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Prevalence of Gendered Views of Reading in Thailand and Canada

Recent large-scale testing of reading achievement indicates significant gender differences favoring girls in all countries tested, a situation that some researchers believe is the result of boys viewing reading as a feminine activity. Given that Canada has one of the world's smallest gender gaps in reading whereas Thailand has one of the largest, a matched sample of 168 boys from Canada and Thailand were studied to examine potential differences in prevalence of viewing reading as feminine. Findings show no significant differences between boys in Canada and Thailand, which suggests that viewing reading as feminine is not at the root of gender differences in reading achievement. Other potential contributing factors, including culture, socioeconomic status, and interest are discussed.

Les résultats d'une évaluation à grande échelle portant sur le rendement en lecture indiquent des différences significatives sur le plan du genre - des écarts qui favorisent les filles dans tous les pays étudiés. Selon certains chercheurs, cette situation découle du fait que les garçons perçoivent la lecture comme activité féminine. Étant donné que le Canada a, sur le plan de la lecture, un des écarts les moins importants entre les genres et que la Thaïlande en a un des plus grands, on a étudié un échantillon apparié de 168 garçons du Canada et de la Thaïlande pour déterminer s'il y avait des différences dans la prévalence des impressions de la lecture comme activité féminine. Les résultats n'indiquent pas de différences significatives entre les garçons du Canada et ceux de la Thaïlande, ce qui porte à conclure que le fossé entre les genres quant au rendement en lecture ne découle pas de la perception de la lecture comme activité féminine. Sont évoqués d'autres facteurs pouvant contribuer à cet écart, dont la culture, le statut socioéconomique et l'intérêt que l'on porte à la lecture.

Introduction

Boys' underachievement in reading as compared with that of girls has been consistently demonstrated on large-scale international tests (Organization for Economic Co-operation and Development [OECD], 2001, 2003, 2004, 2007). Scholars have examined a variety of potential explanations for this trend ranging from those based in biological differences to those grounded in sociocultural practices. Regardless of the orientation taken, most initiatives to address the gender gap in reading have focused on boys as a group. This response suggests that gender is considered the salient variable when confronting boys' reading deficits.

Although gender gaps in reading are evident in every country tested, the size of the gaps vary substantially between countries, suggesting that other variables must be considered in understanding and responding to boys' underachievement trends. Moreover, the discrepancies in the size of the gender differences between countries provide fertile ground for examining the claim

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that boys' perceptions that reading is a feminine activity are at the root of gender differences in reading. That is, if perceptions that reading is more suited to females are associated with poor reading performance in boys, it would be expected that countries with large gender differences in reading achievement would also demonstrate high prevalence of boys who view reading as feminine. Given that Canada demonstrates one of the smaller gender gaps and Thailand demonstrates one of the largest, these two countries were selected to test the hypothesis that there is greater prevalence of boys with feminine views of reading in Thailand than in Canada. Results of the study are intended to inform interventions aimed at reducing views of reading as feminine as a means of addressing boys' reading needs.

Evidence of the Gender Gap in Reading

Concern about boys' underachievement in reading has been expressed in both academic and popular publications. Although the gender gap favoring girls in reading has remained somewhat stable since the early 1970s (Smith, 2003) and documentation of this trend is evident as early as 1785 (Cohen, 1998), it is only within the past decade that concern has grown into what some scholars view as "moral panic" about the boy crisis (Epstein, Elwood, Hey, & Maw, 1998; Titus, 2004). Indeed, recent international test results confirm that there were gender difference in reading scores of teenagers in all countries tested in (OECD, 2001, 2004, 2007), and recent international tests of grade 4 students demonstrate an overall advantage of females over males in comprehension, retrieval, inference, interpreting, integrating, and evaluating reading tasks (Mullis, Martin, Kennedy, & Foy, 2007).

