routine at home has been shown to correlate with behaviour problems (Chen et al. 2014; Dumas et al. 2005; Evans 2004; Shamama-tus-Sabah et al. 2011a, b) less ability to self-regulate (Malatras et al. 2016; Martin et al. 2012), and internalising and externalising disorders (Dumas et al. 2005; Ferguson et al. 2013; Koulouglioti and Kitzman 2009; Otto et al. 2016). However, despite these findings and a large volume of literature on the different methods of home education, no research to date has addressed the question of how the degree of structure in home education affects the emotional and behavioural world of the child.

It is important to examine the impact of structure in home education on the child's emotional world; understanding this may help parents and other stakeholders in home education in different countries design the home education environment so that it has a positive effect on the children's world. Against this background, the present research was designed to focus on this issue. According to the findings of the previous research described above, the present study considered two dimensions of structure in education, that is, the degree to which the educational objectives are clear and the degree to which there is a clear schedule at home. In addition, it included examination, for the first time, of the association of these dimensions with emotional and behavioural characteristics of children who are home educated.

Furthermore, in the light of the intense, intimate contact between parents and children and the characteristically high number of hours they spend together in home education, this study also included an examination of the children's patterns of attachment. Attachment theory (Bowlby 1969, 1979) is currently one of the most prominent theories in the research of personal and developmental processes and interpersonal differences. It refers to the primary relationship that the infant forms with a distinct, favoured adult, and the implications of this relationship on the mental and emotional development of the individual, in childhood and adult life (Mikulincer and Shaver 2003). Thus, investigation of the impact of both dimensions of structure in home education on the child's emotional world may contribute significantly to our understanding of how home education affects the world of children educated in this way.

Based on the findings of previous research, it was hypothesised that in the families where there was a lower degree of structure in terms of both dimensions examined, there would be a higher level of symptoms of emotional and behavioural problems among the children. However, unschooling is characterised by education that is more open and adapted to the desires and choices of children, and therefore, may reduce tension between parents and children, leading to more secure attachment. Therefore, the second hypothesis of the research was that in families that practise

home education with a low level of structure in terms of both dimensions, the children will have more secure attachment.

Method

Participants

A group of 65 children aged 6 to 12 who were home educated participated in the research. To better understand the characteristics of the research sample, some basic demographic details about them were collected, such as gender, age, number of children in the family, parents' education, and the like. The average age was 8 years and 11 months, with a standard deviation of 2.12. Of the 65 children in the sample, 31 were girls and 34 were boys. The number of children per family ranged from one to six and the average number of children was 2.16. The standard deviation was 1.24. On the demographic questionnaire, most of the participants (62) described themselves as secular and 3 of them described themselves as religious. Among the parents, the average years of education of the mothers was 16.07 (SD = 2.82) and the average years of education of the fathers was 15.42 (SD = 1.97). Sixty of the participants' parents were married and five were single mothers.

Procedure

The participants in the research were recruited in weekly meetings of home educators that were held in different regions of Israel. This is a relatively small population in a relatively small country; therefore, the participants in these meetings represent the majority of families that home educate. The parents of children in the relevant target population (ages 6 to 12) were asked to participate in the research. All but three of the families approached agreed to participate.

In preparation for conducting the research, the research assistants practised contacting families and administering the questionnaires. Upon completion of the practice, they began contacting the families and arranging appointments to meet them in their homes. The study was conducted with the approval of the Ethics Committee of Western Galilee College. At each such meeting, the parents signed an informed consent statement after the interviewer gave a detailed explanation about the research. Then, the primary caregiver (that is, the parent who spent the most time at home with the child—in all the families in this study, the mother) completed the questionnaires regarding the child. The research assistant also administered the questionnaire to the child. When the parents and children had completed answering the questionnaire, a summary conversation was held with the parents and children together, to enable questions and comments. On this occasion, the importance of the research was also reiterated. The data were stored without any identifying details (each family was assigned a number).

