

Sex or gender identity? Understanding children's reading choices and motivation

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The extent to which children's reading choices could be predicted by their motivation and gender identity was examined. Two hundred and twenty-three children (average age 9 years 11 months) completed questionnaires measuring book reading choices, reading motivation, gender identity (identification with masculine and feminine traits) and a standardised reading assessment. Sex differences were found in children's reading motivation and reading choices. In addition, feminine traits were more closely associated with reading motivation and engagement with neutral books compared to masculine traits. Whilst children's sex predicted their choice of reading male- or female-orientated books, the extent to which they identified with feminine traits was a better predictor in choice of neutral books. Results are discussed in relation to previous research examining sex differences in children's reading choices. In addition, implications for reading activities and choice of books available at school are discussed.

Introduction

Children's exposure to print and the extent to which they engage in reading activities have been found to contribute to their reading skill and reading development (Anderson, Wilson & Fielding, 1988; Cipielewski & Stanovich, 1992; Cunningham & Stanovich, 1997; Taylor, Frye & Maruyaama, 1990). In a recent meta-analysis examining this association, Mol and Bus (2011) suggest that the relationship between print exposure and reading is reciprocal, as children's engagement in reading activities also depends on their reading skill. Reading frequency has also been found to be associated with the development of other abilities such as general knowledge, oral language, vocabulary and verbal fluency (Cunningham & Stanovich, 1991; Mol & Bus, 2011; Senechal & Cornell, 1993; Senechal, LaFevre, Hudson & Lawson, 1996). Therefore it is crucial to identify ways to increase children's interest and engagement in reading activities. To do this, it is necessary to understand the types of books that children are interested in reading so that these are available in schools to optimise children's engagement in reading.

Investigating sex differences in reading habits and interests has been a common method to understand variation in children's reading choices, and many studies have cited sex differences in this area (Bosacki, Elliott, Bajovic & Askeer, 2009; Clark, 2011; Clark & Foster, 2005; Clark, Osborne & Akerman, 2008; Coles & Hall, 2002; Hall & Coles, 1999; Merisuo-Storm, 2006). Indeed, in large UK studies, girls consistently report reading books more frequently (Clark, 2011; Clark & Foster, 2005; Clark et al., 2008; Coles & Hall, 2002), and sex differences are typically found in book reading choices (Clark, 2011; Clark & Foster, 2005; Clark et al., 2008; Coles & Hall, 2002; Merisuo-Storm, 2006), in addition to other popular reading materials, such as magazines (Bosacki et al., 2009). It is interesting to note, however, that the majority of research in this area has taken an approach focused solely on sex differences and has not investigated the extent to which children's reading choices may be understood in terms of their identification with masculine and/or feminine traits. For example, McGeown, Goodwin, Henderson and Wright (2012) examined sex differences in children's reading motivation and found that children's gender identity (i.e., the extent to which they identified with masculine and feminine traits) was a better predictor of their motivation to read than their sex. Similarly, Pajares and Valiante (2001) found that sex differences in writing motivation and achievement were better explained by children's gender identity than their sex.

Sex and gender

As noted by McGeown, Goodwin et al. (2012), the concepts of sex and gender are often used interchangeably; however, sex refers to biological differences between boys and girls, whilst gender refers to the characteristics commonly associated with being male or female. Indeed, both boys and girls will vary in the extent to which they identify with masculine and feminine traits. Throughout childhood, children's identification with masculine and feminine qualities develops based on feedback from their environment. In an extensive review into gender development and the factors influencing the emergence and continuity of gender stereotypes, Bussey and Bandura (1999) argued that modelling others (e.g., parents, peers), receiving feedback for gender-appropriate behaviour (social sanctions) and direct tuition of gender roles were important contributors to gender development. Research has shown that at a young age, children understand the concept of gender and have been found to make toy preferences based on their knowledge of gender stereotypes (Martin & Little, 1990). However, there is evidence to suggest that children are more flexible in their gender stereotypes as they progress through primary school (Banse, Gawronski, Rebetez, Gutt & Morton, 2010). Nevertheless, throughout childhood and adolescence, reading is typically perceived as a more feminine activity (Millard, 1997). In addition, girls, on average, typically report valuing reading more highly (Eccles, Wigfield, Harold & Blumenfeld, 1993; Wigfield et al., 1997). Indeed, there is concern that these perceptions may be a partial explanation for the consistent sex differences found within reading attainment tests (Mullis, Martin, Gonzalez & Kennedy, 2003; Mullis, Martin, Kennedy & Foy, 2007; Ming Chui & McBridge-Chang, 2006). However, whilst the studies cited have typically drawn comparisons based on sex, in this study, the extent to which children identified with masculine and feminine traits was examined, to investigate whether this would elucidate a greater understanding of sex differences in reading choices and reading motivation.

