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Why should I read?

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Published in:
International Review of Education

DOI:
[10.1007/s11159-013-9354-4](https://doi.org/10.1007/s11159-013-9354-4)

Publication date:
2013

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Broeder, P., & Stokmans, M. J. W. (2013). Why should I read? A cross-cultural investigation into adolescents? Reading socialisation and reading attitude. *International Review of Education*, 59(1), 87-112.
<https://doi.org/10.1007/s11159-013-9354-4>

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Why should I read? - A cross-cultural investigation into adolescents' reading socialisation and reading attitude

Peter Broeder · Mia Stokmans

Published online: 26 May 2013
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Abstract While reading behaviour of adolescents is a frequent object of research, most studies in this field are restricted to a single country. This study investigates reading as a leisure-time activity across social groups from three regions differing in reading tradition as well as in the facilities available for reading. The authors analyse the reading behaviour of a total of 2,173 adolescents in the Netherlands, in Beijing (China), and in Cape Town (South Africa). Taking Icek Ajzen's Theory of Planned Behaviour as a starting point, the authors adjusted it to model the three most important determinants of reading behaviour, namely (1) reading attitude; (2) subjective norms (implicit and explicit social pressure to read); and (3) perceived behavioural control, which includes reading proficiency and appropriateness of the available books (book supply). While they found the adjusted model to fit the Dutch and Beijing situation quite well, it appeared to be inappropriate for the Cape Town situation. Despite considerable cultural and situational differences between the Netherlands and Beijing, the results show a similar pattern for these two environments. The most important determinants turn out to be: the hedonic reading attitude, the implicit norm of family and friends, the attractiveness of the available choice of books, and the perceived reading proficiency.

Keywords Theory of Planned Behaviour · Leisure reading · Attitude · Subjective norm · Perceived behavioural control · China · South Africa · The Netherlands

Résumé À quoi bon lire ? Une étude transculturelle sur la socialisation à la lecture et l'attitude face à la lecture chez les adolescents – Si le comportement de lecture

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chez les adolescents est un sujet fréquent de recherche, la plupart des travaux dans le domaine se limitent à un seul pays. Cette étude explore la lecture en tant qu'activité de loisir auprès de groupes sociaux issus de trois régions, qui diffèrent par leurs traditions de lecture ainsi que par les structures de lecture existantes. Les auteurs analysent le comportement de lecture auprès d'une cohorte totale de 2173 adolescents originaires des Pays-Bas, de Pékin (Chine) et du Cap (Afrique du Sud). Partant de la Théorie du Comportement Planifié (TCP) d'Icek Ajzen, les auteurs adaptent cette dernière pour modéliser les trois principaux déterminants du comportement de lecture, à savoir (1) l'attitude face à la lecture, (2) les normes subjectives (pression sociale implicite et explicite de lire), et (3) la maîtrise comportementale perçue, qui porte sur la maîtrise de la lecture et la pertinence des ouvrages disponibles (approvisionnement en livres). Les auteurs constatent que le modèle adapté correspond assez bien à la situation néerlandaise et chinoise, il s'avère par contre inapproprié à la ville du Cap. Malgré les différences culturelles et situationnelles considérables entre les Pays-Bas et Pékin, les résultats dévoilent un schéma similaire pour ces deux environnements. Les principaux déterminants s'avèrent être les suivants : une attitude hédoniste face à la lecture, la norme implicite au sein de la famille et du cercle d'amis, l'attrait de l'assortiment disponible de livres, et la maîtrise perçue de la lecture.

Zusammenfassung Warum soll ich lesen? Eine kulturvergleichende Untersuchung zur Lesesozialisierung und LeseEinstellung von Jugendlichen – Obgleich das Leseverhalten von Jugendlichen ein beliebtes Forschungsgebiet ist, beschränken sich die meisten Studien zu diesem Thema auf einzelne Länder. Diese Studie untersucht das Lesen als Freizeitbeschäftigung in sozialen Gruppen aus drei Regionen, die sich sowohl im Hinblick auf Lesetraditionen als auch auf die Möglichkeiten zum Lesen unterscheiden. Die Autoren analysieren das Leseverhalten von insgesamt 2.173 Jugendlichen in den Niederlanden, in Beijing (China) und in Kapstadt (Südafrika). Als Ausgangspunkt wählten die Autoren das Modell des geplanten Verhaltens von Icek Ajzen und passten es an die drei wichtigsten Bestimmungsgrößen des Leseverhaltens an: 1. LeseEinstellung, 2. subjektive Normen (impliziter und expliziter sozialer Druck, zu lesen) und 3. wahrgenommene Verhaltenskontrolle, einschließlich Lesekompetenz und Eignung der verfügbaren Literatur (Buchangebot). Während sich dieses angepasste Modell für die Verhältnisse in den Niederlanden und Beijing gut bewährte, schien es für die Verhältnisse in Kapstadt ungeeignet zu sein. Trotz der beträchtlichen kulturellen und situativen Unterschiede zwischen den Niederlanden und Beijing zeigen die Ergebnisse in beiden Umgebungen ähnliche Muster. Als wichtigste Determinanten erwiesen sich die hedonistische LeseEinstellung, implizite Normen von Familie und Freunden, die Attraktivität des Buchangebots und die wahrgenommene Lesekompetenz.

Resumen ¿Por qué debería leer? Una investigación transcultural sobre la socialización de la lectura y la actitud de lectura de los adolescentes – Si bien el comportamiento de lectura de los adolescentes es un tema frecuentemente investigado, la mayor parte de los estudios que se realizan en esta área se limita a un solo país. El presente trabajo estudia la lectura como actividad de tiempo libre a lo largo

de diferentes grupos sociales y en tres regiones distintas en cuanto a su tradición de lectura y también en cuanto a las facilidades disponibles para la lectura. Los autores analizan el comportamiento de lectura de un total de 2.173 adolescentes en los Países Bajos, en Beijing (China) y en Ciudad del Cabo (Sudáfrica). Tomando como punto de partida la Teoría del Comportamiento Planificado, de Icek Ajzen, los autores lo ajustaron para reproducir los tres determinantes más importantes del comportamiento de lectura: (1) actitud de lectura; (2) normas subjetivas (presión social implícita y explícita de leer); y (3) el control de comportamiento percibido, que incluye capacidad lectora y conveniencia de los libros disponibles (provisión de libros). Si bien los autores comprobaron que el modelo ajustado se correspondía bastante bien con la situación de Holanda y de Beijing, resultó ser inapropiado para la situación en Ciudad del Cabo. Pese a considerables diferencias culturales y situacionales entre los Países Bajos y Beijing, los resultados mostraron un modelo similar para estos dos entornos. Los determinantes más importantes, finalmente resultaron ser los siguientes: la actitud de lectura hedónica, la norma implícita de familiares y amigos, el atractivo de la clase de libros disponibles y la capacidad lectora percibida.