Instruments

To examine the research hypotheses, the participants were asked to complete several questionnaires. The first dealt with emotional and behavioural problems of the children, the second with the degree of attachment security of the children, and the third with demographic characteristics, including the degree of structure in their home education. Details of the questionnaires are presented below.

Questionnaire on emotional and behavioural problems

The Hebrew version (Zilber et al. 1994) of Achenbach's (1991) standardised questionnaire consists of 112 statements regarding behaviour, which the parent rates regarding the child on a three-point scale, ranging from 0 (incorrect) to 2 (very correct). It is important to note that the questionnaire involves subjective rating of the children by their parents. The total questionnaire scores have been standardised by gender and age of the child. In this research, the accepted division into two axes of problems, that of externalising problems and that of internalising problems, was used. Externalising problems are those associated with aggressive behaviour, delinquency, violation of rules, and hurting other people. Internalising problems refer to symptoms of anxiety and depression, introversion and social detachment, and somatic complaints. In the present research, the Cronbach's α reliability score for externalising problems was 0.93 and for internalising problems, 0.91.

Attachment questionnaire

The Hebrew version (Granot and Mayseless 2001) of the attachment questionnaire (Kerns et al. 1996) consists of 15 items and is designed to evaluate children's perceptions regarding security in the parent–child relationship in mid-childhood and early adolescence. Secure attachment is measured in this questionnaire in terms of level of trust in the attachment figure to react quickly and be available, turning to the attachment figure in times of pressure and calm and interest in a relationship with the attachment figure. Each item includes two statements. First, the child is asked to examine which statement describes him or her best. After the child selects a statement, he or she is asked whether it describes him or her to a great or slight degree. A high score on the questionnaire reflects a more secure relationship. In the present research, the Cronbach's α reliability score of the questionnaire was 0.76.

Demographic questionnaire

The parents completed a demographic questionnaire that included personal characteristics of the children, such as gender, age and number of children in the family. In order to consider socioeconomic status, the parents were asked to note their monthly family income (in Israeli shekels) and the parents' formal education (in number of years). In addition, this section of the questionnaire also included quantitative details

on the degree of structured routine in the home and the degree to which the family engaged in activities oriented towards educational goals at home. In both items, the scale ranged from 1 (not at all) to 7 (to a great degree).

Results

Pearson's correlations were employed to examine the relationships between the research variables. To examine the differences between the genders, analysis of variance was performed. In addition, hierarchical regressions were performed, enabling examination of the joint contribution of the variables.

In order to examine the relationship between internalising and externalising problem and the other variables, Pearson's correlations were calculated between the socioeconomic and personal variables and the level of internalising and externalising problems. These correlations are presented in Table 1.

A negative correlation was found between mother's education and internalising problems: the higher the mother's level of education, the lower her level of internalising problems was, but no correlation was found between mother's education and externalising problems. Family income correlated negatively with both internalising and externalising problems, so that the higher the family income, the lower the level of internalising and externalising problems. A regular daily routine in the home and family activity oriented to educational goals correlated negatively with internalising and externalising problems; the more structured the daily routine and more educational goal orientation of family activity, the lower the levels of internalising and externalising problems.

In addition, in order to examine whether there were differences between boys and girls in terms of externalising and internalising problems, a one-way MANOVA analysis was performed. The analysis revealed a significant difference between boys and girls, $F(2,62)=7.69$, $p<0.01$, $\eta^2=0.20$. The means and standard deviations of

Table 1 Pearson's correlations of socioeconomic characteristics and child attachment security and internalising and externalising problems ($n=65$)

Variable	Internalising problems	Externalising problems	M	SD
Mother's education	0.24**	0.12	15.43	2.42
Family income	0.31*	0.25*	3.80	1.54
Child's age	0.05	0.22*	8.92	1.12
Child's attachment security	0.18	0.20	3.11	0.45
Regular daily schedule	0.34**	0.28*	4.42	1.17
Orientation towards educational goals	0.31*	0.25*	3.89	1.64
M	46.90	45.53		
SD	9.70	9.36		

