

The Adjustment of Ethnic Minority and Majority Children Living in Israel: Does Parental Use of Corporal Punishment Act as a Mediator?

Rotem Regev^a, Noa Gueron-Sela^b and Naama Atzaba-Poria^b

^aDepartment of Psychology, University of Victoria, BC, Canada

^bDepartment of Psychology, Ben-Gurion University of the Negev, Beer-Sheva, Israel

This paper examines explanatory mechanisms of differences, in both positive and negative aspects of children's adjustment, between ethnic minority (i.e., Former Soviet Union—FSU origin) and ethnic majority (i.e., Israeli) children living in Israel. Seventy Israeli children (40 girls) and 75 FSU origin children (38 girls) and their parents constituted the study sample. Both mothers and fathers reported on the children's prosocial and externalizing behaviours and provided accounts of their use of corporal punishment. Analyses showed that FSU origin children displayed lower levels of prosocial behaviour as well as higher levels of externalizing problems and that their parents used more corporal punishment than their Israeli counterparts. In addition, a mediation model was determined in which both maternal and paternal use of corporal punishment mediated the link between ethnicity and the child's prosocial behaviour. Furthermore, according to the best fitting structural equation model, ethnicity did not have a direct effect on children's prosocial behaviour. This link was fully mediated by maternal and paternal corporal punishment. No mediation was revealed for the links between ethnicity and externalizing problems. The process of risk is discussed. Copyright © 2011 John Wiley & Sons, Ltd.

Key words: ethnic minority; corporal punishment; prosocial behaviour; externalizing behaviour

Background

Research on children's adjustment has traditionally focused on identifying the *factors* that may be linked to adjustment (Campbell, 1990; Coie & Dodge, 1998).

*Correspondence to: Noa Gueron-Sela, Department of Psychology, Ben-Gurion University of the Negev, Beer-Sheva 84105, Israel. E-mail: gueron@bgu.ac.il

More recently, there has been a growing interest in identifying the developmental *mechanisms* and *processes* relating to children's adjustment (e.g., Reis *et al.*, 2000; Rutter, 1990). Moreover, cross-cultural studies investigating the factors and processes contributing to children's adjustment have almost exclusively focused on the negative aspects of adjustment such as externalizing and internalizing behavioural problems, as seen during the adolescence and middle childhood periods (e.g., Atzaba-Poria *et al.*, 2004; Lansford *et al.*, 2004). The positive aspects of adjustment as well as a focus on earlier ages have received considerably less attention. This literature gap is especially salient, as although children younger than 7 years may not be aware of their ethnicity or minority status (Aboud, 1988), their exposure to different values and norms, held by diverse socialization agents—their teachers and school environment versus their parents and their family environment, may affect them negatively (Spencer & Markstorm-Adams, 1990). Such effects can be expressed as both increased negative and decreased positive behaviours (e.g., Koblinsky *et al.*, 2006). Accordingly, the present study was designed to identify processes associated with the development of positive (i.e., prosocial behaviours) and negative (i.e., externalizing behaviours) adjustment. Externalizing behaviours are defined in the current study as defiant and hostile behaviours toward authority figures and/or peers (e.g., temper tantrums, disobedience, bullying, lying, stealing). Prosocial behaviour is defined here as behaviours intended to benefit another person (Eisenberg *et al.*, 2006). Such actions may include sharing (e.g., food, toys), helping, giving and being considerate of others' feelings (see Bierhoff, 2002). In particular, this study extends our previous findings that focused on ethnic group differences in children's adjustment between the Former Soviet Union (FSU) children living in Israel and their indigenous-Israeli peers (Atzaba-Poria, 2010), aiming to uncover the risk process underlying this group difference. It should be noted that FSU families living in Israel are immigrant families who also comprise an ethnic minority group within Israel. Thus, this group is studied while referring to explanations related to its minority status as well as the acculturation process involved.

The important role of parenting in contributing to children's adjustment in general, and the adjustment of ethnic minority children in particular, are discussed in the following focused review. Furthermore, a mediation model is presented.

Ethnicity and Adjustment

Previous research on the adjustment of children from ethnic minorities has mainly focused on negative behaviour, such as behavioural problems as indicators of adjustment difficulties (e.g., Pachter *et al.*, 2006; Reijneveld *et al.*, 2005). However, whereas externalizing behavioural problems are significant predictors of negative outcomes such as physical violence, delinquency and substance abuse (Broidy *et al.*, 2003; Timmermans *et al.*, 2008), positive behaviours, such as prosocial behaviour, were found to predict essential aspects of adjustment, such as academic achievement (Chen *et al.*, 2002), social skills (Crick, 1996; Eisenberg *et al.*, 1996) and peer preference (Caprara *et al.*, 2000). These results highlight the importance of assessing positive, as well as negative aspects of development when examining children's adjustment.