Резюме Почему я должен читать? Межкультурное исследование социального поведения подростков в их отношении к чтению в различных странах – В то время как отношение подростков к чтению часто становится предметом изучения, большинство исследований в этой области ограничиваются анализом ситуации в одной отдельно взятой стране. В настоящем исследовании чтение рассматривается в качестве одной из форм проведения досуга применительно к социальным группам в трёх регионах, отличающихся друг от друга как характером традиции чтения, так и его доступностью. Авторы анализируют отношение к чтению в общей сложности 2 тыс. 173 подростков в Нидерландах, Пекине (Китай) и Кейптауне (Южная Африка). В качестве отправной точки авторы используют теорию Айсека Эйзена о запланированном поведении, применяя её в качестве модели, основанной на трёх важных детерминантах, определяющих читательское поведение, а именно (1) отношение к чтению; (2) субъективные нормы (имплицитное и эксплицитное социальное давление, понуждающее к чтению); (3) воспринимаемый поведенческий контроль, включающий в себя способность читать, а также наличие и доступность соответствующих книг (обеспечение книгами). Авторы приходят к выводу, что в то время как указанная модель довольно хорошо применима к ситуации в Голландии и Пекине, по всей видимости, она не подходит для анализа ситуации в Кейптауне. Несмотря на существенные культурные и социальные различия между Нидерландами и Пекином, результаты демонстрируют наличие общих закономерностей, характерных для обеих стран. Наиболее важными факторами оказались следующие: гедонистическое отношение к чтению, имплицитное влияние семьи и друзей, привлекательность доступных для выбора книг, а также ощущаемая способность к чтению.

Introduction

Reading behaviour of adolescents is a frequent object of study, since many teachers, policy makers and sometimes also parents are of the opinion that adolescents spend too little of their spare time reading. These social agents frequently argue that differences in the amount of leisure-time reading done in adolescence might explain differences in vocabulary and reading proficiency and subsequent differences in educational careers (Leseman and de Jong 1998; Schieffelin and Ochs 1986). An important question is: What makes adolescents read? Most studies thus far have explored this question for a national sample (McKenna et al. 1995; Van Schooten and de Gloppe 2002). Within a particular country or national culture, certain determinants of leisure-time reading can have a lesser effect than others, since general opinions regarding reading as well as opportunities for doing so are fairly constant.

In order to be able to design effective reading programmes, it is important to know which factors are the most influential. By conducting a cross-cultural study including social groups from countries that differ in reading tradition as well as opportunity structures and reading facilities, we aimed to gather more in-depth insight. We investigated adolescents' reading behaviour and opinions about reading in the Netherlands, Beijing (China) and Cape Town (South Africa).

A model for explaining reading behaviour

In studying antecedents of behaviour, Icek Ajzen's (1991) Theory of Planned Behaviour (TPB) is a widely accepted and frequently used socio-psychological model (for a review see Manstead and Parker 1995; Armitage and Conner 2001). The model has been found to be helpful in reading research and other educational settings (for example McKenna 2001; Mathewson 1994; Van Schooten and de Gloppe 2002; Stokmans 1999; Norwich and Duncan 1990; Simonson and Maushak 1996).

This study uses TPB as a general framework (see Fig. 1) to categorise the important determinants of reading behaviour: reading attitude, subjective norms (social pressure to read) and perceived behavioural control (resources for and barriers to reading). Applied to reading research, TPB assumes that background variables, such as educational level, school climate and socio-economic background, all have an indirect effect on reading (intention) via reading attitude, subjective norm and perceived behavioural control. Reading research concerning adolescents supports this assumption except for gender and age (McKenna et al. 1995; Stokmans 2003, 2007). TPB needs to be modified slightly to make it more applicable for studying reading behaviour.

Reading attitude

A person's reading attitude is conceptualised as a learned predisposition to react consistently favourably or unfavourably to the activity of "reading storybooks in

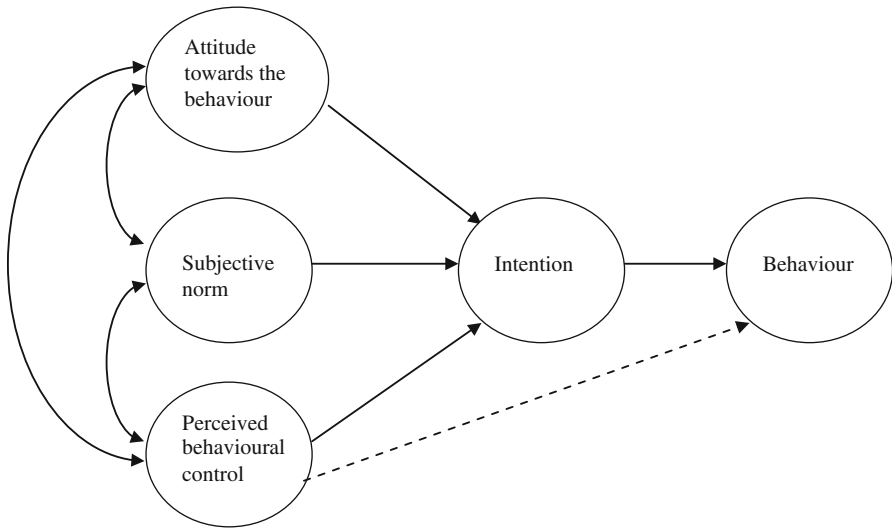


Fig. 1 Theory of Planned Behaviour (TPB). Source: Ajzen (1991)

one's leisure time".¹ Attitudes are based on experiences with the attitude object, i.e. reading storybooks. These experiences are gathered directly as well as indirectly. Direct experiences arise from being engaged in the reading activity oneself, while the indirect experiences concern those felt by others (family members, peer group, friends, and teachers) and communicated (verbally as well as non-verbally) to the individual. These indirect experiences arise, among other things, from primary and secondary reading socialisation.

Studies on reading attitude (McKenna et al. 1995; Mullis et al. 2003) regard an attitude as a one-dimensional construct that focuses mainly on the (instrumental) benefits associated with reading. However, leisure reading is also a type of hedonic behaviour (Holbrook and Hirschman 1982), involving pleasure. We distinguish two different components of reading attitude (Breckler and Wiggins 1989; Batra and Ahtola 1990; Voss et al. 2003). One is a hedonic component referring to emotions and feelings immediately experienced while reading, and the other is a utilitarian component that relates to the (instrumental) benefits derived from reading.

Ajzen's TPB postulates a positive relationship between reading attitude and leisure-time reading: the more positive the reading attitude components, the higher the expected value of reading, the stronger the probability that an individual will read at a particular point in time, and the higher the reading frequency.

Subjective norm

The subjective norm construct concerns the individual's perception of the extent to which others who are important to him/her feel that one should engage in the

¹ The term "storybooks", in this study, refers to fiction and other literature (excluding books about hobbies and magazines) read by our adolescent respondents for entertainment.

behaviour. It reflects the social pressure perceived by a person to engage in reading as a leisure activity. Each social agent who is important to the adolescent contributes to the subjective norm. In the case of leisure-time reading, three important social agents are usually explored (Stalpers 2005): family members, teachers and the peer group. However, research indicates that the importance of teachers is negligible (for the Netherlands: see Stalpers 2005, for Beijing: see Huguen 2009).

For each social agent, the subjective norm consists of two aspects. First, there is the norm itself: the perceived opinions and beliefs about leisure-time reading held by the agent. In the case of reading, this norm can be expressed in two different ways: explicit (intentionally, verbally approving or disapproving of leisure-time reading) and implicit (unintentionally, actual behaviour regarding the activity of reading; Bandura and Walters 1963; Bennet et al. 2002; Darling and Steinberg 1993; McLeod and Brown 1976). In the case of an explicit norm, social agents have their effect through persuasive communication processes, while in the case of an implicit norm, learning through observation and imitation governs the influence. The second component of the subjective norm concerns the motivation to comply with the norm held by a particular social agent.