*$p<0.05$, **$p<0.01$

Table 2 Means and standard deviations of the externalising and internalising problems, by gender

Measure		Gender				$F(1, 63)$	η^2
		Boys ($n=34$)		Girls ($n=31$)			
		M	SD	*M*	SD		
Internalising problems	49.74		10.40	43.78	7.88	6.29*	0.09
Externalising problems	45.95		9.96	45.07	9.38	0.14	0.00

*$p<0.05$

the internalising and externalising problems and the results of the variance analysis performed separately for each measure are presented in Table 2.

Significant differences were found between boys and girls in internalising problems, where the girls demonstrated fewer internalising problems than the boys did.

In order to examine the contribution of these variables to the explained variance of internalising and externalising problems of children who are home educated, two hierarchical regression analyses were performed. The first regression referred to internalising problems and the second, to externalising problems. Each of the regressions was comprised of five steps: in the first step, the demographic characteristics of the family—mother's education and family income were entered. In the second step, the demographic characteristics of the children—age and gender were entered. In the third step, the attachment security of the child was entered. In the fourth step, measures of daily routine and educational goal orientation were entered. In the fifth step, interactions of the personal characteristics of the family and the child x daily routine and educational goal orientation were entered, to enable examination of whether the contribution of daily routine and educational goal orientation to externalising and internalising problems was dependent upon personal characteristics. In the first four steps, the variables were force-entered; in the fifth step, in which the contribution of the interactions to the explained variance was tested, only the interactions that contributed significantly to the explained variance were entered ($p<0.05$).

The results of the regression regarding internalising problems revealed that the level of explained variance of internalising problems was 39%, and the regression regarding externalising problems indicated that the level of explained variance of externalising problems was 26%. The β coefficients and the explained variance of internalising and externalising problems are presented in Table 3.

The first step, in which the family demographic characteristics—mother's education and family income—were entered, indicated a significant contribution of 11% to the explained variance of internalising problems and a significant contribution of 7% to the explained variance of externalising problems. Income contributed significantly and negatively to the explained variance of externalising problems and internalising problems, where the higher the income, the lower the level of externalising problems and internalising problems. It should be noted that examination of the correlations revealed a significant correlation between mother's education

Table 3 Hierarchical regression coefficients for the explained variance of internalising and externalising problems ($N=65$)

Predictor	Children's behaviour problems			
	Internalising		Externalising	
	ΔR^2	B	ΔR^2	β
Step 1	0.11*		0.07*	
Mother's education		0.13		0.03
Family income		−0.26*		−0.24*
Step 2	0.11*		0.03	
Child's age		0.01		0.19
Gender		−0.34**		0.01
Step 3	0.06*		0.02	
Attachment security		−0.26*		0.16
Step 4	0.08*		0.06	
Regular daily schedule		−0.24*		0.22
Orientation towards educational goals		0.10		0.09
Step 5	0.03*		0.08*	
Income × orientation	0.20*			
Education × daily schedule				0.31*
Total R^2	0.39***		0.26*	

*$p<0.05$, **$p<0.01$, ***$p<0.001$

and internalising problems, which was not expressed in the regression analysis. This may be the result of the association between mother's education and family income, $r=0.38$, $p<0.01$.

In the second step of the regression, when the child's demographic characteristics—age and gender—were entered, a significant contribution of 11% to the explained variance of internalising problems was indicated, but a significant contribution to the explained variance of externalising problems was not found. In this step, a significant negative β coefficient was found between gender and internalising problems. This finding regarding gender is consistent with the results of the MANOVA analysis, which are presented in Table 2. More internalising problems were indicated among the girls in the study.

