

Teacher ratings of academic achievement of children between 6 and 12 years old from intact and non-intact families

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We investigated teacher ratings of the impact of parental divorce on academic achievement of children between 6 and 12 years old up to 12 months after their parents divorced. A purposive sample of 120 children attending four different primary schools in a small South African town took part in the study. One third (n = 40) of the children had experienced parental divorce (male = 14, female = 26) while two thirds had not. Teachers rated participating children in their class on academic performance on the Conners rating scale ranging from 0 to 3. In addition, teachers obtained the average term score of each of the participating children in key academic areas, which were converted to the Conners scale for classification. Chi square tests were used to analyse the data. Results showed that the academic performance of children from non intact families within the age range of 6 – 9 was inferior to that of their counterparts from intact families suggesting that the experience of parental divorce had a negative impact on children's academic achievement. It is recommended that future research compare teacher ratings with children's ratings on standardised tests.

Keywords: academic achievement; children; divorce; intact and non intact families; parent; parental divorce; self concept; self fulfilling prophecy; teacher ratings

Introduction

Divorce is the choice that two people make not to live together as husband and wife (Engelbrecht & Renchen Wentzel (1999). In the past, divorce was unheard of in many African countries as it was not sanctioned by cultural norms (Dlamini, 1997). However, Luttig (1997) observed that as from the beginning of the 20th century divorce has become a common phenomenon in many countries in the world, including South Africa. As noted by Delport (1997), in South Africa spouses are now allowed to terminate their marriages virtually at will. Although recently courts are trying their best to make divorce difficult, they cannot go against the will of spouses. A consequence of divorce on children is that the children may experience stress from the process and after effects of divorce. Sometimes, single parent families struggle to survive making their involvement in the schooling of their children not always possible (Pillay & Wasiekewski, 2007). Tengove (1997) observed that 40,000 children are victims of parental divorce annually and went on to predict that up to a third of all children born in wedlock risk experiencing parental divorce before the age of 18. Inevitably, the family structure in South Africa is transformed by the increasing divorce rate. Non intact family structures such as single parent families, stepfather families, grandmother families and families in which parents are merely cohabiting are a common sight.

Influence of family structure on child wellbeing

Parents have been identified as major role players in their children's learning and development (Pillay & Wasiekewski, 2007). In the developed countries, the emergence of diverse family structures especially during the 1960s and 1970s prompted social scientists to investigate how the dif

fering family structures affect children. Consequently, there is mounting evidence from studies on children growing up in non intact family structures suggesting that divorce has negative effects on child development (Mudie, 1987; Clapp, 1988; Amato & Keith, 1991; Morrison & Cherlin, 1995; Entwisle & Alexander, 1996; Hines, 1997; Jerkins & Guidubaldi, 1997; Swart, 1997; Battle, 1998; Hanson, 1999; Miller *et al.*, 1999; Martinot & Montei, 2000). The effect of growing up in non intact family structures on academic achievement has been documented by several studies. For example, Manskie *et al.* (1992) note that non intact family structures constrain preschoolers' academic development by not stimulating the development of relevant school entry cognitive and social behaviours. This finding is elaborated by Amato (2001) who notes that on average, preschool children in intact families are 12% more likely to be read to, every day, 6% more likely to be told stories at least three times per week, 13% more likely to visit a library at least once a month. Such differences in grooming for schooling could possibly be an explanation for Entwisle and Alexander's (1995) finding that there was a strong link between two parent families and higher achievement scores in first grade. This has been recently confirmed by Chen (2008) who notes that children with supportive parents are more resilient, engage positively in schoolwork and encounter fewer problems. Greater participation in community activity settings including schooling is related to more child developmental progress and behavioural competence (Trivette, Dunst & Hamby, 2004). Similarly, Amato (2001) notes that achievement, from the primary grades through high school, can be hindered by growing up in non intact family homes.