Given the significance of reading to individual academic achievements both during schooling and later in life (OECD, 2001), it is little wonder that parents, teachers, and the public have responded with alarm to reports of boys' underachievement. Although the existence of the gap is not widely disputed, its significance, causes, and the appropriate response to it have been the topic of much debate.

Concern About the Feminization of Reading in Homes and Schools

Several scholars have been vocal in their criticisms that schooling in general, and reading in particular, have become overly feminized (Gurian, 2001; Hoff Sommers, 2000; Millard, 1997; Sax, 2005; Smith & Wilhelm, 2002) and has contributed to boys' underachievement in reading. Concern tends to focus on the overabundance of female reading models and the lack of reading materials that many boys find interesting. Copious research has demonstrated that many of boys' early literacy experiences foster perceptions of reading as a gender-marked behavior (Millard). Certainly early reading models in the home are predominately mothers, who read to young children more frequently than do fathers (Clark, Torsi, & Strong, 2005). Teachers in the early years of schooling are also mainly women, and this situation is becoming more common. The percentage of male teachers in Canada has decreased from 41% in 1989 to 35% in 1999 (Statistics Canada, 2003), a trend that is reflected in many other countries.

Further feminization of schools is evident in the types of literacy activities valued there. Research shows that many boys' interests are not valued or

represented in the texts available at many schools (Worthy, Moorman, & Turner, 1999). Street (1993, 1995) suggests that school-based practices are only one context of literacy and problematizes this narrow view as the defining form of reading and writing (Street & Street, 1991). Canadian researcher Booth (2006) supports this view and believes that traditional ways of thinking about and defining reading are insufficient in helping young people become full participants in the world of the future. Canadian boys are reading both similarly and differently from how Canadian girls are reading (Industry Canada, 2005), and students are not only using technology to do familiar things but are also exploring ways of doing new things through technology (Lankshear & Knobel, 2007). Accordingly, researchers argue that traditional school-based practices need to be expanded to encompass other genres of text and other reading activities such as computer use and its associated “affinity groups” (Gee, 1996) and “communities of practice” (Wenger, 1999). Advocates believe that providing the types of reading activities that many boys prefer in school would allow them to “morph” their out-of-school and in-school literacy practices (Blair & Sanford, 2002; Leander, 2007; Leander & Frank, 2006).

Theoretical Underpinnings

That boys who perceive school-based reading to be a feminine activity might also reject that activity can be explained by gender schema theories (GSTs, Liben & Bigler, 2002; Martin & Halverson, 1981). These theories seek to elucidate how children’s environments interact with their cognitions to inform their understanding, beliefs, preferences, and behaviors. According to Blakemore (2001), through observations and interactions with their environments, most children have accurate classifications of society’s masculine and feminine gender stereotypes by age 7. Given the abundance of feminine experiences with reading provided at home and at school, it would be expected that many boys would classify reading as a feminine activity. Once children form these ideas, they may apply them to their selections of activities. Children vary in their degrees of gender schematicity—their inclination to view the gender classification of activities as salient. Boys are more gender-schematic than girls (Sokal, 2001) and perceive greater restraints on their social behavior than do girls (Ragg, 1999). Thus high gender-schematic children, particularly boys, tend to self-select out of activities that they perceive as cross-gendered (Bauer, 1992; Huston, 1983). GSTs would predict that high gender-schematic boys who view reading as feminine would be likely to opt out of reading activities.

Do Boys View Reading as Feminine?

There is some evidence that diverse groups of boys do believe that reading is a feminine activity (Baron, 1996; Government of the United Kingdom, 2000; Fendrick, 1998; Katz & Sokal, 2003; McKenna, 1997) and that these perceptions may affect their motivation to engage in reading (Baker & Wigfield, 1999). Several dated studies (Filangieri, 1979; May & Ollila, 1981) suggest that feminine views of reading were once widespread. Furthermore, early studies using the Mazurkiewicz Masculine-Feminine Attitude Survey demonstrated that 72%-81% of child and adult males surveyed viewed reading as feminine (Mazurkiewicz, 1960). More current literature reveals several small studies showing evidence that some boys still do view reading as feminine. McKenna

(1997) surveyed 269 inner-city children in kindergarten to grade 8 and found that most children in all grades viewed reading as feminine. Sixty percent of boys in kindergarten viewed reading as feminine, and this percentage steadily climbed until grade 5, where all the boys indicated a feminine perception of reading. It should be noted that the children were surveyed using a forced-choice classification task: No gender-neutral responses were possible.