In the third step, in which the personality characteristic of the children—attachment security—was entered, a significant contribution of 6% to the explained variance of internalising problems was found, but a significant contribution to the explained variance of externalising problems was not found. In this step, a significant negative β coefficient was found between attachment security of the child and internalising problems, where the higher the level of attachment security, the lower the level of internalising problems.

In the fourth step, when daily routine and educational goal orientation were entered, a significant contribution of 8% to the explained variance of internalising problems was found, but a significant contribution to the explained variance of

externalising problems was not found. In this step, a significant negative β coefficient was indicated between daily routine in the home and internalising problems, where the more regular and structured the daily routine in the home, the lower the level of internalising problems.

It should be noted that examination of the correlations indicated a significant relationship between educational goal orientation and internalising problems and externalising problems. These correlations were not expressed in the regression analysis. It seems that this arose from the association between educational goal orientation and daily routine, $r = 0.44$, $p < 0.01$.

In the fifth step, in which the interactions of daily routine and goal orientation × personal characteristics of the family and the child were entered, the interaction between income × educational goal orientation added another 3% to the explained variance of internalising problems. In addition, the interaction of education × daily schedule added another 8% to the explained variance of externalising problems. To further clarify the two interactions, Aiken and West's (1991) method was used. Figure 1 shows the relationship between family orientation to educational goals and internalising problems among families with high and low family income.

As illustrated in the figure, among the children from high-income families, no significant correlation was found between family educational goal orientation and internalising problems, $\beta = 0.17$, $p > 0.05$. In contrast, among the children from low-income families, a strong negative correlation was found between family educational goal orientation and internalising problems, $\beta = -0.58$, $p < 0.05$. In other words, the higher the educational goal orientation, the lower the level of internalising problems.

Figure 2 shows the relationship between regular daily routine at home and externalising problems among families in which the mother's education was high or low, respectively.

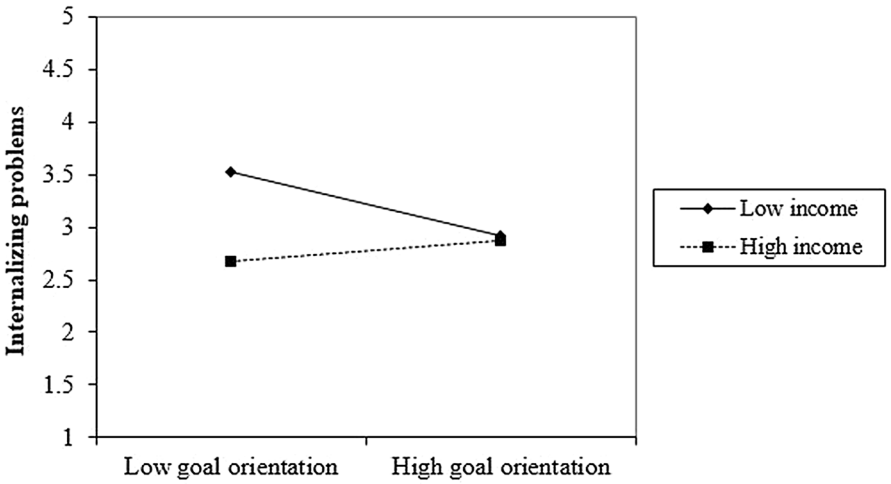

Fig. 1 The relationship of educational goal orientation and internalising problems among families of high and low income