Research exploring the adjustment of children from ethnic minorities has yielded inconsistent findings. On the one hand, some research suggests that minority children from immigrant families display increased rates of problem behaviour, reflecting the challenges involved in negotiating living in two cultures. For example, a study conducted in Britain found that Indian children exhibited

more behaviour problems than their English peers (Atzaba-Poria, Pike & Barret, 2004). Similarly, Reijneveld *et al.* (2005) found higher rates of behaviour problems in immigrant children compared with indigenous Dutch children in the Netherlands. Further supporting this claim, several studies focusing on the FSU adolescent immigrants in Israel found that new immigrants exhibited more psychological symptomatology, social isolation, school difficulties and substance abuse (Isralowitz & Reznik, 2007; Mirsky, 1997; Walsh *et al.*, 2010) compared with their indigenous-Israeli peers. On the other hand, some research indicated that, perhaps counterintuitively, ethnic minority children are in fact better adjusted than their majority peers (*the immigrant paradox*; Garcia Coll, 2005). For example, Berry and colleagues studied the adaptation of ethnic minority youth (aged 13–18) in 13 different countries of settlement (the International Comparative Study of Ethno cultural Youth; Berry *et al.*, 2006). Their results were remarkably consistent: the minority adolescents' overall psychological adjustment (e.g., mental health and self-esteem) was more favourable than that of their majority group counterparts. An additional study using data from Sweden, Finland, Norway, Portugal and the Netherlands partially supported the immigrant paradox. Researchers found that the sociocultural adaptation (i.e. school adjustment), but not psychological adaptation (i.e. self-esteem) of ethnic minority children from immigrant families, was better than their peers (Sam *et al.*, 2008). Lastly, much less is known about prosocial behaviour. The limited studies available indicated similar levels of prosocial behaviour in children from ethnic minority and majority populations within the same country (Sagatun *et al.*, 2008; Yagmurlu & Sanson, 2009).

The inconsistency in findings regarding the adjustment of children from ethnic minorities compounded by the tendency to focus on negative aspects of adjustment underscores the importance of investigating positive aspects of adjustment in different ethnic minority groups.

The Former Soviet Union and the Indigenous-Israeli Cultures

Following the collapse of the Soviet Union in 1990, many FSU families immigrated to Israel, resulting in more than one million people and 200 000 second-generation children living in Israel. Even though the decade preceding the FSU's dissolution was characterized by dramatic social changes, immigrant parents were predominantly raised according to the traditional Soviet pedagogy child-rearing practices, characterized by an expectation for obedience and conformity (Shor, 1999). FSU parents living in Israel were found to be more demanding, monitoring and less indulging than non-immigrant Israeli parents (Knafo & Schwartz, 2003; Zaslavsky & Moore, 2003). Perhaps, in contrast to the expectation of children's obedience and conforming behaviour, research conducted in the FSU indicated higher levels of externalizing problems among children and adolescents compared with their American (Slobodskaya, 1999), British (Goodman *et al.*, 2005) and Finnish (Kumpulainen *et al.*, 1999) counterparts. Research conducted in the FSU also found that corporal punishment was a pervasive method of discipline among this population (Berrien *et al.*, 1995; Shor, 2006). Indeed, using vignettes and hypothetical open-ended questions, Shor (1999) discovered that recent FSU immigrants to Israel reported perceiving corporal punishment as an acceptable parenting method. However, to the best of our knowledge, no study has investigated whether and to what extent physical punishment is being practiced by FSU parents in their new environment.

Notwithstanding the importance of cultural values in accounting for potential differences in children's development and adjustment, research also suggests that

ethnic minority parents are able to determine the extent to which the original cultural identity and characteristics are maintained, as well as the extent of involvement and adaptation in the host cultural group (Berry, 1994, 1997). This research alludes to the active role that parents, as primary socialization agents, play in shaping their children's development.

The role of parental practices in accounting for ethnic differences in children's adjustment has been previously found (e.g., Atzaba-Poria & Pike, 2005). That is, the ethnic minority group children appeared to exhibit more problem behaviours than the majority group children, because of less positive behaviours exhibited by their parents (Atzaba-Poria & Pike, 2005). Taken together, these findings suggest that in addition to the personal differences seen in parental discipline, parents from different cultures may discipline their children differently, because of their cultural values and attitudes. Eisenberg (1995) also found parenting to mediate the link between culture and prosocial behaviour. She proposed that children's prosocial behaviour develops through guidance and modelling of socialization agents, predominantly parents, who shape children's interpretations of cultural expectations, as well as their internalization of prosocial values. Therefore, parents' culture-based child-rearing values and practices may play a significant role in shaping the development of children's behaviours.

Some 20 years following the massive wave of FSU immigration to Israel, the current study examines differences in child-rearing techniques practiced by Israeli and FSU parents raising their Israeli-born children. As the FSU ethnic minority children come from immigrant families, parents' acculturation processes may play a role in their children's adjustment. Thus, the acculturation process of FSU parents will be taken into account when examining ethnic differences in children's adjustment.