Fendrick (1998) showed that 52% of adult Jewish males she surveyed viewed reading as feminine. Interestingly, the participants included Orthodox, Reform, and Conservative Jews, and the prevalence of views of reading as feminine differed between males in each group. Fendrick attributed these differences to some groups having greater cultural influence to read and study. Using the same instrument, Baron (1996) showed that 69% of the 26 male university students surveyed viewed reading as feminine.

It should be noted that both the research by Fendrick (1998) and by Baron (1996) was conducted using the measure developed by Mazurkiewicz (1960). This instrument involves participants classifying 42 pictures into a forced choice between mainly masculine or mainly feminine activities. Similarly, the forced-choice format was also evident in the work by McKenna (1997). Fendrick commented in her report that she found that many participants expressed reluctance to complete the task. She attributed their reluctance to their belief that "prescribing sex-specific attitudes to activities is not politically correct" (p. 10). Alternatively, it is possible that allowing a third category of *gender-neutral* may have better reflected the participants' true classifications. Indeed, findings of the three studies that used the Mazurkiewicz Masculine-Feminine Attitude Survey (Mazurkiewicz; Fendrick; Baron) indicated a steady decrease of feminine perceptions of reading from 81% in 1960 to 52% in 1998.

A more recent study was conducted by Clark et al. (2005) with 1,512 primary, middle-years, and high school students in the UK. They found that boys were more likely than girls to agree with the statement "Reading is more for girls than for boys." These attitudes were negatively correlated with reading enjoyment. However, no percentages were reported, so it cannot be concluded from this study that most boys held perceptions that reading is feminine. Considered together, these studies suggest that perceptions of reading as feminine may be linked to sex, age, culture, and socioeconomic status.

In contrast, other current research shows that feminine views of reading are not the norm and that the relationship between feminine views of reading and attitudes toward reading is complex. Kelly (1986) conducted a study with kindergarten children, who were asked to classify a variety of reading activities as feminine, masculine, or gender-neutral. Findings demonstrated that most of the kindergarten children studied perceived reading as gender-neutral. These findings were replicated with children ranging from grades 1-4 by Steiner, Steiner and Newman (1981). Katz and Sokal (2003) found that in grade 2 only 24% of the 70 Canadian typical male readers they studied viewed reading as a feminine activity. Moreover, subsequent research with 175 grades 3 and 4 struggling readers revealed even more surprising findings: In this group of boys where they expected to find even higher incidence of feminine views of reading as an explanation for poor reading achievement, a mere 9% of boys viewed reading as feminine (Sokal, Katz, Chazewski, & Wojcik, 2007). If such a

low frequency of views of reading as feminine is evident in struggling readers, it seems illogical that strategies aimed at reducing views of reading as feminine should serve as the foundation of reforms intended to address boys' reading needs.

It should be noted that the studies that found much lower prevalence of views of reading as feminine (Katz & Sokal, 2003; Kelly, 1986; Sokal et al., 2007; Steiner et al., 1981) did not use forced-choice formats. Current theorizing about gender proposes gender as a continuum and rejects the polarity of masculinity and femininity as opposites. Two recent studies illuminate this complex relationship. Although Katz and Sokal showed that 24% of boys viewed reading as feminine by grade 2, they also found that 27% of grade 2 boys did not like reading. Interestingly, not all the boys who viewed reading as feminine disliked reading. Indeed, almost half the boys with feminine views of reading maintained a positive attitude toward reading. This interesting finding is supported by recent research by Chapman, Filipenko, McTavish, and Shapiro (2007), who showed that boys were likely to choose gender-stereotypical books for other children based on the children's sex while choosing counter-stereotypical books for themselves. In each case, children's attitudes seem at odds, suggesting that the relationship between reading attitudes, reading achievement, and gender are complex and worthy of more sophisticated analysis.