Reading choices

As stated earlier, many studies have reported that girls generally read more often than boys (Clark, 2011; Clark & Foster, 2005; Clark et al., 2008; Coles & Hall, 2002; Hall & Coles,

1999; Logan & Johnston, 2009; Millard, 1997). However, boys do report reading some book types more often than girls. For example, Coles and Hall (2002) carried out a national survey of children's reading habits and reading choices and found that whilst girls read more overall, boys were more likely than girls to read some types of texts (e.g., science fiction/fantasy, comedy, sports related, war/spy related). On the other hand, girls were more likely to select books about adventure, romance/relationships, horror/ghost or animal-related books. More recently, Clark and Foster (2005) also illustrated that whilst some types of fiction were very popular among both boys and girls (i.e., adventure, comedy and horror/ghost), sex differences were also evident in children's reading choices, with boys reporting a preference for war/spy-related, crime/detective, sports-related and science fiction/fantasy books and girls reporting a preference for books about romance/relationships, realistic teen fiction and animal-related texts. In addition, in adolescence, sex differences are similarly reported in reading choices and favourite authors (Hopper, 2005; Hughes-Hassel & Rodge, 2007). Indeed, understanding reading habits on the basis of sex has been a popular way to investigate variation in children's reading choices. However, investigating children's reading choices on the basis of their identification with masculine and feminine traits would allow further insight into individual differences in reading choices.

Dutro (2002) noted that boys' book choices are influenced by gender to a greater extent than girls' book choices. Through carrying out observations of children's choices, she noted that boys were more likely to impose boundaries or limits on their choice of reading materials and when given the choice, would choose more male-orientated books. Dutro (2002) also participated in a number of discussions with children about their reading choices and found that girls were more likely, in fact often eager, to transcend gender boundaries in their reading. Indeed, when doing so, girls appeared to be aware that they were making a conscious decision to cross the gender boundary; boys however demonstrated far less interest in transcending gender boundaries.

An awareness of gender boundaries in reading choices can also be observed in younger children. For example, Chapman, Filipenko, McTavish and Shapiro (2007) found that first-grade children showed gender-consistent stereotypical beliefs about what other boys and girls like to read (even if they did not conform to gender stereotypes when choosing their own preferred reading material). Chapman et al. (2007) argued therefore that perceptions of what boys and girls like to read is not based on generalisations from their own reading preferences, but from a socially constructed understanding of gender-appropriate reading material.

Reading motivation

Children's motivation to read has been found to be associated with their level of engagement in reading activities (Baker & Wigfield, 1999; Guthrie, Wigfield, Metsala & Cox, 1999; Wang & Guthrie, 2004; Wigfield & Guthrie, 1997). However, intrinsic motivation (motivation via internal factors from within, e.g., curiosity) has been found to be more closely associated with reading engagement than extrinsic motivation (motivation via external factors, e.g., grades; Becker, McElvany & Kortenbruck, 2010; Wang & Guthrie, 2004). When sex differences are examined, girls typically report higher reading motivation than boys (Baker & Wigfield 1999; Wigfield & Guthrie, 1997). Whilst research has established an association between children's motivation to read and their engagement in reading activities, there is less research examining how important motivation is for children to engage in various types of reading activities. Evidently some reading activities and choices

will be less desirable for children and therefore it is important to understand the role of motivation across a range of different reading choices. For example, whilst children may willingly read texts that they typically find interesting, within the classroom environment, they are often required to read texts on a range of different topics and of different genres, some of which may be of less interest. It is likely that in these cases, a general interest in reading and motivation to read will play a greater role.