Ajzen's TPB hypothesises a positive relationship between the subjective norm and leisure-time reading: the higher the felt social pressure to read, the stronger the probability that the individual will read at a particular point in time, and the higher the amount of reading done. In this study, different aspects of the subjective norm (implicit and explicit) are explored separately for each agent, so that the differential effect across countries can become visible.

Perceived behavioural control

The third factor of Ajzen's TPB, perceived behavioural control, concerns people's personal judgment regardless of their ability to perform the behaviour. It is not an objective characteristic, but the perception of the availability of resources and opportunities for performing the behaviour. In the case of reading, a distinction is made between resources referring to the person's self-assessed reading proficiency, and (external) opportunities reflecting the availability of "suitable", interesting books, i.e. the appropriateness of the book supply (Stalpers 2005).

Ajzen's TPB assumes a positive relationship between the perceived behavioural control and leisure-time reading: the more favourable the perception of the resources and opportunities, the stronger the probability that the individual will read at a particular point in time and the higher the amount of reading done. In this study the resources (reading proficiency) and opportunities (book supply) are explored separately, so that differential effects across regions can be detected.

Relationship between the factors of the model

In most applications of TPB, behavioural intention plays an important role (Armitage and Conner 2001). However, the theory indicates that under conditions of volitional control the intention-behaviour relationship is optimal, and as a consequence perceived behavioural control has no direct effect on actual behaviour.

In the case of reading, individuals have control over their behaviour. Furthermore, they have a very accurate perception of their behavioural control, as the idea of reading as a leisure activity is not new to them, and tends to be facilitated by the social context. Moreover, with reading being habitual in character, the scoring on the intention to read will be based on what is done most of the time, which results in a strong relationship between reading intention and reading behaviour. By consequence, we did not incorporate intentions but only behaviours into the model.

In most studies, reading attitude emerges as the most important factor in explaining variation in reading behaviour (Van Schooten and de Gloppe 2002; Stokmans 2003). Similar results have been found in other research domains (for an overview, see Ajzen 1991; Terry and Hogg 1996; Armitage and Conner 2001). The large effect of attitude is to be expected on the basis of the model, since past experiences have a cumulative effect in shaping a person's attitude. On the one hand, these past experiences will be related to the social context as indirect experiences with leisure reading (reading socialisation). Social contexts, which the subjective norm about reading is part of, do not generally change overnight. On the other hand, past experiences will be related to cognitive feelings accompanying the reading process (Mathewson 1994; Ganzeboom 1989). These feelings reflect the (mis)match between reading proficiency and the complexity of storybooks and thus influence reading attitude (if reading is difficult, the reading attitude will be negatively adjusted) as well as the perceived reading proficiency (if reading is difficult, the perceived reading proficiency will be adjusted downward).

The effect of the subjective norm reflects the fact that one's social environment can facilitate or inhibit the behaviour irrespective of the attitude. Cross-cultural differences may affect the relative importance of both attitude and subjective norm (Abrams et al. 1998). One important characterisation is the dimension of individualism-collectivism (cf. Hofstede 2001). Members of individualistic cultures (such as the Netherlands) tend to define themselves in terms of their independence from and autonomy in the group and are socialised to value individual freedoms and individual expressions, while collectivistic cultures (such as China) emphasise the maintenance of harmony and the importance of sticking with the group, even when doing so comes at considerable personal cost. There are suggestions that members of collectivistic cultures show more of a tendency to conform than do members of individualistic cultures (Bond and Smith 1996; Tamis-LeMonda et al. 2008), and that members of collectivistic cultures are less likely to seek differentiation from others than members of individualistic cultures (Yu 2007; Heine et al. 1999; Kim and Markus 1999).

Method

Research question

The aim of this study is to acquire more knowledge about the factors that influence leisure reading among adolescents. The focus is more on enlarging insight into each of the factors that affect reading behaviour, than to estimate the magnitude of the

effects of the components of TPB for each country. Cross-cultural data are likely to increase variations in opportunity structures as well as belief structures. Thus more insight into the relationship between the antecedents of reading and reading behaviour is gathered. We chose samples from the Netherlands, Beijing and Cape Town. These regions differ in terms of opportunity and belief structures about leisure reading. In order to meet the objective of this study, we explored the following overall research question:

- What is the relationship between adolescents' reading behaviour and the antecedents of leisure reading (attitude, subjective norm and perceived behavioural control) for the Netherlands, Beijing and Cape Town?

Research sample

In the period 2007–2011, three comparable surveys were carried out on three continents. The total number of pupils who participated in these surveys was 2,173.

The Dutch research sample is representative of the Netherlands: A total of 1,184 pupils participated, coming from 2 primary schools and 21 secondary schools. The average age of the 576 boys and 593 girls was 14 (standard deviation = 1.98, 15 cases missing on sex/age).

In Beijing, China, 643 pupils participated in the reading survey. Four schools in the urban districts of Haidian, Dongcheng and Xicheng provided 378 pupils participating in the research. Three other schools in the rural districts of Huairou, Shunyi and Miyun provided 265 pupils. The average age of the 231 Chinese boys and 391 Chinese girls was 15 (s.d. = 1.83, 21 cases missing on sex/case).

In Cape Town, South Africa, 346 pupils participated in the reading survey. Their schools were located in three townships: Langa, Khayelitha and Delft. The average age of the South African pupils was 14 (s.d. = 1.48). There were 143 South African boys and 197 South African girls participating in the survey (6 cases missing on sex/age).

Questionnaire

Taking the experience gained from large-scale leisure reading surveys held among adolescents in the Netherlands (cf. Stokmans 2007) as a point of departure, a questionnaire was developed and adapted to the Beijing and Cape Town contexts. The pupils were asked to keep in mind that all the questions were about storybooks that they read for pleasure, and not about school textbooks, or any other school books, or books about hobbies, or magazines.

The questions in the Dutch questionnaire were asked in Dutch, which is the mother tongue for most of the pupils. The Beijing questionnaire, which was in Chinese and English, explicitly stated that all the questions in the questionnaire were about reading in Chinese, and not about reading in other languages such as English. The Cape Town questionnaire was in English.

The questionnaire consisted of five parts: (1) Reading attitude; (2) Subjective norm; (3) Perceived behavioural control; (4) Reading behaviour; and (5) Background variables.

Part 1: Reading attitude

Reading attitude was measured in different ways to capture both the hedonic (emotional) and the utilitarian (instrumental) dimensions. We used a belief-based scale as well as a semantic differential, considering that a belief-based scale captures the cognitive aspects better while a semantic differential is more appropriate for signalling affective aspects (French et al. 2005). Moreover, the utilitarian and hedonic experiences were inquired about in different items and using both scales (based on Voss et al. 2003; Lewis and Teale 1982; McKenna 2001; Stokmans 1999, 2007). This operationalisation resulted in different indices of reading attitude (see Table 1).

The global hedonic and utilitarian attitudes were made measurable using a semantic differential (5 points). Following Lewis and Teale (1982), four different scales for the belief-based measure were formulated – pleasure, empathy, school, and self-actualisation (fulfilling one’s potential) – employing a 5-point scale (agree – disagree).