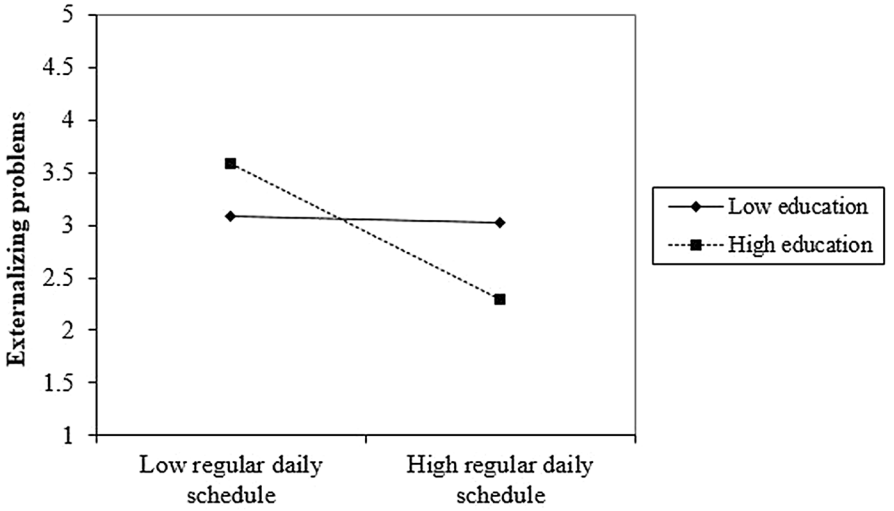

Fig. 2 The relationship of daily schedule at home and externalising problems among with level of mother's education

As the figure shows, among the children from families in which the mothers had a high level of education, there was a strong negative correlation between regular daily routine in the home and externalising problems, $\beta = -0.52$, $p < 0.05$. In other words, the more regular the daily routine, the lower the level of externalising problems. In comparison, among children in families where the mother's level of education was low, no significant correlation was found between a regular routine in the home and externalising problems, $\beta = -0.06$, $p < 0.05$.

Discussion

The present research focused on the question of whether the degree of educationally relevant routine and educational goal orientation in these frameworks significantly relates to the emotional world of the home-educated child. As the first study of this subject, the present research focused only on the relationships between these variables and did not investigate a possible causal relationship between them. As discussed in the introduction to this article, in order to understand the factors underlying the different nature of conduct of the participating families, the study focused on the most widely accepted division in the relevant literature, that of structured and unstructured home education. In contrast to previous studies, which considered these as two separate concepts, with families adopting one or the other, the present study examined the degree of structure in the home education process as a continuum. Furthermore, the study examined this continuum by means of parents' reports, regarding both time management and the orientation towards subject matter, in terms of hours per week devoted to parent-initiated learning and the degree to which they followed a set daily educationally relevant routine.

As hypothesised, the findings indicated that a set daily educationally relevant routine in the home and orientation of family activities towards educational goals were negatively associated with internalising and externalising problems, where the more structured the daily schedule and the more goal-oriented the activities were, the lower the level of internalising and externalising problems among the children. Against this background, it is interesting that the findings indicated an association of both time management structure, in the form of a daily educationally relevant routine, and subject matter structure, in the form of orientation towards educational goals, each in its own right.

This may suggest that a daily educationally relevant routine is particularly important for children who are home educated. For children who attend school, getting up for school and coming home constitute a regular, stable daily routine and provide a sense of order. In contrast, for children who are home educated, there may be no educationally relevant routine at all, since the time of getting up, the order of activities and the entire daily schedule may be radically different from one day to the next. Against this background, the findings of the present research fit those of previous research by the authors, which indicated that the taxonomy of the degree of structure in home education can be based on two different axes (Neuman and Guterman 2016a, b).

As noted, orientation towards educational goals was also found to be negatively associated with children's emotional and behavioural problems. In other words, the higher the level of orientation towards educational goals, the lower the level of emotional and behavioural problems among the children. Perhaps educational activities also serve as an anchor of stability for children in their home activities and help create a clear, structured world. It would be interesting in further research to examine the relationship between these aspects among children who are home educated and children who attend school, in order to examine whether these relationships differ in nature or intensity. It would also be interesting to compare children who are home educated, children who attend conventional schools, and children in other alternative educational settings along the same lines. Such a comparison might provide information about the relative importance of these respective factors for children. In addition, given the correlations indicated by the results of this research, it would be interesting to examine which factors explain the variance in different dimensions of stability of the family environment among the different families.