Motivation, reading choices and reading attainment

Many studies have highlighted the association between motivation to read and reading attainment (Baker and Wigfield, 1999; Becker et al., 2010; McGeown, Norgate & Warhurst, 2012; Morgan & Fuchs, 2007; Wang & Guthrie, 2004). However additional research has illustrated sex differences in this area. For example, Oakhill and Petrides (2007) questioned children on their level of interest in the texts provided in the UK-administered Standard Assessment Tests (SATs). Interestingly, boys showed better reading performance on their preferred text, whilst girls' performance was relatively unaffected by the text content, suggesting that boys' level of interest is more closely associated with their reading performance. Similarly, Logan and Johnston (2009) and Logan and Medford (2011) found that boys' attitudes to reading and reading motivation were more closely associated with their level of reading skill compared to girls. They argued that boys' motivation, to a greater extent than girls, may influence their levels of reading attainment through effort applied during reading assessments. Taken together, these studies illustrate sex differences in the strength of association between levels of interest, motivation and reading attainment; whether similar sex differences are found in the association between motivation and reading choices is unknown.

The aim of this study was to examine sex differences in reading choices and reading motivation and investigate the extent to which gender identity explained these differences. Furthermore, the relationships between masculine and feminine traits, intrinsic reading motivation and book reading choices were explored. It was predicted that girls would have higher reading motivation and would be more inclined to read female-orientated books, whilst boys would be more inclined to read male-orientated books. Furthermore, it was predicted that feminine traits would be more closely associated with reading motivation and likelihood of reading female-orientated books whilst masculine traits would be more closely associated with the likelihood of reading male-orientated books. Finally, it was predicted that children's gender identity would predict their reading choices, after accounting for sex.

Method

Participants

Two hundred and twenty-three children (97 male) from four primary schools in England participated in the study. Two schools were located within close proximity to city centres and two were in more rural locations. School sizes differed (number of pupils on the school roll: 62, 218, 268, 454). Head teacher and parent consent was required for children to take part; only those children who received parent consent were included in the study. Seventy-four children were in Year 4 (M age 8 years 11 months, 0.34 SD), 60 children were in Year 5 (M age 9 years 11 months, 0.32 SD) and 89 were in Year 6 (M age 10 years 11 months, 0.39 SD).

Materials

Reading Motivation Questionnaire

The intrinsic constructs from the Motivation for Reading Questionnaire Revised Version (Wang & Guthrie, 2004) were used to assess reading motivation. These constructs examine curiosity (the desire to learn about a particular topic of interest), involvement (the enjoyment of experiencing different kinds of texts) and challenge (satisfaction at mastering complex texts). Questions were answered on a 4-point Likert scale: 4 = a lot like me, 3 = a little like me, 2 = a little different from me, 1 = very different from me. Reliability analysis was carried out using Cronbach's alpha. This met an acceptable (0.70) threshold for each dimension; curiosity (7 items, $\alpha = 0.74$), involvement (7 items, $\alpha = 0.73$) and challenge (5 items, $\alpha = 0.72$).

Gender Identity Questionnaire

The Children's Sex Role Inventory Short Form was used to assess gender identity (see Boldizar, 1991). This inventory measures traditional masculine traits (e.g., competitiveness: 'When I play games, I really like to win'), feminine traits (e.g., compassion: 'I care about what happens to others') and neutral traits as filler items (e.g., friendly: 'I have many friends'). Questions were answered using a 4-point Likert scale: 4 = very true of me, 3 = mostly true of me, 2 = a little true of me, 1 = not true of me at all. Neutral items were not included in the analysis. As before, reliability analysis was carried out on the questionnaire using Cronbach's alpha. Reliability was high for masculine traits (10 items, $\alpha = 0.76$) and feminine traits (10 items, $\alpha = 0.84$).

Reading Habits Questionnaire

A 45-item questionnaire with coloured images of book covers was used to examine children's reading behaviours. Under each book cover was the question: how likely are you to read this book? This question was answered using a 5-point Likert scale: 1 = not at all, 2 = not likely, 3 = maybe, 4 = quite likely, 5 = very likely. Books were selected as being more likely to be read by males (e.g., *Boy Thief* by Lee Raven), females (e.g., *Love Lottery* by Cathy Hopkins) or equally by males and females (e.g., *Harry Potter* by J.K. Rowling). Selection of books for each category was carried out by four individuals and agreement was required among all individuals before the book was selected for a specific category. Books were selected as appropriate for the age group of the children in the study and were taken from Amazon.co.uk (9–11 age range). As before, reliability analysis was carried out on the questionnaire using Cronbach's alpha. Reliability analysis was high for masculine books (15 items, $\alpha = 0.93$), feminine books (15 items, $\alpha = 0.95$) and neutral books (15 items, $\alpha = 0.78$).