Links Between Corporal Punishment and Children's Adjustment

The relationship between parental discipline practices and children's adjustment is well documented and replicated. Research consistently shows that positive, non-coercive parental discipline is related to more prosocial behaviour among children (Knafo & Plomin, 2006; Krevans & Gibbs, 1996). Conversely, negative and harsh parental discipline has been found to be associated with less prosocial behaviour (Asbury *et al.*, 2003; Knafo & Plomin, 2006) and more externalizing problems (Deater-Deckard *et al.*, 1996; McKee *et al.*, 2007). The associations between corporal punishment and behaviour problems have been documented in different countries (e.g., Lansford *et al.*, 2005). However, research investigating the links between corporal punishment and prosocial behaviour among diverse cultural groups is scarce. One exception is a recent study conducted in Australia, indicating that maternal use of punishment was linked to lower levels of Turkish-Australian children's, but not native Australian children's, prosocial behaviours. However, for native Australian children, it was lack of maternal affection and support that were linked to decreased prosocial behaviours (Yagmurlu & Sanson, 2009). To date, the links between parental behaviour and children's prosocial behaviour have not been examined among FSU parents in Israel.

The Importance of Including Paternal Reports

Parenting literature has primarily relied on maternal reports, providing minimal attention to fathers' unique contributions to the parent-child relationship. However,

as fathers are not simply a replica of mothers in their parenting (Lamb, 2004), the contribution of fathers' harsh discipline to children's adjustment merits more investigation. The few studies addressing this issue offer somewhat mixed results. For example, it was found that both maternal and paternal use of harsh discipline was associated with higher levels of externalizing problems among fifth and sixth graders (McKee *et al.*, 2007). However, a recent study found that maternal, but not paternal, authoritarian style was related to increased externalizing problems among preschoolers (Jewell *et al.*, 2008). The links between paternal versus maternal use of corporal punishment and children's adjustment is further examined in the current study.

The Present Study

In this study, we investigated differences in children's prosocial and externalizing behaviours shown by FSU and indigenous Israeli children. We suggest that parental use of corporal punishment may contribute to an elevated risk for adjustment difficulties in the population of FSU children. Specifically, we hypothesized that (1) FSU mothers and fathers will use more corporal punishment with their children than their indigenous-Israeli counterparts; (2) FSU children will exhibit more externalizing behaviours and less prosocial behaviours than their indigenous-Israeli counterparts; and (3) mediation models will be found such that (a) corporal punishment use will mediate the relation between ethnicity and prosocial behaviours and (b) corporal punishment use will mediate the relation between ethnicity and externalizing behaviours. Although research supporting specific links between these variables exists, this study is unique in its attempt to offer an examination of the process linking ethnicity to children's behaviour in a single, systematic investigation.

METHOD

Eligibility Criteria

Children were eligible to participate in this study if they were 4–6 years old, living at home with both parents and were either indigenous Israelis or second-generation FSU immigrants. Children belonging to the indigenous Israeli group (i.e., the ethnic majority group) were born in Israel and had parents who were Israeli born or who had immigrated to Israel before the age of 3. Additionally, children in the Israeli group were to have no family origins in the FSU. Children belonging to the FSU origin group (i.e., the ethnic minority group) were either born in Israel or born in the FSU but immigrated before the age of 3, and had parents who were born in the FSU. Finally, in order to control for as many confounding variables as possible, all families were recruited from the same preschools. Recruitment was conducted in Beer-Sheva, a midsized city in southern Israel. All preschools were public, expanding the representativeness of the sample.

Sample

The sample consisted of 145 families. Seventy children derived from the indigenous Israeli group (30 boys and 40 girls) and 75 from the FSU origin group (37 boys and 38 girls). Data were available for mothers of all families and for fathers of 109 families. The main reason for lack of participation was long working hours

resulting in difficulties in finding time to take part in the study. Children's ages ranged from 4.0 to 6.5 years ($M = 5.54$, $SD = 0.48$).

Demographic information for both parents, including age, place of birth, years of education and occupation are presented for each ethnic group, separately (see Table 1). The vast majority of the indigenous Israeli parents were born in Israel, whereas all of the FSU origin parents were born in the FSU. In addition, 85% of the FSU origin children were born in Israel and 15% were born in the FSU but immigrated before the age of 3. All parents were married. The sample was diverse in terms of parental education: the majority of the Israeli mothers (77%) and fathers (73%) and about a half of the FSU mothers (49%) and fathers (56%) completed school with either a high school diploma or a high school equivalency diploma. In addition, 51% and 41% of the FSU mothers and fathers, respectively, whereas 19% and 24% of indigenous Israeli mothers and fathers, respectively, were university graduates. These differences were found to be significant suggesting that indigenous Israeli fathers and mothers held lower educational qualifications than their FSU origin counterparts [$t(88) = -2.25$, $p < .05$; $t(101) = -6.60$, $p < .001$, respectively].