Studies on the effect of father absence on children's academic achievements made two important revelations. The first one is that father absence resulted in child repeating a grade (Entwisle & Alexander, 1996; Battle, 1998; Martinot & Montei, 2000). The second one is that boys without fathers performed poorly in school (Abbott, Meredith, Self Kelly & Davis, 1997). This is in contrast with Miller *et al.*, (1999)'s observation that girls from non intact family structures performed better than boys from similar family backgrounds. Mudie (1987) investigates age differences in the experience of divorce and found that younger children were more affected by parental divorce than older ones. This finding is corroborated by Kaplan and Sadock (1998) whose study noted that school performance declined if divorce occurred between ages of 7 and 12.

The differences in the academic achievement of children from intact and non intact families were also highlighted in reading and maths. For example, the US Department of Education (1996) on reading literacy indicated that fourth grade children in intact families scored higher on reading comprehension than children living non intact families. According to this report, the performance of fourth graders in single parent families was equal or above the level of those in two parent biological families if economic resources were equal. Studies by Pong (1997) and Pong, Dronkers, and Hampden Thompson (2003) note with respect to achievement in mathematics, that non intact family structure had a negative and significant effect at both the individual and school level. Reading results were slightly different; family structure at the individual level was not significant, but it was significant at the school level. However, income or other family resources did not appear to explain the lower outcomes of children from other types of non intact families. Single parenthood was associated with a lower academic performance on both math and science tests. However, recent studies employing complicated research and data analysis strategies dispute the causal link between the family structure and children's academic achievement (e.g. Ginther & Pollack, 2003; Picketty, 2003; Björklund, Ginther & Sundström, 2004). The current argument is that lone parenthood may be correlated with other socioeconomic disadvantages, and so inferior academic outcomes may arise from (potentially unobserved) factors other than a parent's absence.

Influences of divorce status on teacher perceptions

The findings suggesting that children from intact families perform better than their counterparts from non intact families are currently being disputed as they are based on flawed teacher perceptions. Teacher perceptions have been shown to have a lifelong effect on student performance. The self fulfilling prophecy of teacher expectations has a direct effect on student performance. For instance, student performance will rise to the level of expectation or fall to one that is lower than their po

tential (Oyserman, Gant & Ager, 1995).

Studies have demonstrated that powerful stereotypes exist among educators and practitioners regarding the academic goals, work habits, and abilities of children from different backgrounds (Oyserman, Gant & Ager, 1995). Teacher expectations operate both through their provision of differential opportunity to children they perceive as being low versus high achieving by influencing children's perceptions of themselves as capable learners. Several studies have found that high achievers are exposed to more challenging and more difficult material and are given more opportunities for learning and development (Jussim & Harber, 2005). Children who have more supportive teacher relations are more engaged in school, work harder, persevere more, participate more in class and are more attentive than their counterparts (Little & Kobak, 2003).

Furthermore, research by psychologists and marriage and family therapists indicates that individual cultural biases about children of divorce inadvertently may be causing a self fulfilling prophecy for these children (Atwood, Schuster & Tempestini, 1994). Similarly, research on self fulfilling prophecy suggests that even professional people can not overcome their perceptions (Baras, 2009). As might be expected, these professionals often are influenced by their own internalised socially created belief systems.

Traditionally, divorce has been viewed as negative, an aberration from the "normal" two parent structure (Atwood *et al.*, 1994). This is perhaps the single most important factor contributing to the discrepancies of the early studies proving that family divorce causes lower grades and poor school behaviour. Researchers now recognise these findings only told part of the story. However, this partial information may have caused many educators to inaccurately predict lower grades and poorer behaviour of these children, and in so doing created a self fulfilling prophecy (Atwood *et al.*, 1994).

The flaw in many of the landmark early studies is that they relied on the ratings of teachers to compare children from one parent families with those from two parent families. The perceptions that teachers hold, both negative and positive, may affect a child's self concept and perception of his/her own academic ability (Jussim, 1989). This finding on the literature is problematic for self concept formation in children; labelled children may internalise self fulfilling prophecy (Feldman & Theiss, 1982). It can be hypothesised that in response to their teachers' expectations, children develop a false belief in their abilities and perform the standard set by the teachers, rather than performing to their actual abilities (Rosenthal & Jacobson, 1968). Further, many of the data were drawn from clinical populations of children already identified as experiencing difficulties in adjusting (Atwood *et al.*, 1994). Studies where teachers were asked to rate the identical behaviours of fictitious children from single parent families, remarried families and intact families; teachers consistently gave low ratings for identified behaviours to the children from non traditional families. Teachers' opinions of children at the very onset of their education may predict children's success. They may give extra attention and motivation to the children they expect to become the most accomplished, conversely they may fail to support children they expect to fail (Dickinson, 2001). These differential evaluation contingencies may lead lows to believe less strongly than highs that effort will influence academic outcomes (Cooper, 1979). The erroneous premise has created conditions for lower teacher based academic ratings (Atwood *et al.*, 1994). New research on the outcomes of divorce for children seems to indicate that conflict between parents has a far greater impact on school behaviour, grades, and self concept irrespective of parental divorce (Atwood *et al.*, 1994).