It is interesting to note that in contrast to the present results, previous research conducted in the United States and other countries revealed no relationship between home stability and socioeconomic situation. Naturally, different methods were used in the existing studies to measure these variables, but even those that employed similar instruments to those of the present study indicated no association (Evans 2006; Martin et al. 2012; Shamama-tus-Sabah et al. 2011a, b). Their findings suggested that regardless of socioeconomic status, families that were strict about educationally relevant routine were more consolidated and happy and suffered less conflicts and confrontations (Evans 2006). The results of the present study showed that the correlation between a stable, structured environment and the measures examined was associated with socioeconomic status. Among children from low-income families, there was a strong negative correlation between the family's educational goal

orientation and internalising problems. In other words, the higher the level of orientation towards educational goals, the lower the level of internalising problems. In contrast, in the high-income families, no relationship was found between these variables. Furthermore, among children from families where the mother had a high level of education, there was a strong negative correlation between a regular daily educationally relevant routine and externalising problems, that is, the more structured the daily schedule, the lower the level of externalising problems. In contrast, among children from families where the mother had a low level of education, no correlation was found between these variables.

One possible explanation for this finding might be that the correlation between the family's educational goal orientation and internalising problems was only found among low-income families because the economic hardship in these families creates stress. In other words, it is likely that in these families there was more stress, which contributed to a sense of anxiety and depression among the children. In such situations, orientation towards educational goals may help families cope with economic status-related stress by creating a stable factor in the home. It may also be assumed that among families with greater economic means, it is possible to promote learning processes by other means, as well, such as participating in Web-based courses, extracurricular classes and the like. Under these circumstances, the orientation towards educational goals may be less significant. Similarly, with respect to the correlation between daily routine and externalising problems, mothers with a lower level of education may use different educational tools than better-educated mothers do. In further research, it would be interesting to examine whether mother's education is associated with different styles of parenting. Such research might shed light on the mechanism underlying this relationship. If there is such a difference, perhaps for mothers with less education, a daily routine constitutes a means for coping, so that it helps reduce behaviour problems and create a more structured environment, which, as shown, reduces the frequency of externalising problems.

Despite the importance of the findings, the present study also has some limitations. First, because this was a correlative study, it was not possible to determine a causal relationship. For example, emotional and behavioural problems of children may make it difficult to create a regular daily routine and concentrate on educational goals. In further research, it would be interesting to examine these questions by means of a follow-up of families over time, or by examining several siblings in the same family. Second, the research referred to the aspect of stability in the alternative framework of home education; to date, there is no information from other studies for comparison. In other words, these findings should be considered initial results, and further research with other samples is required to better establish them. Third, the study did not refer to other aspects that may characterise environmental stability, such as disorganisation or noise; it would be interesting to examine these questions regarding other populations, as well as other aspects of stability of the child's environment in future studies. Fourth, the present research did not compare children in home education with children who attended school. Previous studies have shown differences in the levels of anxiety and depression among children in these two educational frameworks. Accordingly, examination of such differences regarding this important subject

is warranted. Finally, in the present research, self-report by means of questionnaires was employed as a means of measuring the structure of home education. Therefore, it is certainly possible there was a statistically significant difference in scores, but no phenomenological difference between these two groups of children in anxiety or depression. It would be interesting in further research to examine this variable directly, for instance, based on observation of the families or on journal writing.

These limitations notwithstanding, this research examined an important aspect of the field of home education. Alongside the advantages that this framework may offer, there is not enough information about the factors that might affect the emotional world of children who are educated in these ways. From this point of view, the present research could help parents and professionals in different countries better understand the aspects the home education practised that might affect the emotional and behavioural world of children.