Mothers' and fathers' current or most recent occupations were categorized using the Israeli Standard Occupational Classification (Israel Central Bureau of Statistics, 1998). Most of the mothers and fathers had skilled or semi-skilled occupations. A single socioeconomic status (SES) composite was created using mothers' or fathers' highest educational level and highest occupational status. These two variables were moderately correlated ($r = .41$, $p < .001$) and thus were standardized and averaged to create a single SES composite, with higher scores representing higher SES.

Significant differences were found for SES between the indigenous Israeli and the FSU origin families [$t(143) = -3.21$, $p < .01$]. Indigenous Israeli families had significantly lower SES than did the FSU families ($M = -0.24$, $SD = 0.84$; $M = 0.20$, $SD = 0.80$, respectively). For both ethnic groups, family size varied between two and seven people ($M = 4.48$, $SD = 0.95$; $M = 4.09$, $SD = 1.03$, for the indigenous

Table 1. Demographics for the entire sample, and by ethnic group

		Israeli group ($n = 66-70$)		FSU group ($n = 67-75$)	
	Mean (SD)	Mothers	Fathers	Mothers	Fathers
Age (years)		34.46 (4.43)	37.70 (5.45)	33.93 (5.70)	36.73 (6.54)
Place of birth					
Israel		90%	87%	–	–
Former Soviet Union		–	–	100%	100%
Other		10%	13%	–	–
Education					
Less than 8 years of studies		4%	3%	–	3%
8–12 years of studies		57%	44%	13%	23%
Higher non-academic qualification		20%	29%	36%	33%
Undergraduate and/or postgraduate qualification		19%	24%	51%	41%
Job status					
Professional occupations		–	4%	6%	8%
Managerial and technical occupations		8%	–	–	5%
Skilled occupations: manual and non-manual		42%	29%	37%	25%
Partly skilled occupations		48%	55%	48%	55%
Unskilled occupations		2%	12%	9%	7%

Israeli and FSU origin families, respectively). Most indigenous Israeli families had two (43%) or three (41%) children living at home, whereas most FSU origin families had one (36%) or two (52%) children at home. Finally, for both the indigenous Israeli and the FSU origin groups, the target children were primarily eldest (40%, 48%, respectively) or second born (34%, 40%, respectively).

Procedure

In order to protect families' confidentiality, letters were sent via preschools to the children's homes. Teachers were asked to target those children from two-parent families of either indigenous Israeli or FSU origin. As letters were sent home with the children, there was no guarantee that parents received our letters, and thus, it is impossible to estimate refusal rates. Certainly, this volunteer sample represents a minority of eligible families. However, the sample included a wide SES range of families and broad variability on most measures. Interested families were visited at home where parents completed questionnaires.

Measures

Acculturation index

We measured the psychological and behavioural acculturation via maternal and paternal endorsement of FSU traditional cultural beliefs (e.g., cultural identity, use of language, cultural general knowledge, cultural preferences) using the FSU-traditionalism scale, e.g., 'I see myself as a part of the Russian culture' ($\alpha = .86$ for maternal and $\alpha = .90$ for paternal reports) as well as their adaptation to the Israeli cultural beliefs (reversed score, e.g., 'I would rather see my child marry an Israeli than a Russian' ($\alpha = .94$ for maternal and $\alpha = .90$ for paternal reports). This 60-item measure was adapted for the FSU in Israel (adapted from Zea *et al.*, 2003). The items were rated on a four-point Likert-type scale (1 = strongly disagree to 4 = strongly agree). Mother-father agreement was substantial for the FSU traditionalism ($r = .63$) and for the Israeli adaptation ($r = .64$) scales, and thus were averaged to create a single score. This strategy was used in order to increase the reliability and validity of these indices (Epstein, 1984; Rushton *et al.*, 1983). A single acculturation index was created by averaging the two scales (adaptation to the Israeli culture reverse scored). Higher score reflected more FSU-traditional acculturation style.

Child prosocial and externalizing behaviours (the Strengths and Difficulties Questionnaire)

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) is a parental report of children's behaviours for children, 4–10 years. Parents were asked to indicate the degree to which different statements were true about their child's behaviour within the previous 6 months, using a three-point scale ranging from 0 (*not true*) to 2 (*certainly true*). In the current study, parents were asked to complete the prosocial scale (five items: 'Considerate of other people's feelings', 'Shares readily with other children', 'Helpful if someone is hurt', 'Kind to younger children' and 'Often volunteers to help others') and the externalizing behaviour problem cluster (10 items from the conduct problems and hyperactivity scales. e.g., 'Often has temper tantrums or is hot tempered') of the SDQ. The SDQ has been translated and is in use in more than 40 languages, including Hebrew and Russian.

Correlations between mothers' and fathers' reports were calculated for each of the scale indices. Mother-father agreement was substantial for prosocial ($r = .42$)

and for externalizing ($r = .55$) behaviours. On the basis of these inter-reporter correlations, reports from both parents were averaged. This strategy was used in order to increase the reliability and validity of these indices (Rushton *et al.*, 1983).