Together these studies suggest that the evidence is inconclusive regarding the prevalence of boys' perceptions of reading as feminine. They suggest that these perceptions can change over time and culture. The findings seem to indicate trends related to the methods employed, with forced-choice tests consistently yielding higher prevalence of feminine perceptions of reading. Finally, they suggest the relationships between gender, views of reading as feminine, and attitudes toward reading are complex: Even boys who hold feminine perceptions of reading do not necessarily reject it.

Reading Achievement in Canada and Thailand

International test scores further support a more nuanced conceptualization of boys through their examination of the influence of contextual factors, including culture, on boys' reading development. Results of the OECD's 2000, 2003, and 2006 test administration demonstrated that although gender gaps in achievement occurred in all OECD countries, the size of the gap varied widely. Canada has given research, programmatic, and financial attention to the differences in boys' and girls' reading scores, and Canada has one of the smallest gaps of the countries participating in testing. Eight countries, including Thailand, were flagged by the OECD (2004, 2007) as having the largest gender gaps in reading achievement.

This variation in scores provides an opportunity to compare gendered views of reading in Canadian and Thai students. A comparison between countries with diverse reading achievement gender gaps would allow us to determine whether more views of reading as feminine are held by students in a country with one of the largest gender gaps in reading scores than in a country with a smaller gap. If so, it would seem reasonable to suggest that gendered views of reading may be at the root of the achievement gap between boys and girls and to pursue programming aimed at "boy-friendly" pedagogy. How-

ever, if a view of reading as feminine is not more prevalent in countries with large gender gaps, a boy-friendly approach may be insufficient and greater complexity in our approach may be indicated.

Method

Participants

The participants were 168 school boys composed of a subsample from a large, central Canadian city ($n=84$) and a subsample of boys from Bangkok, Thailand ($n=84$). The Canadian boys were part of a larger study. Boys in both countries attended school in grades ranging from kindergarten to grade 6, and Thai boys were matched with Canadian boys by age, sex, and relative family income. The overall sample comprised 12 kindergarten boys, seven grade 7 boys, two grade 2 boys, 58 grade 3 boys, 57 grade 4 boys, 22 grade 5 boys, and 10 grade 6 boys. The boys' families were mainly of middle socioeconomic status, with 136 of the families reporting middle-income levels and 30 families reporting high-income levels. Most children ($n=153$) spoke their country's official language in the home and represented the dominant cultural groups in their respective countries, although 15 families spoke an alternative or additional language at home. The families in both countries were well educated, with 53% of mothers and 49% of fathers holding university degrees. Only 11% of mothers and 14% of fathers had not completed high school.

Measures

Two instruments were used in the study: The Gendered Activities Q-sort (Sokal, Monette, McBey, & Wocjik, 2006) and a parental survey. The Gendered Activities Q-sort measure provides children with pictures that depict nine activities such as wrestling, watching television, and reading. These pictures were selected based on research in Canada about activities that children typically view as masculine, feminine, or gender-neutral (Sokal, 2002). Children were asked to classify the pictures into categories of *usually done by girls*, *usually done by boys*, or *usually done by both boys and girls*. For example, the students were asked, "Who usually plays video games? Usually boys? Usually girls? Or usually both boys and girls?" Responses categories are counterbalanced. The children's classification of the picture that depicts reading was used to infer their views of reading as masculine, feminine, or gender-neutral.

The parental survey asked a series of demographic questions for the purpose of describing and matching the samples. In all cases, surveys and Q-sort measures were translated and implemented in the first language of the participants.