The latest, most methodologically sound studies on the effects of divorce on children demonstrate that many children emerge from the period of transition following divorce psychologically healthy and perhaps even stronger, more independent and resilient for having successfully mastered the challenges associated with divorce (Atwood *et al.*, 1994).

Rationale of the study

The literature reviewed for this study show that most past researchers used archival data to investigate the relationship between family structure and children's academic achievement. In some

cases complicated research designs employing complex and robust data analysis strategies have been used to investigate the relationship between family structure and children's academic achievement. The present researchers enter this interesting area of investigation from the South African context by finding out from teachers whether they see any discrepancy in the academic performance of children from intact and non intact families.

Problem statement

In the South African context, family bonds and relationships are broken on a daily basis due to the fast increasing rate of divorce, which also brings about drastic changes in the family structure. Many families in various parts of the country are headed by single parents, most of whom are women, i.e. single mothers, as a result of the divorce of the parents. No study to our knowledge has ever requested teachers to directly rate and report the overall academic performance of six to twelve year old children from intact and non intact family structures. Thus, we wondered whether children growing up in intact and non intact family structures would demonstrate significantly different achievement profiles as rated by their classroom teachers. The rationale for trusting teachers to rate children's academic achievement is based on our appreciation of their knowledge of children and special training in evaluation of children's achievements.

Purpose of study

Our purpose in the present study was to assess the impact of parental divorce on children by comparing overall teacher ratings of academic achievement of children from intact and non intact families in their classrooms.

Hypotheses

The following hypotheses were formulated for the study:

1. There is no significant difference in academic performance between children from intact and non intact families aged 6-9 years old and 10-12 years old.
2. There is no significant difference in academic performance between children from intact and non intact families by sex.

Method

Participants

Participants were 120 primary school children from intact and non intact families studying at four randomly selected schools from a small South African town. Participants from intact families were 40 children: 10 six to nine year olds; 30 ten to twelve year olds; 14 were male and 26 were female; 23 were in Grade 1-4 while 17 were in Grade 5-7. Participants from non intact families were 80 children: 20 six to nine year olds; 60 ten to twelve year olds; 40 were male and another 40 were female; 46 were in Grade 1-4 while 34 were in Grade 5-7. No participant was dropped from the study and all participants had never participated in a similar project before.

Instrument

The study employed the Conners Teacher Rating Scale (CTRS) and end of term mathematics and language results. The three items on the CTRS evaluate performance in spelling, reading and mathematics. Items on the CTRS are indexed on a scale of 0 (not at all) to 3 (frequently). It has the test retest reliability of .85 to .87. (Conners, 1998; Casat *et al.*, 1999). The teachers calculated the average term performance scores for mathematics and languages. The scores of 0 to 100 were categorised as 0-25 (0 rating), 26-49 (1 rating), 50-75 (2 rating) and 76-100 (3 rating) for complementing with CTRS.

Procedure

Permission for the study was granted by the Department of Education and principals of participating schools. Each child from non intact families in the study was matched with two of their classmates of both sexes, born closest in time, and living with both biological parents and also sitting closest in the classroom. Participating teachers indicated their consent by way of signing a consent form that was given to them prior to their inclusion in the study. The researchers assured participating teachers of the confidentiality of their responses. School records were used to obtain information on children's family structure, age, sex and end of term results. Children's academic performance was also rated by participating teachers based on three items (items 29, 34, and 41) on the CTRS.