Reading skill assessment

The Group Reading Test II (Macmillan Test Unit, 2000a) was used to measure reading skill. In accordance with manual guidelines, children in Year 4 completed Form A or B and children in Year 5 and 6 completed Form C or D. This assessment was administered as a group, and to prevent copying, Forms A and B or C and D were given alternately based on the seating arrangement in the classrooms. Reliability and validity for this assessment have been shown to be high (see Macmillan Test Unit, 2000b, for details). For example,

for reliability, values of K-R 21 for Form C = 0.88 and for Form D = 0.84. The examiner read through the practice items with the children beforehand to ensure they understood the test. No time limit was imposed for completion of the test; however children took approximately 25 minutes. Standardised scores were used for the analyses.

Procedure

Ethical approval was sought and granted from the Department of Psychology Ethics Committee, University of Hull. Children who did not receive parent consent worked on their school work during the assessment period. Assessments took approximately 1 hour and 15 minutes to complete.

Results

Initially, analysis of variance was used to examine sex differences in reading skill, reading motivation, reading habits and identification with masculine and feminine traits (see Table 1). There were no significant sex differences in reading skill, $F(1, 221) = 0.12$, $p > .05$. However, girls reported significantly higher levels of reading motivation in curiosity, $F(1, 221) = 6.41$, $p < .05$, $\eta^2 = 0.03$; and involvement, $F(1, 221) = 5.74$, $p < .05$, $\eta^2 = 0.03$; but not in challenge, $F(1, 221) = 1.21$, $p > .05$. Overall girls' intrinsic reading motivation was higher, $F(1, 221) = 5.73$, $p < .05$, $\eta^2 = 0.03$. Sex differences were also found in reading habits: boys were significantly more likely to read male-orientated books, $F(1, 221) = 40.81$, $p < .01$, $\eta^2 = 0.16$, whilst girls were more likely to read female-orientated books, $F(1, 221) = 187.52$, $p < .01$, $\eta^2 = 0.46$; and neutral books, $F(1, 221) = 10.72$, $p < .01$, $\eta^2 = 0.05$. Finally, whilst girls identified significantly more with a feminine identity, $F(1, 221) = 47.36$, $p < .01$, $\eta^2 = .18$, there was no sex difference in identification with masculine traits, $F(1, 221) = 1.80$, $p > .05$; although there was a trend towards boys identifying more closely with masculine traits.

Correlations were carried out to examine the extent to which children's gender identity (i.e., masculine and feminine traits) correlated with their reading motivation and reading

Table 1. Means and standard deviations for reading skill, intrinsic reading motivation, reading habits and gender identity (split by sex).

	Male	Female
Reading skill	97.35 (12.41)	97.96 (13.19)
Reading motivation (curiosity)	19.05 (4.81)	20.54 (3.96)
Reading motivation (challenge)	13.94 (3.79)	14.45 (3.18)
Reading motivation (involvement)	19.79 (4.52)	21.17 (4.06)
Reading motivation (all intrinsic)	52.78 (11.64)	56.17 (9.45)
Male book choices	47.25 (14.64)	34.91 (14.03)
Female book choices	24.01 (14.27)	49.46 (13.35)
Neutral book choices	43.57 (12.16)	48.30 (9.43)
Masculine identity	28.90 (5.36)	27.90 (5.58)
Feminine identity	28.88 (4.45)	33.75 (5.79)

Table 2. Correlations between gender identity, intrinsic reading motivation and reading habits.

	Curiosity	Challenge	Involve	Intrinsic motivation	Male books	Female books	Neutral books
Masculine	.24**	.21**	.25**	.27**	.15*	.02	.11
Feminine	.46**	.35**	.43**	.48**	-.19**	.36**	.26**

***p* < .01; **p* < .05.

Table 3. Sex differences in the correlations between intrinsic reading motivation, gender identity and reading habits.

	Male books	Female books	Neutral books
Males			
Intrinsic reading motivation	.31**	.14	.51**
Masculine traits	.15	.04	.04
Feminine traits	.08	.04	.29**
Females			
Intrinsic reading motivation	.06	.22*	.27*
Masculine traits	.09	.16	.22*
Feminine traits	-.09	.17	.13

***p* < .01; **p* < .05.

choices (see Table 2). The extent to which children (both boys and girls) identified with feminine traits was more closely associated with all dimensions of intrinsic reading motivation (and the composite measure of intrinsic motivation) compared to their identification with masculine traits. In addition, whilst identification with masculine traits was significantly associated with reading male-orientated books, they were not associated with any other book type. Identification with feminine traits was positively associated with reading female-orientated books and neutral books but negatively associated with male-orientated books.