Procedures

Once ethics approval had been granted, I received permission from the school administrators and the parents. The return rate of parental surveys was 75%. Children were interviewed by the primary investigator in a private location away from other children at school. I developed rapport with the children, explained the procedures and tasks, and confirmed that they understood the directions. Assent was given by all children. No comments outside of repeating the children's words were provided in response to the children's selection of each activity as masculine, feminine, or gender-neutral. At the end of the interview, children were thanked and given a small gift in appreciation.

Findings

Examination of the data revealed that few boys in either group perceived reading as a feminine activity. In the Canadian sample, seven boys saw reading as feminine whereas 77 perceived reading as masculine or gender-neutral. In the Thai sample, four of 84 boys perceived reading as a feminine activity. In order to answer the research question, a one-way ANOVA was conducted with country as the independent variable and view of reading as feminine as the dependent variable. Results indicated no significant differences in the gendered views of reading held by Thai and Canadian boys, $F(1, 167)=.87$, $p=.35$.

Follow-up analysis sought to determine whether children who held views of reading as feminine were demographically different from other boys. Views of reading as feminine versus masculine or gender-neutral were the independent variables, and the dependent variables were family income, mother's education level, father's education level, and language spoken in the home. None of the variables was significantly different between the children who perceived reading as feminine and those who did not ($F_{\text{range}}=.32-1.6$, $p_{\text{range}}=.19-.57$).

Discussion

The main finding of the study was that when socioeconomic status and representation in the country's predominant cultural group were controlled through matching, there were no differences in the prevalence of views of reading as feminine in Thai and Canadian boys who participated in the study. Given that the differences in magnitude of gender differences in reading performance reported by OECD (2001, 2004, 2007) cannot be attributed to differences in views of reading as feminine, other possible explanations must be explored. Potential explanations include biological gender differences and sociocultural explanations, each recommending different approaches to addressing the differences in boys' and girls' reading scores.

Biological Explanations

Several scholars have investigated biological gender differences in learning (Gurian, 2001; Sax, 2005). Basing their recommendations on anatomical and developmental brain differences between males and females, these researchers advocate differential educational experiences including separate schools for boys and girls. Despite the burgeoning of single-sex schools and accompanying research that has occurred since Hillary Clinton challenged the interpretation of Title IX legislation, the precipitating achievement outcomes are inconclusive (Jackson, 2002; McCollum, 2004). These findings suggest that single-sex schools are not the solution for all boys (or girls), although some children respond better to these settings.

Differential responses to single-sex schooling suggest diversity in the category of boys and their learning needs. Furthermore, OECD's (2001) authors warn against viewing boys' reading achievement deficits as innate and immutable:

The results suggest that countries are having differing success at eliminating gender gaps. Whatever the variations, the data suggest that the current

differences are not the inevitable outcomes of differences between young males and females in learning styles. These gaps can be closed. (p. 125)

Certainly the reading achievement changes between and within countries over time suggest that environmental influences are at play.

Sociocultural Explanations

Sociocultural explanations for the gender differences between and within countries are concerned with how boys and girls construct gender. The construction is grounded in the child's experiences including his or her sex as well as age, socioeconomic status, family constellation, and culture. This approach suggests that variability in differences in magnitude of gender differences in reading performance reported by OECD (2001, 2004, 2007) are the result of varying constructions of masculinity, femininity, and schooling in the respective countries.