Data analysis

The Chi square test was carried out to test for differences between teachers' overall rating scores for children from intact and non intact families. Chi square was considered to be the appropriate statistical test because the study data was nominal.

Results

The difference in proportion of teacher overall rating scores of academic performance of children from intact and non intact families aged 6 to 9 years old, summarised in Table 1, shows a relationship ($\chi^2 = 4.109$, 1 df, $p = 0.042$). This means that the academic performance of children from non intact families within this age range is affected by the experience of parental divorce. Furthermore, results show a difference in proportion of teacher overall rating scores of academic performance of male and female children from intact and non intact families ($\chi^2 = 6.048$, 1 df, $p = 0.014$). This suggests that the academic performance of female children from non intact families is affected by the experience of divorce.

Table 1. Academic performance by age and sex ($n = 120$)

Status of parents	Variable	Academic performance		df	χ^2	p	Sig. level (0.05)	
		Below average	Average and above					
Non intact	Age	6-9 yrs	6	4	1	4.109	0.042	S
Intact			6	19				
Non intact	Age	10-12 yrs	11	19	1	1.325	0.25	NS
Intact			15	45				
Non intact	Sex	M	7	7	1	2.363	0.124	NS
Intact			11	29				
Non intact	Sex	F	10	16	1	6.048	0.014	S
Intact			5	35				

Discussion

The findings showed significant difference between teacher ratings of academic achievement of 6-9 year old children from intact and non intact families. Teacher ratings of academic achievement of children within the 10-12 year age range were not significantly different. The results suggest that only children who were within the 6-9 year age range were negatively affected by parental divorce. The findings are in line with those of Mudie (1987) and Kaplan & Sadock (1998) who noted that younger children were more affected by parental divorce than older ones. The negative effect of divorce on these children is characterised by a general decline in school performance.

The finding that there were no significant differences in the teachers' ratings of 10-12 year old

children from intact and non intact families is not surprising. Earlier studies reviewed by Wadsby and Svedin (1996) suggest that age plays an important role in children's ability to cope with stressful situations. This is probably because at certain ages children are able to reason about their circumstances and make bold decisions to resolve their challenges. In fact, past research referred to by Wadsby and Svedin (1996) indicates that children of the average age of ten years or who are in third grade through to sixth grade are capable enough to adjust satisfactorily to divorce. Instead of focusing on the stresses of divorce, these children shift their focus to their abilities and academic aspirations.

There were also indications of sex differences in academic performance of male and female children from intact and non intact families as rated by teachers. The academic performance of boys from non intact families was rated as better than that of girls from similar family backgrounds which apparently, is inconsistent with past findings (e.g. Entwisle & Alexander, 1996; Abbott, Meredith, Self Kelly & Davis, 1997; Battle, 1998; Miller *et al.*, 1999) suggesting that boys from non intact families performed less well academically than girls from similar backgrounds. The reason given for girls to perform better than boys is that they adjust better at home where the mother is usually the head of family (Mudie, 1987). Poor performance of boys is explained by their problems with the mother which spill over to school where they are characterised by conduct problems. The current finding is not surprising in view of Wadsby and Svedin (1996)'s warning that reports of negative divorce related impact on academic achievement of children are not consistent or conclusive. However, in line with the above finding, the latest, most methodologically sound studies on the effects of divorce for children demonstrate that many children emerge from the period of transition following divorce psychologically healthy and perhaps even stronger, more independent and resilient for having successfully mastered the challenges associated with divorce (Atwood *et al.*, 1994). In African settings, there could be other factors which encourage boys to adjust better than girls to divorce. For example, in African communities boy children are valued more than girl children. In the absence of the biological fathers, boys are regarded as family heads. This role makes them want to work hard for the family. Acquiring a good education could be a beginning point for working hard for the family. The other factor could be that African families are collective in nature. Although the biological father may be absent other father figures in form of uncles, grandfathers, etc. can easily assume the roles which used to be performed by the absent father. In fact, African communities view child rearing as a collective activity.