Internal reliability coefficients were acceptable for indigenous-Israeli ($\alpha = .73$) and FSU ($\alpha = .62$) parental reports of prosocial behaviour and were excellent ($\alpha = .80$) for both indigenous-Israeli and FSU parental reports of externalizing behaviours.

Corporal punishment

Mothers and fathers completed the corporal punishment scale from the short version of the Parenting Behavior Questionnaire (PBQ; Robinson *et al.*, 1995). Both parents rated their own behaviour on a five-point scale ranging from 1 (never) to 5 (always) while thinking about interactions with their target child (four items; e.g., 'Slaps child when the child misbehaves'). Correlations between mothers' and fathers' reports were calculated. Mother-father agreement was substantial ($r = .46$). On the basis of these inter-reporter correlations, reports from both parents were averaged. The PBQ has been previously used in the Russian language (Robinson *et al.*, 1995). Internal reliability coefficients in the current study were good for indigenous-Israeli ($\alpha = .70$) and for FSU ($\alpha = .65$) parents.

The official Hebrew and Russian translations for the SDQ as well as the official Russian translation for the PBQ were obtained. As for the Hebrew translation of the PBQ as well as the Russian translation of the acculturation index, there was no official translation available, and thus, they were translated by two people fluent in both languages. Specifically, a native speaker of Russian translated the PBQ official Russian version into Hebrew, and then, it was back translated by another translator fluent in Hebrew and Russian. The acculturation questionnaire was available in English. Therefore, a native English speaker translated it into Russian, and then, it was back translated into English. All disagreement was discussed until a consensus was reached.

RESULTS

Correlations between SES and maternal and paternal corporal punishment as well as children's adjustment were first calculated. SES was not found to be related to maternal ($r = .08$) nor paternal ($r = .13$) use of corporal punishment nor to children's prosocial ($r = -.11$) or externalizing ($r = -.08$) behaviours. In addition, multiple regression analyses, including ethnicity, SES and the interaction variable of ethnicity by SES, were conducted to examine whether SES interacted with the group effects. All beta coefficients for the interaction variable were insignificant ranging between $\beta = -.02$ to $\beta = .13$.

Next, ethnic group differences were examined for the children's adjustment and parental use of corporal punishment scales. Because of ethnic group differences in SES, as reported in the sample section, all of the analyses were conducted controlling for SES. These analyses revealed significant group differences for prosocial and for externalizing behaviours. As shown in Table 2, FSU origin children had lower levels of prosocial behaviour and higher levels of externalizing problems than their indigenous Israeli peers. In addition, it was found that FSU origin parents reported using significantly higher levels of corporal punishment compared with their indigenous Israeli counterparts (see Table 2).

Ethnicity and Acculturation

We tested whether the ethnic group difference in children's prosocial (FSU < Israeli) and externalizing (FSU > Israeli) behaviours as well as parental use of corporal punishment (FSU > Israeli) could be accounted for by differences in acculturation process. First, we computed bivariate correlations between parental use of corporal punishment and the acculturation composite as well as within the FSU origin subgroup of families. The acculturation composite was significantly associated with children's externalizing behaviours ($r = .21, p < .05$). That is, stronger ties to native culture were associated with higher levels of children's externalizing problems. Children's prosocial behaviour and parental use of corporal punishment were not related to the acculturation index [$r = -.17$ and $r = .15$, not significant (ns), accordingly]. Next, we computed unstandardized residuals for children's externalizing problems (controlling for the acculturation index), and we then compared FSU origin (residuals) and indigenous Israeli (original scores) parents. FSU origin children were higher in externalizing behaviours compared with indigenous Israeli children, even after controlling for acculturation.

A Mediation Model of ethnicity and Adjustment: Model Estimation

In order to determine mediation, we examined two alternative models for *prosocial* and *externalizing* behaviours. Model I specifies that ethnicity has a *direct* influence on children's behaviour. Model II specifies that ethnicity has direct as well as *indirect* effects through maternal and paternal use of corporal punishment on children's behaviour. Pearson correlations were first examined among children's prosocial behaviour, externalizing problems and parental use of corporal punishment. As can be seen in Table 3, in both ethnic groups, parental use of corporal punishment was negatively correlated to children's prosocial behaviour and positively associated with children's externalizing behaviour. In addition, children's prosocial and externalizing behaviours were negatively and highly correlated among

Table 2. Means and (standard deviations) of model variables by ethnic groups

	Israeli ($n = 51-69$)	FSU ($n = 52-75$)
1. Children's prosocial behaviour (maternal report)	8.77** (1.31)	8.05** (1.49)
2. Children's prosocial behaviour (paternal report)	8.43* (1.40)	7.88* (1.54)
3. Children's externalizing behaviour (maternal report)	2.12*** (1.60)	3.15*** (1.71)
4. Children's externalizing behaviour (paternal report)	2.22* (1.57)	2.98* (1.56)
5. Maternal use of corporal punishment	1.53*** (0.43)	1.99*** (0.62)
6. Paternal use of corporal punishment	1.49*** (0.44)	1.88*** (0.55)
1. Children's prosocial behaviour	8.56 (1.36)	7.99 (1.31) $F(1,143) = 5.15^*$
3. Children's externalizing behaviour	2.15 (1.41)	3.20 (1.55) $F(1,143) = 22.40^{***}$
5. Parental use of corporal punishment	1.52 (.35)	1.93 (.49) $F(1,143) = 30.78^{***}$