The significant advantage of females in reading literacy in all countries ... may be the result of the broader societal and cultural context or of educational policies and practices. Some countries do appear to provide a learning environment that benefits both genders equally, either as a direct result of educational efforts or because of a more favourable societal context. In reading literacy, Hong Kong-China, Korea and, to a lesser extent, Ireland, Japan, and the UK, achieve both high mean performance and limited gender differences. (OECD, 2001, p. 124)

Culture and Educational Trends in Canada and Thailand

As suggested by the OECD, responses to the gender gap in reading scores have differed significantly between Canada and Thailand. Whereas Canada has funded research aimed at exploring strategies to increase boys' engagement and achievement in reading, for example Ontario's *Me read? No way!* the response from Thailand has been quite different. Knobel (1997) conducted a study using multiple methods to examine large-scale trends in gender and education in Thailand as well as the parental attitudes that accompanied them. The historic gender gap evident in Thailand related to the underrepresentation of females in secondary and tertiary education. Traditionally, parental attitudes favoring the importance of educating sons over educating daughters precipitated higher literacy rates and educational rates for men than for women. Over the last 40 years, however, educational attainment for girls has steadily increased at all levels. Recently, the percentage of women attaining postsecondary education has exceeded the percentage of men at that level. Interestingly, parental attitudes toward whom should get priority in attending schools has shifted from most believing that boys should attend to a perception that the most able children should attend. Because Thai adolescent boys are given less responsibility than are girls and are expected to have more fun with their friends (*paiteaw*), Knobel found that common parental perceptions are that daughters are more likely to apply themselves and become serious students. In this way, girls demonstrate self-selectively in pursuing secondary and tertiary education. However, Thais who live in rural areas are more likely to be poor and to require their children to begin earning an income as soon as they can leave school, which results in fewer rural boys and girls continuing on in school. Given that 72% of Thai children aged 14-15 live in rural areas and that

the compulsory stage of schooling ends at this stage, socioeconomic status, rural/urban residence, age, and sex collide to paint a demographic different from that of Canada.

Socioeconomic Influences

Literacy researchers who work in the sociocultural framework have shown that demographic variables such as socioeconomic status (SES) and minority ethnicity play an important role in nuancing the category of boys (Alloway, 2007; Alloway & Gilbert, 1997; Francis & Skelton, 2005; Luke, Freebody, & Land, 2000). Indeed, the lack of differences found in boys' views of reading as feminine in Canadian and Thai samples may be an artifact of the sample selected for the current study. Whereas the current study's sample reflected mainly medium and some high SES children, the larger samples represented in the OECD data are more diverse, and the average SES of the participants from Thailand is lower than the average SES of students from Canada (OECD, 2007). Thailand's overall reading achievement is significantly lower than the OECD average, whereas Canada's overall reading achievement is both above the OECD average and significantly higher than the scores of Thailand (OECD, 2007). Given that SES and reading achievement are correlated (Alloway), it is possible that the findings would have been quite different if children from lower SES had also been included in the current study.

Alternatively, it could be that the influence of SES is overstated and that other variables should also be considered. The correlation between SES and reading achievement decreased from the 2000 to the 2003 and the 2006 administration of the OECD tests (OECD, 2007). Again, we are reminded that exploring one demographic variable in isolation may lead to faulty conclusions.

Diversity in Experiences of "Being a Boy"

Researchers who work in a sociocultural framework believe that generalized strategies aimed at all boys as a group are overly simplistic, a misdirection of funding, a dilution of effect, an approach that will direct attention toward many boys who are not at risk, and may potentially harm some boys and girls (Alloway, 2007; White, 2007). The findings of the current study highlight the importance of studying boys' reading underachievement in more sensitive and sophisticated ways that consider the variety of experiences that contribute to "being a boy." Awareness of the greater variability in boys' achievement (Wilhelm, 2001) has provoked gender and achievement researchers to move from asking the question, "What about the boys?" (Martino & Meyenn, 2001) toward asking instead, "Which boys?" (Davison, Lovell, Frank, & Vibert, 2002; Young, 2001). This point of view is also supported in the diversity of responses reflected in the cultural community in Fendrick's (1998) study. She attributes differences in males' views of reading as feminine as a result of family attitudes toward reading and studying.