Conclusion

In line with earlier studies on the effects of family structure on children's academic achievement, our study found age to be an important mediating factor. As expected, younger children were more affected by the experience of divorce than older children. In this study "younger" referred to children in the 6-9 year age range and "older" referred to children in the 10-12 year age range. The hypothesis that children from intact and non intact families would reflect equal academic achievement as rated by teachers was refuted. While the study revealed sex differences in the experience of parental divorce, unlike previous studies, girl children demonstrated poorer academic achievement ratings than boy children. The fact that the previous studies were conducted in individualistic cultural environments, quite different from the collectivistic cultural setting where the current study was conducted was given as an explanation for the discrepancy in findings on sex differences. All the same, the hypothesis that male and female children from intact and non intact families would show equal academic performance was not confirmed. Overall, our findings suggest that the impact of parental divorce is much less adverse than is suggested by earlier studies. The findings of this study suggest that the self fulfilling prophecy did not influence teachers' ratings of children's academic performance in the rated areas. It is recommended that future research compare teacher ratings with children's ratings on standardised tests.

Limitations

There are several methodological limitations to the current study. When assessing children's achievement, teachers may have taken variables other than academic achievement into consideration such as work ethic, behaviour problems, and attention during class, which may have influenced the results. Additionally, teachers' ratings were norm referenced rather than criterion referenced. Only three items on the CTRS were used to rate children's academic achievement, therefore the findings of this study may not be a true reflection of the children's performance. The study did not consider the characteristics of teachers (e.g. experience, training) and their prior knowledge of children's family status.

Future studies

Future research in this area should address a number of methodological issues as well as replicate and extend the current study. To begin with, teachers' reports of how well they know the children should be measured with a greater range of values. In addition, teacher experience should be measured. Also, when teachers are asked to assess a child's achievement relative to other children in the class, they should be asked to rate only the child's academic abilities, and not to incorporate any other behaviours, such attention and work ethic, into the ratings.

References

- Abbott DA, Meredith WH, Self Kelly R & Davis ME 1997. The influence of a big brothers program on the adjustment of boys in single parent families. *The Journal of Psychology*, 13:143 156.
- Amato PR 2001. Children of divorce in the 1990s: An update of the Amato and Keith (1991) meta analysis. *Journal of Family Psychology*, 15:355 370.
- Amato P & Keith B 1991. Parental divorce and the well being of children: a meta analysis. *Journal of Marriage and the Family*, 53:43 58.
- Atwood JD, Schuster D & Tempestini M 1994. *Dealing with 'broken' homes*. Retrieved from http://findarticles.com/p/articles/mi_m0JSD/is_4_51/ai_77195883/pg_2/?tag_content;coll
- Baras R 2009. Teens don't stand a chance against self fulfilling prophecy. Retrieved from http://EzineArticles.com/?expert_Ronit_Baras
- Battle JJ 1998. What beats having two parents? Educational outcomes for African American students in single versus dual parent families. *Journal of Black Studies*, 28:783.
- Bjorklund A, Ginther D & Sundstrom M 2004. Family structure and child outcomes in the United States and Sweden. *IZA Discussion Paper No. 1259*.
- Casat CD, Norton HJ & Boyle Whitesel M 1999. Identification of elementary school children at risk for disruptive behavioral disturbance: validation of a combined screening method. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38:1246 1253.
- Chen CP 2008. Career guidance for at risk students via social learning. *Perspectives in Education*, 26:6 16.
- Clapp G 1988. *Child study research: current perspectives and applications*. Canada: Lexington books.
- Conners CK 1998. Revision and restandardization of the Conners Teacher Rating Scale: factor structure, reliability, and criterion validity. *Journal of Abnormal Child Psychology*, 40:1 20.
- Cooper HM 1979. Pygmalion grows up: A model for teacher expectation communication and performance influence. *Review of Educational Research*, 49:389 410.
- Delport JT 1997. *Social change and legal development. Marriage & family life in South Africa: Research priorities. The Family and the law*. Pretoria: HSRC Publishers.
- Dickinson DK 2001. *Teacher rating of oral language and literacy (TROLL): a research based tool*. University of Massachusetts: Allyssa McCabe.
- Dlamini CRM 1997. *The need for research in social sciences for family law in respect of blacks. Marriage & family life in South Africa: Research priorities. The family and the law*. Pretoria: HSRC Publishers.
- Engelbrecht R & Rencken Wentzel, A 1999. *Divorce: a South African guide*. South Africa: Zebra press.
- Entwisle D & Alexander K 1995. A parent's economic shadow: Family structure versus family resources as influences on early school achievement. *Journal of Marriage and the Family*, 57:399 409.

