Reliability and concurrent validity of a French version of the Youth Self-Report for Francophone youths.

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RELIABILITY AND CONCURRENT VALIDITY OF A FRENCH VERSION OF THE YOUTH SELF-REPORT FOR FRANCOPHONE YOUTHS

by

Christian Wyss

A Dissertation
Submitted to the Faculty of Graduate Studies and Research through Clinical Psychology
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy at the
University of Windsor

Windsor, Ontario, Canada

2000

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ABSTRACT

The objective of the study was to establish basic psychometric information on the Youth Self-Report (YSR) and a French-Canadian version of the Youth Self-Report for a non-referred Canadian sample. A survey of psychologists and psychological associates in Ontario revealed that there were few psychological instruments available to psychologists serving the Francophone population, particularly for personality and emotional assessments (Wyss, 1997). Since bilinguals tend to disclose more when they use their first language (Canino & Spurlock, 1994), the lack of appropriate psychological instruments that can be administered in French may significantly impede evaluation of Francophones. The present study compared adolescent self-report on French and English versions of Achenbach’s Youth Self-Report with parent report on a parallel measure (Child Behavior Checklist, CBCL). Thirty-nine Anglophone girls and 25 Anglophone boys and their parents completed the YSR and the CBCL. Twenty-five Francophone girls and 21 Francophone boys and their parents completed the YSR, a French-Canadian translation of the YSR and the CBCL. Analyses were calculated for the 102 items common to the CBCL and YSR for three summary scores: Internalizing, Externalizing and Total Problems. Univariate analyses of variance indicated that youths reported more Internalizing problems, $F(1,109) = 52.56, p < 0.001$, Externalizing problems, $F(1,109) = 99.87, p < 0.001$, and Total Problems, $F(1,109) = 139.92, p < 0.001$, than did their parents. Comparisons by child gender indicated no significant differences on Internalizing, Externalizing, or Total Problems ($p > 0.05$). The YSR and the French-Canadian YSR (FCYSR) were compared
for the bilingual sample. The Pearson correlations between the two versions were significant, \( r = 0.96 \) to 0.98, \( p \leq 0.001 \). The intra-class correlations were negative. Paired t-tests indicated that Francophone youths for whom French was the prominent language at home reported significantly more Internalizing, \( t (24) = -2.859, p = 0.009 \) and Total Problems, \( t (24) = -2.757, p = 0.011 \) on the French version. Cronbach’s coefficient alpha was 0.85 for Internalizing, 0.83 for Externalizing, and 0.92 for Total Problems. Thirty-five Francophone youths completed the French-Canadian version a second time within approximately 5 days. The test-retest correlations for the FCYSR were high, \( r = 0.85 \) to 0.87, \( p < 0.001 \). The intra-class correlations were low, \( r = 0.17 \) to 0.43, \( p > 0.05 \). Scores decreased significantly between test and retest for Internalizing, \( t (34) = 4.279, p < 0.001 \), Externalizing, \( t (34) = 2.989, p = 0.005 \), and Total Problems, \( t (34) = 4.124, p < 0.001 \). Implications for clinical assessment and research are discussed.
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RELIABILITY AND CONCURRENT VALIDITY OF A FRENCH VERSION OF THE YOUTH-SELF REPORT FOR FRANCOPHONE YOUTHS

CHAPTER I

The impetus for the present study is the ethical and legal obligation that psychologists have to provide services in French to Francophones in Ontario. In Northern Ontario about 20% of the population is Francophone (Statistics Canada, 1997). French is an official language in Canada, and both the Canadian Charter of Rights and Freedom and the Ontario French Language Services Act guarantee several linguistic rights to Francophones in the province of Ontario. In addition, the Guidelines for providers for psychological services to ethnic, linguistic, and culturally diverse populations (American Psychological Association, 1991) recommend that psychologists interact in the language requested by the client. When this is not possible, psychologists are expected to make an appropriate referral. In actual practice, the ideal of providing services in the client's language of choice is impeded by the lack of appropriate resources, validated methods, and finances. Very few tests and materials are available in French, and instruments available in French are lacking in basic psychometric information.

Before undertaking this dissertation study, the author conducted a survey to assess the needs and practices of psychologists and psychological associates able to provide psychological services in French in Ontario (Wyss, 1997). The results indicated that few
instruments are available in French. Most psychologists reported using translated instruments, many of which they had translated themselves.