Together these studies suggest that diversity in the category of boys can be understood by examining culture (both ethnic culture and home culture as it relates to reading) and socioeconomic status alongside gender. Given all the potential constellations of boyhood generated by this perspective, it is reasonable to assume that a variety of strategies will be necessary to meet all their needs. Care needs to be taken, however, that the approaches are not based on

gender stereotypes that imply homogeneity in the category of boys. Rather, research should seek to identify programs that will address the reading needs of struggling boys and girls while not privileging these groups at the expense of other groups of learners.

Interest

One approach to addressing the diversity of needs is to consider the diversity of interests in our student population and to ensure all children have opportunities to engage in activities they find interesting and worthwhile. Liben and Bigler (2002) suggest that interest schema can trump gender schema when children find cross-gender-typed (and gender-typed) activities interesting. In this way, high-interest activities can respond to the needs of boys (and girls) who view reading as feminine as well as to those who do not. Furthermore, the UK Trust showed that of the 1,512 children they surveyed, 39% did not enjoy reading and 28.5% thought reading was a boring activity (Clark et al., 2005). These perceptions were more common for boys and for older children. Clark et al., as well as other researchers (Cox & Guthrie, 2001), showed a significant link between reading enjoyment and proficiency. OECD's 2002 *Reading for Change* study found that reading enjoyment was a more powerful predictor of school achievement than was family SES. Furthermore, SES was found to be a stronger predictor than gender (Gillborn & Mirza, 2000). Taken together, these findings suggest that giving attention to children as individuals rather than categorizing them by demographic variables such as gender or SES may be a more fruitful direction to addressing reading needs.

One way to engage children in literacy activities is to expand traditional views of school literacy to reflect a broader range of activities. Thirty-four percent of the children in the UK Trust study (Clark et al., 2005) indicated they had difficulty finding interesting reading materials at school. Many children who participated in this study indicated that although they enjoyed reading novels, their preferred texts were computing/games, music, and materials about hobbies. Expanded notions of literacy as advocated by Booth (2006) and Street (1993, 1995) may be the key to enacting children's interest schema and engaging them in reading.

Limitations

As with most research, several limitations of the current project require mentioning. First, and as mentioned above, the participants who participated in this study were limited to medium- and high-sample socioeconomic status (SES) groups. This representation was necessary given that the Canadian boys were participants in a larger project and that socioeconomic status was a matching variable in determining participants in the Thai sample. Although some boys from high and medium socioeconomic groups experience reading difficulties, low reading scores are more strongly represented in boys from low socioeconomic groups (Alloway, 2007). It is important that boys representing all socioeconomic groups are studied, as SES is an important variable in exploring the diversity in the category of boys. It is possible that different findings may have occurred if a wider variety of socioeconomic situations had been included. Subsequent cross-cultural studies should include a wider SES variation.

A second limitation of the current study is the boys' understanding of the term *reading*. It is likely, because the children were interviewed at school and the Q-sort picture for reading is a picture of a pile of books, that the children interpreted the picture to mean school-based reading. Similarly, Fendrick (1998) showed that the adults who participated in her study interpreted *reading* to mean reading books. Members of Fendrick's sample suggested to her that a broader interpretation of the term might have affected their responses. Because one of the other Q-sort pictures depicted video games, it is likely that the boys in our study did not use a broadened definition of reading such as that proposed by Street (1993, 1995, computer applications, wikis, video games) as their interpretation of the *reading* picture. It should be noted that all boys in the current study placed the video game picture in the masculine or gender-neutral category, again suggesting a broader definition of literacy as a fruitful direction for engaging boys' interests.

Despite these limitations, when socioeconomic status and representation in the country's predominant cultural group are controlled through matching, the current study found no differences in the prevalence of feminine views of reading in Thai and Canadian boys. This finding suggests that programs aimed at addressing boys' perceptions of reading as a feminine activity will address the needs of a minority of boys. Perhaps another approach to consider is to expand the definitions of school-based reading to include a broader range of literacy activities. In this way, educators may not only address perceptions that reading is feminine, but may also address perceptions that reading is boring.

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