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3. Correlation matrices of model variables by ethnic group

	1	2	3
1. Children's prosocial behaviour	–	0.06	–0.30**
2. Children's externalizing behaviour	–0.40**	–	0.20*
3. Parental use of corporal punishment	–0.36**	0.30**	–

Figures below the diagonal represent correlations among the indigenous-Israeli group, whereas those above the diagonal represent correlations among the FSU group.

* $p < .05$.

** $p < .01$.

the indigenous-Israeli children, whereas no correlation was revealed between these behaviours among the FSU children (see Table 3).

The group differences as well as the patterns of correlations seen in Table 3 suggest the possibility of the existence of models outlined in the introduction. Analyses were conducted by means of the AMOS 4.01 program (Arbuckle, 1999). Missing data were handled using the Full Information Maximum Likelihood estimate (Anderson, 1957). A good model fit is indicated by a non-significant χ^2 statistic, a Bentler–Bonnet normed fit index (NFI) of 0.9 or above, and root mean square error of approximation (RMSEA) near 0.0 (Hu & Bentler, 1999).

Results will be presented first for the prosocial model followed by the externalizing model. Using Structural Equation Modelling (SEM) analyses, we evaluated the fit of Model I, proposing direct influences of ethnicity on parenting and children's prosocial behaviour, by examining multiple fit indices. This model did not fit the data well, $\chi^2(4, n = 145) = 18.88, p < .01$; NFI = 0.838; RMSEA = 0.146 (see Figure 1a).

Subsequently, we examined Model II, proposing direct as well as indirect influences of ethnicity on prosocial behaviour as well as direct influences of maternal and paternal use of corporal punishment on children's prosocial behaviour. This model fit the data well, $\chi^2(3, n = 145) = 1.44, ns$; NFI = 0.986; RMSEA = 0.000. β coefficients and error estimations are presented in Figure 2b. In this model, the direct link between ethnicity and prosocial behaviour was negligible, and not significant. The link between ethnicity and children's prosocial behaviour was fully mediated by maternal and paternal corporal punishment (see Figure 1b).

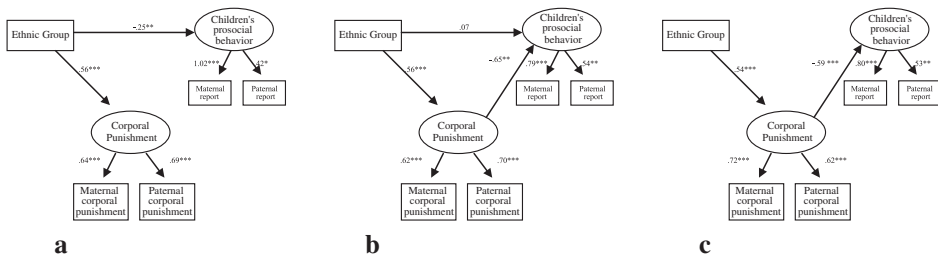


Figure 1. (a) SEM results of Model I: direct influences of ethnicity on maternal and paternal use of corporal punishment and children's prosocial behaviour. (b) SEM results of Model II: direct and indirect influences of ethnicity on maternal and paternal use of corporal punishment and children's prosocial behaviour. (c) SEM results of modified Model II: indirect influences of ethnicity on maternal and paternal use of corporal punishment and children's prosocial behaviour. Note: *, $p < .05$; **, $p < .01$; ***, $p < .001$.

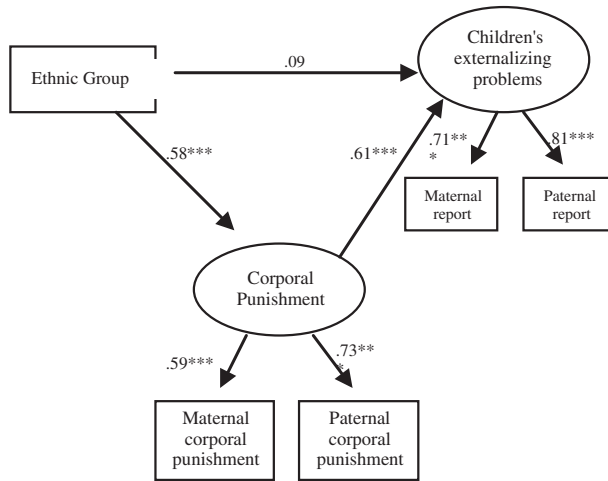


Figure 2. SEM results of Model II: direct and indirect influences of ethnicity on maternal and paternal use of corporal punishment and children's externalizing problems. Note: *, $p < .05$; **, $p < .01$; ***, $p < .001$.