Separate analyses were carried out for boys and girls to examine the extent to which their motivation and gender identity were associated with their reading habits. As before, curiosity, involvement and challenge were grouped to form a composite measure of intrinsic reading motivation (see Table 3). For boys, intrinsic reading motivation was significantly associated with reports of reading male books and neutral books, but not female-orientated books. For girls, motivation was significantly associated with reports of reading female and neutral books, but not male-orientated books. For boys, no other correlations were significant except that boys’ reports of identification with feminine traits were associated with the likelihood that they would read neutral books; the converse was true for girls: girls’ reports of identification with masculine traits were associated with the likelihood that they would read neutral books.

Finally, regression analyses were carried out to predict children’s reading choices, with sex and gender identity as predictors. The aim was to examine whether gender identity would predict additional variance in children’s reading choices after accounting for sex (see Table 4). Identification with masculine traits predicted significant variance in the likelihood of reading male-orientated books after accounting for differences in sex. However, only sex predicted variance in the likelihood of reading female-orientated books. Indeed,

Table 4. Regression analyses predicting reading habits using sex and gender identity.

	Male books			Female books			Neutral books		
	<i>R</i> ²	<i>p</i>	Final β	<i>R</i> ²	<i>p</i>	Final β	<i>R</i> ²	<i>p</i>	Final β
Sex	.156	.000	-.339	.459	.000	.651	.046	.051	.146
Masculine traits		.026	.154		.373	.049		.435	.057
Feminine traits	.175	.188	-.100	.469	.232	.073	.083	.027	.177

sex accounted for a very large proportion of the variance in the likelihood of selecting female books (45.9%). For neutral books, identification with feminine traits predicted significant variance after accounting for sex.

Discussion

Despite no sex differences in reading skill, differences were found in children's reading motivation and reading choices, consistent with predictions. Substantial sex differences were also found in identification with feminine traits but not in identification with masculine traits (although there was a trend for boys to identify more with these). Feminine traits were more closely associated with motivation to read than masculine traits, and were more closely associated with likelihood of reading female-orientated and neutral books compared to masculine traits. On the other hand, masculine traits were significantly associated with likelihood of reading male-orientated but not female-orientated or neutral books. When analysis was carried out separately for boys and girls, the association between motivation and reading interests differed; children's motivation was only associated with the likelihood of reading their own sex or gender-neutral books. Finally, gender identity explained additional variance in reading male-orientated and neutral books after accounting for sex; however sex explained the majority (and a considerable amount) of the variance in likelihood of reading female-orientated books.

Consistent with previous research (McGeown, Goodwin et al., 2012), feminine traits were more closely associated with reading motivation than masculine traits. It is frequently found that girls are, on average, more motivated to read (Baker & Wigfield, 1999; Wigfield & Guthrie, 1997); however previous research suggests that variation in children's reading motivation may be better explained by identification with feminine traits than sex (McGeown, Goodwin et al., 2012). Furthermore, children's identification with masculine traits was only associated with the likelihood of reading male-orientated books (although this relationship was weak), whilst their identification with feminine traits was associated with likelihood of reading not only female-orientated books but also neutral books (and negatively associated with reading male-orientated books). It appears therefore that a feminine identity rather than a masculine identity varies more closely with children's reading habits and motivation. These results suggest that reading interventions aimed at boys that attempt to reduce the feminine view of reading may be particularly important to increase their reading motivation and engagement in a wider variety of texts.