Table 1 shows the statistics for scale construction. It indicates that the belief-based measure generated more item non-response than the semantic differential (% missing indicates the percentage of respondents that had at least one item non-response on the corresponding scale). However, all scales are reliable since their Cronbach’s alpha is larger than 0.60 (Nunnally 1978).

Part 2: Subjective norm

Social pressure is another factor which influences adolescents’ reading habits. In TPB this is termed the “subjective norm”, which in our study was determined for the social agents of family and peers separately. For each agent, the subjective norm consists of three aspects: the implicit norm (e.g. parental behaviour), the explicit norm (e.g. parental instruction), and the motivation to comply with the norm (see Table 2). In accordance with Ajzen’s TPB, a subjective norm is the multiplication

Table 1 Scale characteristics for reading attitude

		Number of items	% missing*	Cronbach’s alpha
Hedonic component	Global (affective)	9	9.8	0.95
	Pleasure	4	15.2	0.83
	Empathy	3	13.9	0.66
Utilitarian component	Global (affective)	10	9.6	0.91
	School	4	19.1	0.78
	Self-actualisation	3	15.7	0.74

* percentage of respondents who had at least one item non-response on the items of the scale

Table 2 Scale characteristics for subjective norm

		Number of items	% missing*	Cronbach's alpha
Family	Implicit norm	3	2.3	0.69
	Explicit norm	1	9.2	–
	Motivation to comply	1	6.0	–
Peers	Implicit norm	4	9.8	0.83
	Explicit norm	1	14.2	–
	Motivation to comply	1	10.0	–

* percentage of respondents who had at least one item non-response on the items of the scale

of the normative beliefs (implicit or explicit) and the motivation to comply. We used these compound variables in our further analyses.

Part 3: Perceived behavioural control

For perceived behavioural control, two aspects were distinguished: reading proficiency and appropriateness of the book supply.

Self-assessed reading proficiency was measured in two different ways. First, through the use of a comparative measure in which we asked the respondents to grade themselves and to indicate how well they could read compared to fellow pupils. Since the two questions made use of a different scale, z-scores were used to create a summarised index. Second, we asked pupils whether they experienced difficulties when reading for school. Analysis indicated that these two indicators correlated marginally ($r = 0.11$; $p < 0.05$). Consequently, both indicators were explored in further analyses.

The appropriateness of the book supply was established on the basis of two statements: (1) *There are many storybooks for youngsters like me*; and (2) *There are many storybooks that I think are nice*. Respondents could (dis)agree on a 5-point scale.

Part 4: Reading behaviour

Reading behaviour is operationalised through the amount of reading done, measured in terms of frequency, the number of books read and the time spent on reading (Stalpers 2005; Stokmans 2007). The items thus go into reading frequency (*How often do you read storybooks in your leisure time?* and *When did you last read in a storybook?*), reading volume (*How many storybooks do you read in your spare time?*) and reading time (*How much time did you spend reading storybooks last week?*).

We did not use a diary method, since we believe that reading behaviour often does not show a fixed pattern over time. Particularly with infrequent readers, fixed patterns are absent and the number of infrequent readers is growing, at least it is in the Netherlands, where only 38 per cent of the Dutch population over the age of 12 read for more than 15 minutes in any particular week (Van den Broek et al. 2009).

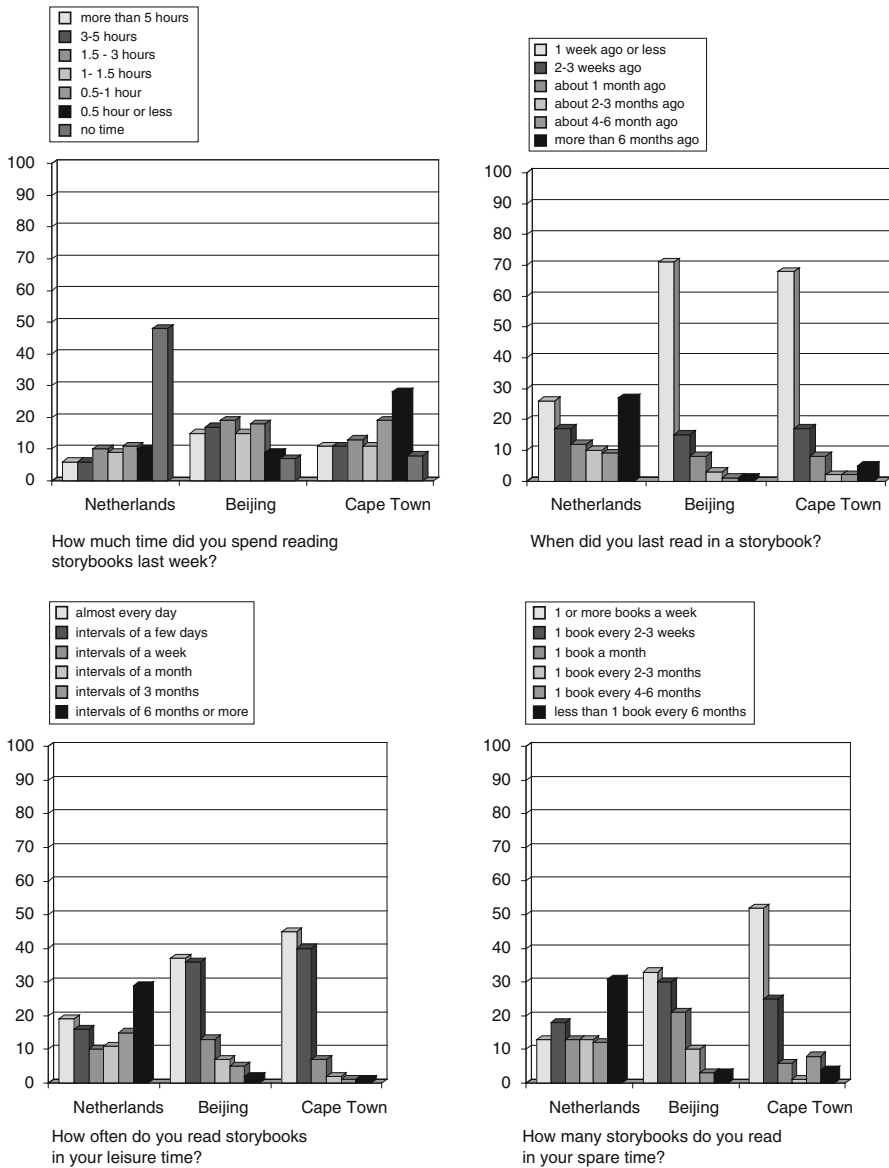


Fig. 2 Responses in percentages to questions on the reading amount

This is why we asked for the time spent on reading in the previous week as well as the reading frequency and reading volume.

The irregularity in reading patterns is illustrated in Fig. 2. The top left-hand graph shows the time spent reading in the previous week. A substantial part of the Dutch respondents (48 per cent) did not read at all that week. For the other respondents, this percentage is much lower (Beijing: 7 per cent and Cape Town:

Table 3 Scale characteristics for perceived behavioural control and reading amount

		Number of items	% missing*	Cronbach's alpha
Reading proficiency	Relative to peers	2	15.8	0.62**
	Reading is easy	4	12.7	0.85
Book supply		2	7.4	0.73**
Reading amount		4	5.9	0.89

* percentage of respondents who had at least one item non-response on the items of the scale

** correlation coefficient

8 per cent). The top right-hand graph of Fig. 2 indicates when respondents last read in a storybook. This graph also shows that only a small proportion of the Dutch respondents had done so in the previous week, namely 26 per cent, while for the Beijing and the Cape Town respondents this percentage is substantially higher (Beijing: 71 per cent and Cape Town: 68 per cent). The bottom left-hand graph indicates how often respondents read storybooks in their leisure time. This graph also shows that quite a lot of Dutch respondents do not read on a weekly basis (only about 35 per cent do) while this percentage is much higher for Beijing (73 per cent) and Cape Town (85 per cent).