The data presented in the Introduction clearly indicate growth in the scope of home education in a broad range of different countries. Considering the increase in this practice, it is important that educators understand it better. From the practical perspective, there will be increasing need for professionals to guide and direct home-educating families. This requires practical knowledge—an understanding of the advantages and weaknesses of home education, of the types of home education practised by different families, and understanding of the relationship between the type of home education and its outcomes. As discussed extensively in the Introduction, there are vast differences in the forms of home education practised. The present research offers a first study of these differences and the relationship between the structure of home education in a family and the emotional and behavioural problems of their children. As such, it may help professionals better understand this new educational framework.

In addition to its practical contribution to the field, the present research also paves the way for further theoretical studies of these dimensions, as well. The conceptualisation of structure in home education in terms of time and subject matter is new to the literature on this subject and may therefore contribute to a broader view of structure in family activity. In particular, this theoretical distinction expands and enriches the existing taxonomy in the literature. As emphasised in the introduction, this new division is based on studies that examined the ways in which parents who home educate understand the structure of the process. The present research helps confirm this division and examine the impact of other aspects on the world of the child. In this respect, it is hoped that the present study will serve as a foundation for a critical, in-depth research perspective on home education, as well as other alternative systems that are expanding.

Furthermore, as noted in the Introduction, despite extensive literature on different types of home education, no empirical examination has been conducted to date of the impact of the type of home education on the emotional and behavioural aspects of the child. In this respect, the present research provides a basis for research of these important aspects and better understanding of the sources of influence of type of home education on its outcomes and implications.

References

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/ 4–18 and 1991 profile*. Burlington, VT: University of Vermont, Department of Psychiatry.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: testing and interpreting interactions*. Newbury Park, CA: Sage.

Barratt-Peacock, J. (2003). Australian home education: A model. *Evaluation and Research in Education, 17*, 101–111.

Bielick, S. (2008). *1.5 million homeschooled students in the United States in 2007*. Washington: US Department of Education Institute of Education Sciences, National Center for Education Statistics.

Bowlby, J. (1969). *Attachment and loss: Attachment* (2nd ed.). New York: Basic Books.

Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.

Chen, N., Deater-Deckard, K., & Bell, M. A. (2014). The role of temperament by family environment interactions in child maladjustment. *Journal of abnormal child psychology, 42*(8), 1251–1262.

Dumas, J. E., Nissley, J., Nordstrom, A., Phillips Smith, E., Prinz, R. J., & Levine, W. L. (2005). Home chaos: Sociodemographic, parenting, interactional, and child correlates. *Journal of Clinical Child & Adolescent Psychology, 34*(1), 93–104.

English, R. (2015). Use your freedom of choice: Reasons for choosing homeschool in Australia. *Journal of Unschooling and Alternative Learning, 9*(17), 1–18.

Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57*, 423–451.

Ferguson, K. T., Cassells, R. C., MacAllister, J. W., & Evans, G. W. (2013). The physical environment and child development: An international review. *International Journal of Psychology, 48*(4), 437–468.

Fineman, M. A., & Shepherd, G. (2016). Homeschooling: Choosing Parental Rights Over Children's Interests. *U. Balt. L. Rev., 46*, 57–169.

Geary, D. (2011). Trend and data analysis of homeschooling. *Academic Leadership, 9*(4), 1–4.

Granot, D., & Mayseless, O. (2001). Attachment security and adjustment to school in middle childhood. *International Journal of Behavioral Development, 25*(6), 530–541.

Green, C. (2014). Education Empowerment: A Child's Right to Attend Public School. *Geo. LJ, 103*, 1089.

Holt, J. (1981). *Learning all the time*. New York, NY: Delacorte.

Kerns, K. A., Klepac, L., & Cole, A. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology, 32*, 457–466.

Klein, C., & Poplin, M. (2008). Families home schooling in a virtual charter school system. *Marriage & Family Review, 43*(3–4), 369–395.

Koulouglioti, C., Cole, R., & Kitzman, H. (2009). The role of children's routines of daily living, supervision, and maternal fatigue in preschool children's injury risk. *Research in Nursing & Health, 32*(5), 517–529.

Kunzman, R. (2009). Understanding homeschooling A better approach to regulation. *Theory and Research in Education, 7*(3), 311–330.