Analyses were carried out separately for boys and girls, to identify how their motivation and gender identity were associated with the likelihood that they would read different book types. Boys' reading motivation was significantly associated with the likelihood that they would read male-orientated or gender-neutral books but was not related to the

reading of female-orientated books. Likewise, girls' motivation was significantly associated with the likelihood that they would read female-orientated or gender-neutral books but was not related to the reading of male-orientated books. Previous research has shown that children's motivation to read is associated with their reading frequency and engagement in reading activities (Baker & Wigfield, 1999; Guthrie et al., 1999; Wang & Guthrie, 2004; Wigfield & Guthrie, 1997). However, it appears that reading motivation may only be related to engagement in some reading activities (those that fit within the children's self-imposed boundaries), as reading motivation was not significantly related to the likelihood of reading books aimed at the opposite sex. This suggests that even children who are very highly motivated to read are unlikely to read books aimed at the opposite sex. In addition, for boys in particular, motivation was particularly closely associated with the likelihood that they would read gender-neutral books compared to male-orientated books. It may be the case that most boys will read books predominately aimed at their sex (regardless, to a lesser extent, of their level of motivation). However, those books that are gender neutral (and often used within schools for group reading activities) are not the type of book that most boys would select. This may help to explain boys' disengagement in classroom reading activities, as only those boys that are highly motivated would select to read books that are gender neutral.

Furthermore, when examining gender identity, the extent to which boys identified with feminine traits was significantly associated with the likelihood that they would read gender-neutral books, whereas the extent to which girls identified with masculine traits was significantly associated with the likelihood that they would read gender-neutral books. As stated, gender-neutral books are often used within the classroom for group reading activities as they form a balance between meeting the needs and interests of both boys and girls. This study suggests that there will be variation in both boys' and girls' likelihood of selecting to read gender-neutral books, and part of this variation can be explained by the extent to which they identify with traits of the opposite sex.

Analyses were carried out to examine whether gender identity would predict variance in the likelihood of reading male, female or gender-neutral book types after accounting for sex. It was found that the extent to which boys and girls identified with masculine traits predicted significant variance in the likelihood of reading a male-orientated book. However, sex explained the majority of the variance in the likelihood of reading female-orientated books (45.9% of the variance was explained by sex), with gender identity explaining no further variance. Very little variance was explained by sex or gender identity in the likelihood of reading neutral books. These results suggest that girls are more open to reading male-orientated books than boys are to reading female-orientated books (consistent with Dutro, 2002), although the likelihood that girls will read male-orientated books will depend on the extent to which they identify with masculine traits.

The results of this study have implications for our understanding of sex differences in reading interests but also highlight practical implications for the primary school classroom. The results of this study suggest that careful consideration should be given to the types of books available in schools; boys in particular will benefit from having access to books predominately aimed at males, as they are less likely to transcend gender boundaries. There is evidence to suggest that over the last few years, children's attitudes to reading have been declining and that children report less pleasure in reading (Twist, Schagen & Hodgson, 2003, 2007). In addition, there has been particular concern regarding boys' poor attitudes to reading and low reading motivation (Baker & Wigfield, 1999; Logan & Johnston, 2009; McKenna, Kear & Ellsworth, 1995; Wigfield & Guthrie, 1997). In addition, Logan and

Johnston (2009), Logan and Medford (2011) and Oakhill and Petrides (2007) have highlighted that boys' attitudes, motivation or level of interest are more closely associated with their reading attainment. Therefore, it may be particularly important for boys to have access to books that they are generally more interested in reading. Access to gender-neutral books is useful, but perhaps access to more male-orientated books is necessary to increase boys' engagement in reading. Given concern regarding boys' lower reading attainment compared to girls (e.g., Twist & Sainsbury, 2009), identifying ways to increase boys' engagement in reading is arguably particularly crucial. Nevertheless, both boys and girls will benefit from having access to a range of texts that have been carefully considered to suit their interests.

Finally, the results of this study suggest that careful consideration should be given when selecting texts to be used in classroom reading activities in order to maximise boys' and girls' engagement in reading. This study would suggest that whilst gender-neutral books are not the most popular among boys and girls, they do offer the best compromise and therefore for whole class reading activities may be the most appropriate (although with gender-neutral books, teachers should bear in mind issues concerning motivation, particularly among boys). Indeed, it may be that same-sex small group literacy activities centred on gender-specific texts will be more likely to engage groups of children, particularly boys, to read.

Conclusions

Differentiating between sex and gender identity may provide a better understanding of variation in children's reading motivation and reading choices. Indeed, it offers a useful route towards understanding sex differences commonly found in these areas. The results of this study suggest that children's book reading choices are not only influenced by their sex, but by the extent to which they identify with masculine and feminine traits. Furthermore, by investigating gender identity, it may be possible to advance current understanding regarding the relationship between reading motivation and reading choices.