The graphs in Fig. 2 indicate that leisure-time reading is probably irregular, especially in the Netherlands. This makes a diary method less appropriate for research, since the time over which respondents would have to track their reading time would be quite long – particularly for irregular readers – for the results to present a reliable picture, with the added disadvantage that irregular readers would probably be least motivated to keep a diary of their reading activities.

The operationalisation of reading behaviour was completed with a fourth question on the number of storybooks read (reading volume; the bottom right-hand graph of Fig. 2). These four questions on reading behaviour that approach reading in three different ways (frequency, time and volume) were taken together and put into a single scale, i.e. the reading amount. Because the response options are not the same for each of the four questions, the z-scores of the variables were used to construct the scale. The internal consistency of the scale for the reading amount is good (Cronbach's $\alpha = 0.89$, see also Table 3).

Part 5: Background variables

In the last part of the questionnaire, participants were asked about their age and gender. Socio-economic status and other background variables, such as educational level and school climate, were not included in the analyses, since TPB assumes that the effects of all background variables are incorporated in attitude, subjective norm and perceived behavioural control (Ajzen 1991). However, research has indicated that in the case of leisure reading among adolescents, effects of age and gender are significant next to the components of TPB (McKenna et al. 1995; Stokmans 1999, 2007).

Results

To get an idea of the relationships within and between the TPB determinants, we broke down our overall research question into the following three more specific questions:

1. What is the relationship between reading amount and each of the indicators of reading attitude, subjective norm and perceived behavioural control? In this exploration, correlations between indicators are *not* accounted for.
2. What is the relationship between each determinant of reading (attitude, subjective norm and perceived behavioural control)? In this exploration, the correlations between the indicators of a *particular* determinant are accounted for.
3. What is the relationship between the determinants of leisure reading and reading amount? In this exploration, the correlations *between* the indicators are accounted for.

Relationships between reading amount and the indicators

Due to the relatively large sample of each region, almost all correlations reported are significant at 5 per cent (see also Table 4). The results of the overall analyses indicate that reading attitude has the highest correlation with reading amount, while

Table 4 Correlations between reading amount and TPB components

	Netherlands	Beijing	Cape Town	Overall
Reading attitude				
Global-hedonic	.726	.388	.140	0.73
Pleasure function	.565	.321	.191	0.46
Emphatic function	.404	.289	.157	0.43
Global-utilitarian	.665	.285	.149	0.68
School function	.366	.273	.116	0.35
Self-actualisation	.346	.299	.162	0.46
Subjective norm				
Explicit norm family	.372	.079*	.009*	0.35
Implicit norm family	.474	.208	.008*	0.44
Explicit norm friends	.376	.166	.034*	0.43
Implicit norm friends	.415	.269	.023*	0.45
Perceived behavioural control				
Book supply	.367	.352	.174	0.30
Relative proficiency	.310	.442	.062*	0.34
Reading ease	.137	.093	.036*	-0.09

* not significant $p > 0.05$

the subjective norm and the perceived behavioural control are more similar in their correlations. These results support the general finding that attitude is most important in predicting behaviour (Ajzen 1991).

However, if we take regional differences into account and look at the correlations for each region separately, noticeable differences appear. Overall two patterns emerge. First, for the Netherlands, we found high correlations between the attitude indicators and reading amount, and lower correlations for both subjective norm indicators and perceived behavioural control with reading amount. Second, for Beijing and Cape Town, we found similar correlations between both attitude indicators and the indicators of perceived behavioural control with reading amount, and lower correlations between subjective norm and reading amount.

If we look more closely at the correlations of each of the determinants mentioned in TPB with reading amount, we notice that the correlations between reading amount and the indicators of reading attitude are most pronounced for the Netherlands and least pronounced for Cape Town. Overall, the results suggest that the hedonic attitude has a higher correlation with the amount of reading than the utilitarian attitude. More striking is that the global, more affective operationalisation of the hedonic as well as the utilitarian component of reading attitude shows a larger impact than the belief-based, more cognitive operationalisation of reading attitude for the Netherlands, while the findings for the global, affective versus the belief-based, cognitive operationalisation are more similar for Beijing and Cape Town.

Regarding the subjective norm, the overall results suggest that the explicit norm of the family has slightly lower influence than the implicit norm of the family or the subjective norm of friends (implicit and explicit). However, these results differ for the regions. The correlations between the reading amount and the aspects of the subjective norm are most pronounced for the Netherlands and least pronounced for Cape Town. What is striking is that for the Netherlands as well as Beijing the implicit norm has a higher impact than the explicit norm, while for Cape Town the reverse appears to be the case. Furthermore, for Beijing and Cape Town, the subjective norms of friends have a somewhat higher influence than those of the family, while the reverse seems to be the case for the Netherlands.

The overall analyses of the last aspect, perceived behavioural control, show that appropriateness of book supply and the relative assessment of reading proficiency (compared to classmates) have a similar correlation with reading amount. Reading ease (*How difficult are schoolbooks?*), however, shows a negative correlation with reading amount. Now the correlations are pronounced both for the Netherlands and for Beijing, but substantially less so for Cape Town. Again regional differences emerge; for the Netherlands and Cape Town the appropriateness of the book supply shows a higher correlation with reading amount, while for Beijing the reading proficiency (relative to classmates) has more influence.

Contribution of each of the TPB determinants to reading amount

Our analysis focuses on the relationship between a specific determinant (reading attitude, subjective norm and perceived behavioural control) and reading amount.

Since we expected correlations between the indicators of each determinant, we first examined the correlations between the indicators themselves.²

Correlations between the indicators of reading attitude show marked differences between the regions. For the Netherlands, the global hedonic and utilitarian attitudes show a high correlation (above 0.70) with one another and these global attitudes also show some moderate correlations (between 0.5 and 0.7) with the separate functions of reading. Furthermore, the pleasure function correlates with both global attitudes and the empathic function. For Beijing the global indicators of attitude also show a strong correlation with one another and the self-actualisation function correlates moderately with all other functions of reading. For Cape Town a different pattern emerges. Here the global hedonic and global utilitarian attitudes are correlated. Moreover, all functions of reading are strongly correlated.

For the subjective norm we see that for the Netherlands, Beijing and Cape Town the implicit and explicit norms of the family correlate with one another, as are the implicit and explicit norms of the friends. For the Netherlands, the implicit norm of the family also correlates with the implicit norm of friends.

For the indicators of perceived behavioural control, no large correlations appear for the Netherlands, Beijing, and Cape Town. However, appropriateness of book supply does correlate with the functions of reading for Cape Town.