- Entwisle D & Alexander K 1996. Family type and children's growth in reading and math over the primary grades. *Journal of Marriage and the Family*, 58:341 355.
- Feldman RS & Theiss AJ 1982. The teacher and student as pygmalsions: Joint effects of teacher and student expectations. *Journal of Educational Psychology*, 74:217 223.
- Ginther DK & Pollak RA 2003. "Does Family Structure Affect Children's Educational Outcomes?" *NBER Working Paper 9628*.
- Hanson TL 1999. Does parental conflict explain why divorce is negatively associated with child welfare? *Social Forces*, 77:1283 1315.
- Hines A 1997. Divorce related transitions, adolescent development, and the role of the parent child relationship: A review of the literature. *Journal of Marriage and the Family*, 59:375 388.
- Jerkins JE & Guidubaldi J 1997. The nature nurture controversy revisited: divorce and gender as factors in children's racial group differences. *Child Study Journal*, 27:145 160.
- Jussim L 1989. Teacher expectations: Self fulfilling prophecies, perceptual biases and accuracy. *Journal of Personality and Social Psychology*, 57:469 480.
- Jussim L & Huber KD 2005. Teacher expectations and self fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review*, 9:131 155.
- Kaplan HI & Sadock BJ 1998. *Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry*, 8th edn. New York: Lippicott Williams & Wilkins.
- Luttig EM 1997. *The psychosocial implications of divorce and remarriage. Marriage & family life in South Africa: Research priorities. The family and divorce*. Pretoria: HSRC Publishers.
- Manski C, Sandefur G, McLanahan S & Powers D 1992. Alternative estimates of the effect of family structure during adolescence on high school graduation. *Journal of the American Statistical Association*, 87:25 37.
- Martinot D & Monteil J 2000. Use of the self concept in forming preferences by students of different levels of academic achievement. *The Journal of Social Psychology*, 140:119 131.
- Miller PA, Ryan P & Morrison W 1999. Practical strategies for helping children of divorce in today's classroom. *Childhood Education*, 75:285 289.
- Morrison DR & Cherlin AJ 1995. The divorce process and young children's well being: a prospective analysis. *Journal of Marriage and the Family*, 57:800 812.
- Mudie G 1987. *A family and developmental model of custody and access determination in divorce*. UCT.
- Oyserman D, Gant L & Ager J 1995. A socially contextualised model of African American identity: Possible selves and school persistence. *Journal of Personality and Social Psychology*, 69:1261 1232.
- Piketty T 2003. The impact of divorce on school performance: evidence from France, 1968 2002. *CEPR Discussion Paper Series No. 4146*.
- Pillay J & Wasielewski T 2007. The utilisation of psychological support services in primary schools in Gauteng. *Perspectives in Education*, 25:63 75.
- Pong S 1997. Family structure, school context, and eighth grade math and reading achievement. *Sociology of Education*, 71:23 42.
- Pong S, Dronkers J & Hampden Thompson G 2003. Family policies and children's school achievement in single versus two parent families. *Journal of Marriage and the Family*, 65:681 699.
- Rosenthal R & Jacobson L 1968. *Pygmalion in the classroom*. New York: Holt, Reinhart and Winston.
- Swart HJ 1997. *Divorce its impact on the child. Marriage & family life in South Africa: Research priorities. The family and divorce*. Pretoria: HSRC Publishers.
- Trengove JJ 1997. *The need for social scientific research for legal practice. Marriage & family life in South Africa: Research priorities. The family and the law*. Pretoria: HSRC Publishers.
- Trivette CM, Dunst C & Hamby D 2004. Sources of variation and consequences of everyday activity settings on child and parent functioning. *Perspectives in Education*, 22:17 33.
- US Department of Education, National Center for Education Statistics 1996. *Reading literacy in the United States: Findings from the IEA reading literacy study*. Washington, DC.
- Wadsby M & Svedin CG 1996. Academic achievement in children of divorce. *Journal of School Psychology*, 34:325 336.