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References

- Anderson, R.C., Wilson, P.T. & Fielding, L.G. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly*, 23, 285–303. doi:10.1598/RRQ.23.3.2
- Baker, L. & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34(4), 452–477. doi:10.1598/RRQ.34.4.4
- Banse, R., Gawronski, B., Rebetez, C., Gutt, H. & Morton, J.B. (2010). The development of spontaneous gender stereotyping in childhood: Relations to stereotype knowledge and stereotype flexibility. *Developmental Science*, 13(2), 298–306. doi:10.1111/j.1467-7687.2009.00880.x
- Becker, M., McElvany, N. & Kortenbruck, M. (2010). Intrinsic and extrinsic reading motivation as predictors of reading literacy: A longitudinal study. *Journal of Educational Psychology*, 102(4), 773–785. doi:10.1037/a0020084

- Boldizar, J.P. (1991). Assessing sex typing and androgyny in children: The Children's Sex Role Inventory. *Developmental Psychology*, 27(3), 505–515. doi:10.1037/0012-1649.27.3.505
- Bosacki, S., Elliott, A., Bajovic, M. & Askeer, S. (2009). Preadolescents' self-concept and popular magazine preferences. *Journal of Research in Childhood Education*, 23(3), 340–350.
- Bussey, K. & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, 106(4), 676–713. doi:10.1037/0033-295X.106.4.676
- Chapman, M., Filipenko, M., McTavish, M. & Shapiro, J. (2007). First graders' preferences for narrative and/or information books and perceptions of other boys' and girls' book preferences. *Canadian Journal of Education*, 30(2), 531–553.
- Cipielewski, J. & Stanovich, K.E. (1992). Predicting growth in reading ability from children's exposure to print. *Journal of Experimental Child Psychology*, 54, 74–89. doi:10.1016/0022-0965(92)90018-2
- Coles, M. & Hall, C. (2002). Gendered readings: Learning from children's reading choices. *Journal of Research in Reading*, 25(1), 96–108. doi:10.1111/1467-9817.00161
- Clark, C. (2011). *Setting the baseline: The National Literacy Trust's first annual survey into young people's reading 2010*. London: National Literacy Trust.
- Clark, C. & Foster, A. (2005). *Children's and young people's reading habits and preferences: The who, what, why, where and when*. London: National Literacy Trust.
- Clark, C., Osborne, S. & Akerman, R. (2008). *Young people's self-perceptions as readers: An investigation including family, peer and school influences*. London: National Literacy Trust.
- Cunningham, A.E. & Stanovich, K.E. (1991). Tracking the unique effects of print exposure in children: Associations with vocabulary, general knowledge, and spelling. *Journal of Educational Psychology*, 83, 264–274. doi:10.1037/0022-0663.83.2.264
- Cunningham, A.E. & Stanovich, K.E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934–945. doi:10.1037/0012-1649.33.6.934
- Dutro, E. (2002). 'But that's a girls' book!': Exploring gender boundaries in children's reading practices. *The Reading Teacher*, 55(4), 376–384.
- Eccles, J.S., Wigfield, A., Harold, R.D. & Blumenfeld, P. (1993). Age and gender differences in children's self and task perceptions during elementary school. *Child Development*, 64, 830–847. doi:10.2307/1131221
- Guthrie, J.T., Wigfield D.A., Metsala, J.L. & Cox, K.E. (1999). Motivational and cognitive predictors of text comprehension and reading amount. *Scientific Studies of Reading*, 3, 231–256.
- Hall, C. & Coles, M. (1999). *Children's reading choices*. London: Routledge.
- Hopper, R. (2005). What are teenagers reading? Adolescent fiction reading habits and reading choices. *Literacy*, 39(3), 113–120.
- Hughes-Hassell, S. & Rodge, P. (2007). The leisure reading habits of urban adolescents. *Journal of Adolescent and Adult Literacy*, 51(1), 22–33. doi:10.1598/JAAL.51.1.3
- Logan, S. & Johnston, R.S. (2009). Gender differences in reading: Examining where these differences lie. *Journal of Research in Reading*, 32(2), 199–214. doi:10.1111/j.1467-9817.2008.01389.x
- Logan, S. & Medford, E. (2011). Gender differences in the strength of association between motivation, competency beliefs and reading skill. *Educational Research*, 53(1), 85–94. doi:10.1080/00131881.2011.552242
- Macmillan Test Unit (2000a). *Group Reading Test II 6–14*. Windsor: NFER-Nelson.
- Macmillan Test Unit (2000b). *Group Reading Test II Teacher's Guide*. Windsor: NFER-Nelson.
- Martin, C.L. & Little, J.K. (1990). The relation of gender understanding to children's sex-typed preferences and gender stereotypes. *Child Development*, 61(5), 1427–1439.
- McGeown, S., Goodwin, H., Henderson, N. & Wright, P. (2012). Gender differences in reading motivation: Does sex or gender identity provide a better account? *Journal of Research in Reading*, 35(3), 328–336. doi:10.1111/j.1467-9817.2010.01481.x
- McGeown, S.P., Norgate, R. & Warhurst, A. (2012). Exploring intrinsic and extrinsic reading motivation among very good and very poor readers. *Educational Research*, 54(3), 309–322. doi:10.1080/00131881.2012.710089
- McKenna, M.C., Kear, D.J. & Ellsworth, R.A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly*, 30(4), 934–956.
- Merisuo-Storm, T. (2006). Girls and boys like to read and write different texts. *Scandinavian Journal of Educational Research*, 50(2), 111–125. doi:10.1080/00313830600576039
- Millard, E. (1997). Differently literate: Gender identity and the construction of the developing reader. *Gender and Education*, 9(1), 31–48. Retrieved from <http://www.tandf.co.uk/journals/GandE>
- Ming Chui, M. & McBride-Chang, C. (2006). Gender, context, and reading: A comparison of students in 43 countries. *Scientific Studies of Reading*, 10(4), 331–362.