On the basis of the correlations between the independent variables we should keep in mind two important points when interpreting the regression analysis. First, the correlation between the indicators of the different determinants mentioned in TPB for the Netherlands and Beijing is not strong. For Cape Town, reading attitude correlates with appropriateness of book supply. Second, the structure of reading attitude differs marginally between regions. For the Netherlands, it is a global (hedonic and utilitarian) attitude with a pronounced pleasure function. For Beijing, it is a global (hedonic and utilitarian) attitude with a pronounced self-actualisation function. And for Cape Town it is strongly associated with the functions of reading.

Table 5 shows the results of the regression analyses for each determinant separately. The overall regression analyses show that attitude has the strongest relationship with reading amount (adjusted $R^2 = 0.591$) and that subjective norm as well as perceived behavioural control have a similar correlation (adjusted R^2 of 0.397 and 0.417 respectively) with reading amount. However, we do notice regional differences. Again, two patterns emerge. First, the pattern for the Netherlands, in which attitude shows the strongest influence, and subjective norm and perceived behavioural control have a similar impact. And second, the pattern of Beijing and Cape Town, in which attitude and perceived behavioural control correlate more strongly with reading amount, and in a more similar correlation than does the subjective norm.

When we look more closely at each of the determinants, more similarities and differences appear. In the overall analysis regarding reading attitude, the global attitudes (hedonic and utilitarian) have a significant influence. Moreover, the pleasure function of the hedonic attitude has a significant impact as well, apart from

² We also calculated the variance inflation factor (VIF) statistics which are indicative of multicollinearity, but for reasons of volume they could not be included in this article.

Table 5 Relationships between reading amount and TPB determinants

	Netherlands		Beijing		Cape Town		Overall	
	b	β	b	β	b	β	b	β
Reading attitude								
Beijing							.457***	.240
Cape Town							.293***	.123
Age	-.079***	-.173	-.052***	-.047	-.006	-.021	-.060***	-.134
Gender	-.072***	-.056	-.020	-.177	-.039*	-.096	-.000	-.000
Global-hedonic	.427***	.494	.178***	.227	.048	.066	.362***	.434
Pleasure function	.073***	.088	.068*	.101	.048	.145	.105***	.127
Emphatic function	.002	.002	.034	.055	.017	.051	-.014	-.017
Global-utilitarian	.155***	.149	.006	.008	.003	.003	.122***	.130
School function	.000	.000	.026	.035	-.054	-.168	-.007	-.008
Self-actualisation function	.014	.015	.063*	.089	.046	.138	.010	.012
Adjusted R ²			.214**		.040*		.591***	
Subjective norm								
Beijing							.731***	.384
Cape Town							.580***	.245
Age	-.102***	-.232	-.069***	-.234	-.028	-.106	-.013**	-.037
Gender	-.185***	-.151	-.043	-.068	-.042	-.078	-.116***	-.204
Explicit norm family	-.019**	-.109	-.014**	-.152	-.003	-.052	-.018***	-.129
Implicit norm family	.104***	.394	.028***	.214	.004	.047	.071***	.330
Explicit norm friends	.014	.071	-.006	-.070	.000	.007	.005	.038
Implicit norm friends	.045**	.137	.030***	.265	.000	-.006	.025***	.126
Adjusted R ²			.323***	.142***	.000		.397***	
Perceived behavioural control								
Beijing							.980***	.515
Cape Town							.736***	.310
Age	-.113***	-.247	-.035***	-.118	-.013	-.050	-.082***	-.183
Gender	-.218***	-.169	-.022	-.040	-.047	-.081	-.011**	-.032
Book supply	.259***	.281	.140***	.231	.070***	.206	.204***	.239
Reading skill (relative)	.206***	.197	.249***	.356	.029	.069	.178***	.193
Reading skill (ease)	.040	.037	.013	.021	.043*	.117	.058***	.065
Adjusted R ²			.283***	.262***	.040***		.417***	

b: unstandardised regression coefficients; β : standardised regression coefficient; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

that of the global hedonic attitude. Looking more closely at the differences between the regions, the global, more affective operationalisation has the largest relevance for the Netherlands (both hedonic and utilitarian). For Beijing, the global hedonic attitude has a major impact. For the more cognitive belief-based operationalisation, the pleasure function has relevance for the Netherlands, while the self-actualisation function has relevance for Beijing. A striking finding for Cape Town is that none of the indicators of attitude show a significant correlation with reading amount.

For the subjective norm, the overall analysis indicates that there is a significantly positive correlation between the implicit norm (family and friends) and reading amount (family is most important), while that between the explicit norm of the family and reading amount is significantly negative. These general trends are also apparent for the Netherlands and Beijing: for both, there is a negative correlation between the explicit norm of the family and reading amount, while the implicit norm (of family and friends) shows a positive correlation with reading amount. However, for the Netherlands, the implicit norm of the family compared to the implicit norm of the friends appears to have a stronger relevance, while the reverse seems to be the case for Beijing. For Cape Town, none of the indicators of subjective norms show a significant correlation with reading amount.

The negative correlation between the explicit norm (of family and friends) and the reading attitude was not expected on the basis of the correlations reported in Table 4. But, for the Netherlands and Beijing, the implicit and explicit norms in fact proved to have a strong correlation with each other. By consequence we explored the partial correlations between the implicit norm, the explicit norm and the reading amount to shed some light on this contradiction. The partial correlations support the results of the regression analysis: a negative correlation between the explicit norm and reading amount and a positive correlation between the implicit norm and reading amount.

Concerning the perceived behavioural control, the overall analysis shows that the appropriateness of book supply has the strongest influence, followed by the reading proficiency relative to classmates, but the perceived reading ease is also significant. Again, we found noticeable similarities between the Netherlands and Beijing in that the appropriateness of the book supply and the reading proficiency relative to classmates are significant, while for Cape Town the book supply and perceived reading ease have a significant correlation with reading amount.

Finally there are the background variables. A noticeable finding is that for Cape Town age and gender hardly have any correlation with reading amount. This is especially noticeable since the TPB factors did not have a correlation with reading amount either. For the Netherlands, age and gender have the expected impact in all the analyses. For Beijing, however, only age turns out to be significant, and no significant correlation with reading amount was detected for gender. In the overall analyses, age has the expected influence, but the significance of gender has disappeared in the analysis with regard to attitude. The overall analyses indicates substantial differences between the regions, which are not accounted for by each determinant.

Contribution of all TPB determinants in describing variations in reading amount

The regression analysis presented in Table 6 provides a certain amount of insight. The overall analysis indicates that TPB describes variations in reading amount quite well (adjusted R^2 is 0.61). Regarding attitude, the global hedonic attitude shows the largest impact, while the global utilitarian attitude and the pleasure function are similar in importance. As regards the subjective norm, the implicit norm has a positive correlation (both family and friends) while the explicit norm has a negative correlation (both family and friends) with the reading amount. The impact of the implicit norms is similar in size and larger (in absolute terms) than the impact of the explicit norms, which are also similar in size. As far as the perceived behavioural control is concerned, the relative reading proficiency has the largest correlation with reading amount, while the appropriateness of the book supply and the perceived reading ease are similar in importance. The background variables, which are exogenous to the model, all matter, except for gender. The dummies for region have the second largest impact of the variables included in the model! This indicates that there are probably differences in the belief and opportunity structures between the regions that are not appropriately accounted for in the model.