Finally, in a further attempt to improve and have a more parsimonious model, we omitted the insignificant direct link between ethnicity and prosocial behaviour. The examination of fit indices indicated that the modified model fit the data well, $\chi^2(4, n = 145) = 1.63$, ns; NFI = 0.984; RMSEA = 0.000 (see Figure 2).

This modification did not improve model fit [$\chi^2(1, n = 145) = .98$, ns]; however, as it resulted in a more parsimonious model, the modified Model II (Figure 3.) was determined to be the best model, based on fit and parsimony. The final model suggests that FSU origin mothers and fathers used more corporal punishment than their indigenous Israeli counterparts ($\beta = .54$). In turn, maternal and paternal use of corporal punishment was negatively related to children's prosocial behaviour ($\beta = -.59$). The model did not include direct effect for ethnicity.

With respect to the externalizing mediation model, we evaluated the Model I and II fits using SEM analyses. The multiple fit indices indicated that the two models did not fit the data well: Model I, proposing direct influences of ethnicity on parenting and children's externalizing behaviour suggested poor fit, $\chi^2(4, n = 145) = 19.32$, $p < .01$; NFI = .848; RMSEA = .163. Similarly, Model II, proposing both direct and indirect influences of ethnicity on externalizing behaviour as well as direct influences of parental use of corporal punishment on children's externalizing behaviour, indicated a poor fit, $\chi^2(3, n = 145) = 9.96$, $p < .05$; NFI = 0.922; RMSEA = 0.127. Finally, in an attempt to improve the model, we omitted the insignificant direct link between ethnicity and externalizing behaviour. The modified model did not improve the fit, $\chi^2(4, n = 145) = 10.30$, ns; NFI = 0.919; RMSEA = 0.105 (see Figure 2).

DISCUSSION

This study examined a mechanism by which ethnicity (indigenous Israeli versus FSU origin) is related to both positive and negative aspects of children's

adjustment. Specifically, the mediating role of maternal and paternal use of corporal punishment was examined. A different pattern of results was revealed for prosocial and externalizing behaviours, suggesting distinct processes. Discussion of the results, their implications, limitations and recommendations for future research directions follows.

Parental Use of Corporal Punishment

Replicating previous findings, this study found that FSU origin parents employed more physical punishment in their child-rearing practices than their Israeli counterparts. This finding extends previous findings from research conducted with parents living in the FSU (Berrien *et al.*, 1995; Shor, 2006) and among parents from the FSU living in Israel (Shor, 1999), implying that child-rearing ideologies and practices adhered to by parents tend to preserve meaningful elements of the original culture (Frankel & Roer-Bornstein, 1982; Levine, 1988).

Differences in Externalizing and Prosocial Behaviours and the Specific Role of Corporal Punishment

The FSU origin children were found to exhibit elevated levels of externalizing problems compared with Israeli children, supporting previous studies of children from other ethnic minorities (e.g., Atzaba-Poria, *et al.*, 2004). This result replicates previous research conducted in Russia that found higher levels of externalizing problems among children and adolescents compared with their American (Slobodskaya, 1999), British (Goodman *et al.*, 2005) and Finnish (Kumpulainen *et al.*, 1999) counterparts. In addition, results indicated that FSU origin children displayed less prosocial behaviour than Israeli children. However, parental use of corporal punishment was found to fully mediate the link between ethnicity and prosocial behaviour. That is, FSU origin children did not show lower levels of prosocial behaviour simply because they were part of the FSU culture. Rather, parents' use of corporal punishment better accounted for the link between ethnicity and prosocial behaviour. Additionally, the finding that children's prosocial behaviour was not related to parents' acculturation index further supports these results and suggests that the lower levels of prosocial behaviour seen for the FSU children is not a reflection of their parents' ethnicity nor their parents' acculturation process. Rather, the fact that they were physically punished more than indigenous-Israeli children better explained their tendencies for prosocial behaviour.

This mediation model exemplifies the intricate relations between individuals, their immediate environment and the larger context. The FSU culture emphasizes values such as achievement, emotional control, efficiency and organization in their children's development, whereas the Israeli culture emphasizes values such as social competence and autonomy (Rosenthal & Roer-Strier, 2001). As a result, there may be widespread legitimacy for the use of corporal punishment toward children among parents in the FSU (Berrien *et al.*, 1995; Shor, 2006). Our findings demonstrate a process by which belonging to a culturally different ethnic minority may be related to parental use of harsh discipline, which in turn is associated with children's prosocial behaviour. That is, it appears that parents discipline their children according to their cultural norms. This, in turn, is related to children's adjustment. These results are in line with extensive research highlighting the central role that parenting behaviour has on children's adjustment in general (Hoghughli & Long, 2004), and in particular, the salient role parental corporal

punishment use plays in children's moral development (see Gershoff, 2002) and subsequent prosocial behaviour (Knafo & Plomin, 2006).