- Mol, S.E. & Bus, A.G. (2011). To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin*, 137(2), 267–296. doi:10.1037/a0021890
- Morgan, P.L. & Fuchs, D. (2007). Is there a bidirectional relationship between children's reading skills and reading motivation? *Exceptional Children*, 73(2), 166–183.
- Mullis, I.V.S., Martin, M.O., Gonzalez, E.J. & Kennedy, A.M. (2003). *PIRLS 2001 International Report: IEA's study of reading literacy achievement in primary schools in 35 countries*. Chestnut Hill, MA: Boston College.
- Mullis, I.V.S., Martin, M.O., Kennedy, A.M. & Foy, P. (2007). *PIRLS 2006 International Report: IEA's progress in international reading literacy study in primary schools in 40 countries*. Chestnut Hill, MA: Boston College.
- Oakhill, J.V. & Petrides, A. (2007). Sex differences in the effects of interest on boys' and girls' reading comprehension. *British Journal of Educational Psychology*, 98, 223–35. doi:10.1348/000712606x117649
- Pajares, F. & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology*, 26, 366–381. doi:10.1006/ceps.2000.1069.
- Senechal, M. & Cornell, E.H. (1993). Vocabulary acquisition through shared reading experiences. *Reading Research Quarterly*, 28, 360–374. doi:10.2307/747933
- Senechal, M., LeFevre, J., Hudson, E. & Lawson, E.P. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology*, 88, 520–536. doi:10.1037/0022-0663.88.3.520
- Taylor, B.M., Frye, B. & Maruyama, J. (1990). Time spent reading and reading growth. *American Educational Research Journal*, 27(2), 351–362.
- Twist, L. & Sainsbury, M. (2009). Girl friendly? Investigating the gender gap in national reading tests at age 11. *Educational Research*, 51(2), 283–297.
- Twist, L., Schagen, I. & Hodgson, C. (2003). *Readers and reading: The national report for England (PIRLS)*. Slough: NFER.
- Twist, L., Schagen, I. & Hodgson, C. (2007). *Readers and reading: The national report for England (PIRLS)*. Slough: NFER.
- Wang, J. & Guthrie, J.T. (2004). Modeling the effects of intrinsic motivation, extrinsic motivation, amount of reading, and past reading achievement on text comprehension between US and Chinese students. *Reading Research Quarterly*, 39(2), 162–186. doi:10.1598/RRQ.39.2.2
- Wigfield, A. & Guthrie, J.T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology*, 89(3), 420–432. doi:10.1037/0022-0663.89.3.420
- Wigfield, A., Eccles, J.S., Yoon, K.S., Harold, R.D., Arbretton, A., Freedman-Doan, C. & Blumenfeld, P.C. (1997). Change in children's competence beliefs and subjective task values across the elementary school years: A three-year study. *Journal of Educational Psychology*, 89(3), 451–469. doi:10.1037/0022-0663.89.3.451

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