Looking at the fit of the model within the regions, the model describes variations in reading amount quite well for the Dutch and the Beijing pupils (adjusted R^2 is 0.59 and 0.31 respectively). However, the model fails to describe differences in reading behaviour for the Cape Town pupils (adjusted R^2 is 0.04). For the Netherlands the results indicate that the hedonic reading attitude (global and the pleasure function) has a large correlation with reading amount. However, the global utilitarian attitude is also significant. The implicit subjective norms of family and friends also show a substantial impact on reading amount. And again we see a significant negative correlation between the explicit norm of the family and reading amount. With regard to the perceived behavioural control, only the perceived reading ease contributes significantly to the model.

For the Beijing region, similar results are found for the subjective norm. However, reading attitude and perceived behavioural control yield different results. For attitude, only the global hedonic and the self-actualisation function are significant, while for perceived behavioural control, the appropriate book supply and the relative reading proficiency contribute significantly to the model. For the Beijing region, the relative reading proficiency shows the largest correlation with reading amount while the hedonic reading attitude is a close second. For Cape Town, only the appropriateness of the book supply contributes significantly to the model.

Discussion

The results of our study suggest that Ajzen's TPB provides a useful framework for describing variations in reading amount across the regions investigated.

The practicability of applying TPB to reading research

The adjustment of the TPB concerns all three components of the theory. The attitude construct was refined in that a hedonic and a utilitarian component were distinguished, and within these components a further distinction was made between predominantly affective (global, semantic differential) and predominantly cognitive (function, belief-based) aspects. This refinement of the attitude construct was inspired by the notion that leisure reading is a hedonic activity (Holbrook and Hirschman 1982, Nell 1988). By consequence, affective experiences are very influential in building reading attitudes. However, reading is also an instrumental activity, being engaged in for school and for gathering general knowledge and insight (self-actualisation), all of which are predominantly cognition-based. The results indicate that this further refinement was useful: the predominantly affective measures contributed significantly to the description of variations in reading amount. However, the predominantly cognitive aspects also showed an effect in the regression analyses. These cognitive aspects provide extra information on what function reading fulfils and they are useful in guiding the promotion of leisure reading activities.

The subjective norm of TPB was further refined as well. First, we made a distinction between an implicit and an explicit norm. This distinction is important since reading is regarded as a desired activity by most adults (the relevant social agents). However, quite a lot of adults do not do much reading themselves. By consequence, what adults *say* in this regard does not correspond to what they *do*; they do not practise what they preach. On the basis of learning theories (persuasive communication and observational learning) one would expect the two types of behaviour to have a differential correlation with the actual reading behaviour of adolescents. The results indicate that this is indeed the case. The correlation between the explicit norm and adolescents' reading amount is a negative one while the relational value of the implicit norm is positive. This differential effect becomes especially clear in the multiple regression analyses, since the implicit and explicit norms are strongly correlated (about 0.80 for each region) with one another. Second, in our application, we followed Ajzen (1991, 2008) by multiplying the normative beliefs and the compliance motivation of each relevant agent, but we did not calculate the sum of the subjective norms over the agents. In our model, each social agent (friends and family) can contribute to the description of variations in reading amount. The advantage of this procedure is that differential influences of social agents can be accounted for. For adolescents, this is important since they are in a transition stage in which the influence of the family is diminishing and the influence of friends is growing. Regarding perceived behavioural control, we made an explicit distinction between the resources of an individual and the opportunities/barriers of the (physical) context.. This distinction is useful for getting a clear picture of the perceived behavioural control regarding leisure reading, which is an activity familiar to all adolescents. Leisure reading can thus be regarded as an easy activity to perform, since one is not normally aware of the resources and opportunities that are needed to actually perform the behaviour. By being asked explicitly about these resources and opportunities, respondents provide a better estimate of their perceived

Table 6 Effects of TPB components on reading amount

	Netherlands		Beijing		Cape Town		Overall	
	b	β	b	β	b	β	b	β
Region								
Beijing							.443***	.233
Cape Town							.251***	.106
Sex	-.062**	-.051	-.009	-.011	-.055	-.106	.002	.006
Age	-.071***	-.161	-.039***	-.131	-.005	-.018	-.057***	-.127
Reading attitude								
Global-hedonic	.378***	.429	.186***	.231	.102	.139	.328***	.393
Pleasure function	.029***	.035	.048	.068	.061	.182	.087***	.105
Emphatic function	.029	.020	-.046	-.071	-.002	-.006	-.017	-.020
Global-utilitarian	.152***	.142	-.064	-.076	-.046	-.061	.097***	.103
School function	.004	.004	-.003	-.003	-.081	-.233	-.008	-.009
Self-actualisation function	.000	.000	.076*	.095	.022	.064	.007	.009
Subjective norm								
Explicit norm family	-.016**	-.093	-.015**	-.158	.000	.001	-.014***	-.099
Implicit norm family	.048***	.183	.021**	.157	.005	.057	.038***	.177
Explicit norm friends	-.008	-.044	-.008	-.087	-.003	-.068	-.008**	-.062
Implicit norm friends	.041***	.126	.022**	.194	.000	.002	.019***	.177
Perceived behavioural control								
Book supply	.017	.018	.077**	.123	.079**	.224	.027*	.032
Reading skill (relative)	.039	.038	.183**	.263	.041	.093	.066***	.071
Reading skill (ease)	.059**	.057	-.028	-.045	.033	.094	.028*	.031
Adjusted R ²	.595		.312		.039		.612	

b: unstandardised regression coefficients; β : standardised regression coefficient; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

behavioural control. The results indicated that the perceived behavioural control contributed substantially to the model. The perceived appropriateness of the book supply as well as the perceived reading proficiency help in describing variations in reading amount in all three regions. However, the role played by reading proficiency is ambiguous. First, it is unclear how it should be operationalised (relative to classmates, based on ease with which schoolbooks are read, or a measure based on self-evaluation). Second, it seems that different operationalisations do not correlate with each other. And third, it seems that different operationalisations have a different correlation with reading amount which differ between the regions. Further research is needed to get a better grasp of the role of reading proficiency.

Our model did not include reading intention. The results indicate that the adjusted R^2 of the overall analysis was 0.61, which is appropriate (Ajzen 2008). However, the overall regression analysis (Table 6) indicates that there are substantial regional differences which are not captured by the model. In our opinion, the perceived behavioural control should be refined. Thus, time pressure, for instance, or the availability of a suitable, quiet place to read, may be crucial in providing opportunities for reading (Kraaykamp and Dijkstra 1999, Kraaykamp 2002).

The correlation analysis regarding the independent variables as well as the regression analysis indicated considerable problems with multicollinearity. These problems were most pronounced in the overall analysis reported in Table 6. The correlation analysis revealed that the correlations were substantial within a determinant of the model (attitude, subjective norm, or perceived behavioural control) but not across determinants. By consequence, the regression coefficients reported are only indicative for the strength of the relationship. This substantial correlation within a determinant suggests that the indicators of a determinant go together, which should be the case. However, the regression analyses indicate that the indicators should not be aggregated into one index, since the indicators show different correlations with reading amount. Yet on the basis of TPB, correlations between the determinants should also be expected, especially between attitude and subjective norm as well as attitude and perceived behavioural control. But the results showed no such correlations. Only marginal correlations (about 0.50) were detected between reading attitude and appropriateness of the book supply.