As for externalizing problems, a different pattern of results than expected was seen when examining the mediation model. Parental use of corporal punishment was *not* found to mediate the link between ethnicity and externalizing behaviour. That is, the elevated levels of externalizing problems exhibited by the FSU children cannot be explained by their harsher parental behaviour.

Why did parental corporal punishment mediate the link between ethnicity and children's prosocial behaviour but not between ethnicity and externalizing behaviours?

In order to answer this question, it is worth considering the differences between these behaviour constructs. Whereas externalizing behaviours are mostly behaviours that concern the child and his efforts to address his individual needs (e.g., restless, easily distracted, has temper tantrum, lies often), prosocial behaviours reflect those behaviours intended to consider and benefit others and their feelings (Eisenberg *et al.*, 2006). Hoffman (1994) suggested that because of their nature, the internalization of prosocial behaviours is particularly at risk when parents use harsh discipline. That is, focusing on personal consequences (e.g., punishment) and not on the effects of their actions on others prevents children's ability to feel empathic and display prosocial behaviour. Supporting this claim, Lopez *et al.* (2001) showed that corporal punishment use significantly predicted lower levels of empathy in a retrospective study of college students. Our results expand this concept by showing how this link is related to cultural variance in children's prosocial behaviour.

As for children's externalizing problems, positive associations were found between parental use of corporal punishment and children's display of externalizing behaviour, indicating that the link between corporal punishment and children's externalizing problems can be generalized to the FSU families living in Israel. However, no indication for a mediation model was found. A possible explanation is that there are other mediators involved. For example, in another ethnic adjustment study, social support was found to act as a mediator explaining the ethnic differences in children's behavioural problems. Furthermore, social support has been found to act as a stronger predictor of children's behavioural problems than was parenting (Atzaba-Poria & Pike, 2005). More research is needed before a clear conclusion may be drawn regarding the differences seen in externalizing problems between children from the two ethnic groups.

The Important Role of Acculturation in Children's Behaviour

Interestingly, the significant associations found between externalizing behaviours and the acculturation index suggest that stronger ties to the FSU culture and weaker ties to the Israeli culture were associated with higher levels of children's externalizing problems. This finding may suggest that possessing strong ties to the majority culture buffers against acting-out behaviour. In studying the links between acculturation and psychosocial behaviour in a sample of Hispanic adolescents in the United States, Schwartz *et al.* (2007) found that orientation toward US cultural practices was associated with diminished externalizing behaviour problems, through acculturative stress and self-esteem. This examination may suggest that FSU children, whose parents are less integrated in the Israeli culture, may experience more adjustment difficulties being exposed to socialization agents from the new culture while still being raised by parents from

a different culture (Davies & McKelvey, 1998; Ogbu, 1988). This difficulty seems to be reflected in their elevated levels of externalizing problems.

Finally, our results, encompassed in a singular model, indicate that mothers and fathers act similarly in their use of corporal punishment. Moreover, both *maternal* and *paternal* use of corporal punishment was found to mediate the link between child's ethnicity and prosocial behaviour in a similar manner. The similar mediation processes seen for mothers and fathers suggest that results can be generalized to both parents within the two ethnic groups.

Limitations and Future Directions

The study had several limitations. First, the research was cross-sectional; thus, causality claims cannot be made, and the mediation model should be interpreted with caution. Second, although both fathers and mothers reported on their children's adjustment, the study relied solely on parental reports in assessing children's behaviour. A multisource approach to data collection would have strengthened the validity of our study. Third, replication of this study in different developmental periods would be necessary in order to understand change and continuity of the role of corporal punishment as a risk factor for lower levels of prosocial behaviour, especially as the role of parents as primary socializing agents tends to diminish as children age. Fourth, the current study focused on one concept of prosocial behaviour. Future study examining different aspects of prosocial behaviour (e.g., requested, altruistic and non-altruistic; Persson, 2005) may further contribute to the understanding of ethnic variation in children's positive adjustment. In addition, the current study examined two specific ethnic majority and minority groups in Israel: indigenous-Israeli and FSU children. Berry (1997) and others have suggested that adjustment models may be distinct for different minority groups. Therefore, a replication of this study with other ethnic majority and minority groups is necessary. Such a replication would indicate whether these results are unique to the groups examined in this paper or, rather, can be extended to other ethnic groups. Furthermore, such replication may clarify whether these results are a better reflection of the minority status or the immigration process. Finally, the role of social support as another important mediator should be further explored.

To summarize, our findings highlight the importance of assessing both positive and negative aspects of children's adjustment as well as exploring the processes involved in ethnic variation. Different processes were identified for prosocial and externalizing behaviours highlighting the differences in those behaviours. The fact that FSU origin children exhibited lower levels of prosocial behaviours, taken alone, does not provide useful information for prevention or intervention nor does it offer a satisfactory explanation for research purposes. However, the identification of other contextual processes underlying this link enables better understanding of the reality that children from ethnic minority groups experience and may provide useful knowledge for researchers and clinicians alike.

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