Kunzman, R., & Gaither, M. (2013). Homeschooling: A comprehensive survey of the research. *Other Education: The Journal of Educational Alternatives, 2*(1), 4–59.

Malatras, J. W., Israel, A. C., Sokolowski, K. L., & Ryan, J. (2016). First things first: Family activities and routines, time management and attention. *Journal of Applied Developmental Psychology, 47*, 23–29.

Martin, A., Razza, R. A., & Brooks-Gunn, J. (2012). Specifying the links between household chaos and preschool children's development. *Early Child Development and Care, 182*(10), 1247–1263.

Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamic and interpersonal processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35). San Diego, CA: Academic Press.

Murphy, J. (2012). *Homeschooling in America*. Thousand Oaks, CA: Corwin.

Neuman, A., & Guterman, O. (2016a). The clash of two world views – A constructivist analysis of home educating families' perceptions of education. *Pedagogy, Culture & Society*, *24*(3), 359–369.

Neuman, A., & Guterman, O. (2016b). Structured and unstructured elective home education: A proposal for broadening the taxonomy. *Cambridge Journal of Education*, *47*(3), 355–371.

Neuman, A., & Guterman, O. (2017). Homeschooling is not just about education: Focuses of meaning. *Journal of School Choice: International Research and Reform*, *11*(1), 148–167.

Noel, A., Stark, P. & Redford, J. (2013). *Parent and family involvement in education, from the National Household Education Surveys Program of 2012: First look*. NCES 2013-028. Washington, DC: National Center for Education Statistics.

Otto, Y., Kolmorgen, K., Sierau, S., Weis, S., von Klitzing, K., & Klein, A. M. (2016). Parenting behaviors of mothers and fathers of preschool age children with internalizing disorders. *Journal of Child and Family Studies, 25*(2), 381–395.

Princiotta, D., & Bielick, S. (2006). *Homeschooling in the United States: 2003*. Statistical Analysis Report. NCES 2006-042. National Center for Education Statistics.

Ray, B. D. (2010). Academic achievement and demographic traits of homeschool students: A nationwide study. *Academic Leadership: The Online Journal, 8*(1), 1–31.

Ray, P., & Riley, G. (2013). The challenges and benefits of unschooling, according to 232 families who have chosen that route. *Journal of Unschooling & Alternative Learning, 7*(14), 1–27.

Reaburn, R. L., & Roberts, J. (2018). The experiences of homeschooling parents when teaching mathematics. In *Making waves, opening spaces, Proceedings of the 41st annual conference of the Mathematics Education Research Group of Australasia*, (pp. 647–652). Mathematics Education Research Group of Australasia Inc.

Riley, G. (2016). The role of self-determination theory and cognitive evaluation theory in home education. *Cogent Education, 3*(1), 1163651.

Safran, L. (2012). Home education: The power of trust. *Other Education, 1*(1), 32–45.

Shamama-tus-Sabah, S., & Gilani, N. (2011a). Household chaos, attention and school problems in primary school children. *Journal of Behavioural Sciences, 21*(1), 68–80.

Shamama-tus-Sabah, S., & Gillani, N. (2011b). Conduct problems, social skills, study skills, and home chaos in school children: A correlational study. *Pakistan Journal of Psychological Research, 26*(2), 201–215.

Taylor-Hough, D. (2010). Are all homeschooling methods created equal? Retrieved December 3, 2012, from https://charlottemasonhome.com/about/are-all-homeschooling-methods-created-equal/.

Van Galen, J. A. (1988). Ideology, curriculum, and pedagogy in home education. *Education and Urban Society*, *21*, 52–68.

Zilber, N., Auerbach, J., & Lerner, Y. (1994). Israeli norms for the achenbach child behavior checklist: Comparison of clinically-referred and non-referred children. *The Israel Journal of Psychiatry and Related Sciences, 31*, 5–12.