Similarities and differences between the regions

Reading attitude

In general, the hedonic attitude shows the strongest correlation with reading amount. This goes for all three regions investigated. However, the effect is most pronounced for the Dutch sample and least pronounced for the sample in Cape Town. The utilitarian attitude also contributes to the reading amount, but in a different way in each of the regions. For the Netherlands, the global (hedonic and utilitarian) measures are most predictive, while for Beijing the self-actualisation function contributes significantly.

The results suggest that for the Netherlands reading attitude is more affect-based, since both global measures contribute to the model as well as the pleasure function. For Beijing the structure of reading attitude is somewhat different, with the emphasis on self-actualisation instead of pleasure. But for Cape Town the attitude structure is markedly different. For this region the attitude seems more cognitive, based on the propositions of reading (the reading functions) and less on the general affect associated with reading (the global measures). The structure for Cape Town is actually somewhat surprising. Because the information processing, which is part of the act of reading, generates affective feelings (such as empathy) and cognitive feelings (such as frustration or surprise; Mathewson 1995, Nell 1988, Ganzeboom 1989), we believe that reading is an affective activity that should be reflected in the

attitude (Gawronski and Bodenhausen 2007). The results for Cape Town may suggest that the attitude structure of these respondents is not predominantly affective. This might be the result of a reading socialisation that emphasises the functions and benefits of reading together with a relative short history of intrinsic motivated leisure reading. Ethnographic research is needed to shed light on these reading socialisation issues. However, it might also be the result of cognitivation. The Cape Town respondents relied too much on their knowledge about the benefits of reading and too little on their feelings about reading (Gawronski and Bodenhausen 2007) to determine their attitude or to fill out the attitude questionnaire. Further research in which the semantic differential is examined next to an implicit measure (Fazio 2001, Fazio and Olson 2003) of reading attitude could give more insight into this issue.

Subjective norm

For Beijing and Cape Town we expected the subjective norm to have a larger effect than for the Netherlands, as explained in the introduction. However, the results indicated that this was not the case. The total (direct and indirect) correlation between the subjective norm and reading amount given in Table 5 (since in these regression analyses the attitude and perceived behavioural control are not accounted for) reveals that the subjective norm has the second largest impact for the Netherlands (attitude has the largest), and also the second largest impact for Beijing (perceived behavioural control is most important), while for Cape Town the subjective norm has no significance at all.

And there are more striking similarities between the Netherlands and Beijing. For both regions the implicit norm correlates positively with reading amount. This applies both to the implicit norm of the family, which has the largest effect for the Dutch respondents, and to the implicit norm of friends, which has the largest effect for the Beijing respondents. Furthermore, for both regions the explicit norm of the family has a negative correlation with reading amount, while the explicit norm of friends has none. For the Cape Town region the results suggest similar trends regarding the family: the explicit norm has a negative correlation with reading amount, while the relational figure for the implicit norm is positive. These results suggest that observational learning or modelling (implicit norm) and instruction or persuasion (explicit norm) have quite different effects on the reading amount by adolescents: instruction or persuasion can be counterproductive, while a good example set by the family or friend may be very effective.

In the above it was already noted that the implicit norm of the family has a strong influence on reading amount for the Dutch respondents, while for the Beijing respondents the influence of the implicit norm of friends is strong. This finding cannot be attributed to age (the Dutch sample is somewhat younger), since age (and gender) is (are) controlled for in the analysis. Nor can this effect be attributed to the suggestion that the Beijing respondents are focused more on their friends, since for both the Dutch and Beijing adolescents the explicit norm of the family has a (negative) correlation with reading amount and the relevance of the explicit norm of friends is not significant for either region. Further ethnographic research into the

social structures and behaviour of family and friends is needed to get a clearer picture of the effect family and friends may have on reading amount.

Perceived behavioural control

Due to differences in opportunity structures of the regions, we expected that this factor would be most influential for Cape Town. The results in Table 5 and 6 support this suggestion. In Table 5, the total (direct and indirect) correlation of the perceived behavioural control with reading amount is somewhat smaller than the total correlation of attitude with reading amount. However, the adjusted R^2 reported in the analysis about reading attitude can be attributed mainly to gender. Table 6 indicates that the appropriateness of book supply is the only aspect of TPB that contributes significantly to the variations in reading amount.

The results also show noticeable similarities. For all regions, the appropriateness of book supply has a significant correlation with reading amount. For the Netherlands, however, this correlation disappears if attitude (and subjective norm) is (are) controlled for. For Beijing neither book supply nor subjective norm is marginally correlated with reading attitude, while for Cape Town the book supply correlates with all functions of reading that add to the attitude construct. These correlations with the functions of reading provide an argument why reading attitude does not contribute to the description of variations in reading amount for Cape Town as reported in Table 6, since these variations are already accounted for by book supply.

The effect of perceived reading proficiency is also important for all regions. Table 5 shows that for the Netherlands and Beijing this construct shows its effect by the perceived reading proficiency relative to classmates, and for Cape Town its effect becomes visible by the perceived reading ease, but this effect disappears if attitude and subjective norm are controlled for.

It is striking that reading proficiency contributes to the model next to attitude and subjective norm for the Netherlands and Beijing but not for Cape Town, as this suggests that reading proficiency is not a barrier to reading for Cape Town respondents. This conclusion contrasts with the Progress in International Reading Literacy Study (PIRLS; see Howie et al. 2007 for South Africa), which shows that the levels of reading proficiency in South Africa are among the lowest in the world, which includes their being less good readers than Dutch and Chinese pupils. How can this discrepancy be explained? An answer may be found in the suggestion that for Beijing pupils it is very important to have good reading proficiency, so that they can get good grades at school and be properly prepared for further education (Ying 2003). This tendency is also visible in the attitude component; only for Beijing does self-actualisation play an important role in the attitude structure. By consequence of this achievement motivation, Beijing respondents may be very sensitive to reading achievements of classmates. In the case of Cape Town, none of the adolescents in the classroom can read very well (according to PIRLS) and there is no pressure to do better than average.

Conclusion

The results of this study are in some ways surprising. First, despite large cultural and situational differences between the Netherlands and Beijing, the results show a similar pattern: all three components of TPB contribute to the description of variations in the amount of reading done. The most important determinants are: the hedonic reading attitude, the implicit norm of family and friends, the appropriateness of the book supply, and the perceived reading proficiency. Second, it is surprising that the model fits the Dutch and Beijing situations quite well, but appears to be inappropriate for the Cape Town situation. These results may be attributed to the cognitivation and demand characteristics, or to the barriers to reading perceived in Cape Town (South African respondents are willing to read more, but perceive large barriers to doing so).

This study suggests that the motivation to read, based on reading attitude and social pressure (subjective norms), can only be converted into actual reading behaviour if an adolescent has the *competences* to read (is able to read, has the cultural capital to read) and has the *opportunities* to read (book supply, spare time, peace of mind, and a quiet place). In all three regions the motivation to read is large, in the Netherlands as well as in Beijing and Cape Town. In Cape Town, however, this motivation is not the decisive factor for reading. The perceived appropriateness of the book supply correlates with reading attitude and seems to be most strongly correlated with reading amount. Additional research, involving more regions from more countries differing in reading tradition and opportunity structure, is needed to get a better insight into the relative effects of reading attitude, subjective norm and perceived behavioural control.

Acknowledgments We would like to thank the anonymous reviewers for valuable discussions and comments.

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