Intellectual, personality and behavioural assessments are problematic with linguistic minority youths (Figueroa, 1990; Moran, 1990; Williams, 1987). A common practice is to translate an English test into the required language (Krieger Wilen & van Maanen Sweeting, 1986). However, the reliability of the translated instrument still needs to be evaluated in the context of the second language (Sattler, 1990; Vallerand, 1989). One technique uses bilinguals (Sperber, Devellis, & Boehlecke, 1994; Vallerand, 1989). While bilinguals may represent a separate population from the monolingual population (Sperber, Devellis, & Boehlecke, 1994), in particular, in their use of language styles (Brown, 1980; Stern, 1986), Francophones outside Quebec are essentially bilinguals with a great exposure to English (Harrison & Marmen, 1994; Statistics Canada, 1991). Therefore, a study assessing the reliability of a translated instrument for Francophones outside Quebec is justified in relying on bilingual participants. The present study will assess the reliability of a French-Canadian version of the Youth Self-Report (Achenbach, 1991d).

In the following sections, a number of topics will be reviewed to provide a context for the present study. The first will be a description of the identity of the francophone minority outside Quebec. Research conducted with Hispanics and Asians in the United States (Figueroa, 1990; Malgady, Rogler, and Costantino, 1987; Puente, 1990) provides a useful foundation for conducting research with linguistic minority groups, even though the
context of the linguistic minority groups in the United-States is not directly analogous to that of Francophones in Canada.

The literature on self-report of psychopathology and cross-informant agreement will be reviewed. A complete youth assessment involves obtaining information from both parents and youths, and represents a unique characteristic of youth psychopathology assessment (Kashani, Orvaschel, Burk, & Reid, 1985). Reports of behaviours could be affected by different factors (Jensen, Traylor, Xenakis, & Davis, 1988; Jensen, Xenakis, Davis, & Degroot, 1988), in particular, the type of behaviour on which the report is based. For example, there is greater agreement between informants for externalizing than for internalizing behaviours (Achenbach, McConaughy, & Howell, 1987; Jensen, Traylor et al., 1988; Jensen, Xenakis et al., 1988; Loeber, Green, Lahey, & Southamer-Loeber, 1991a; Moretti, Fine, Haley, & Marriage, 1985). Externalizing symptoms include readily observable behaviours stemming from an individual's recurrent conflicts with others in his or her environment, such as delinquent and aggressive behaviours. In contrast, Internalizing symptoms may be less overt and require more inference on the part of the observer. Internalizing pathology includes anxiety, depression, and somatic symptoms (Conners, 1997).

Cross-cultural research with the Child Behavior Checklist (CBCL) (Achenbach, 1991b) and the Youth Self Report (YSR) (Achenbach, 1991d) reveal reporting trends similar to those of the original American version. Most notable is that youths report significantly more problems than do their parents (Achenbach, Bird, Canino, Phares,
Gould, & Rubio-Stipec, 1990). The present study will also evaluate parent-youth agreement for both an English and French-Canadian sample.

The Identity of the Francophone Minority outside Quebec

The label "ethnic minority children" refers to children whose background is a recognized ethnic group and whose values, customs, way of thinking, or language are significantly different from that of the majority of the society in which they live. Their assimilation into the majority culture may be difficult because they may be physically different, may use a different language, and may have cultural practices that may not be compatible with those of the majority (Sattler, 1990). Most of the data on linguistic minority children in the United States have been gathered from Hispanic and Asian children, as these groups represent the largest linguistic minority group populations (Figueroa, 1990).

Francophones outside Quebec are a linguistic minority that differ significantly from the linguistic minority groups in the United States. The Francophone community outside Quebec is defined by social milieu rather than by biology. That is, there is no single Francophone ethnic group with overt physical characteristics. Francophones can move in and out of the Francophone minority by changing their dominant language, while ethnic groups based on country of origin are locked into their ethnic group. The use of and attachment to the French language is the criterion defining Francophones (Clément, Gauthier, & Noels, 1993).
Little research is available on psychological assessment of the Francophone minority outside Quebec. However, a great deal of research has been conducted with ethnic and language minority groups in the United States and this research may provide a useful foundation for the present study.

Cultural Diversity of Linguistic Minority Children in the United States

Most of the data available on linguistic minority children have been gathered from minority groups in the United States, in particular Hispanics and Asians. These minority groups differ in many aspects from the Francophone minority in Canada. Their language is not recognized as an official language in their adopted country and they may not move in and out of their linguistic group with the same ease as Francophones. Also, besides their use of a different language, other aspects of their ethnic background such as physical differences or cultural practices may distinguish them from the majority culture.

Cultural Identification and Language. Most research on linguistic minorities in the United States has been conducted with Hispanic and Asian children (Figueroa, 1990). Cultural identity is considered in the context of differences between Western (American/European) culture and Latin-American or Asian cultures. In fact, Canino and Spurlock (1994) recommend that clinicians know the cultural compatibility between a youth's country of origin and the culture of the host country. These authors emphasize the importance of considering the children's acquisition of ethnic group patterns and their sense of belonging to that ethnic group. A youth's ethnic identification may be more apparent in certain situations than in others. Identification may also depend on the status
of the group. In addition, identification may depend on the degree of ethnic heterogeneity of the youth's daily life. Changes in a youth's minority group awareness may result from "variation in the socio-cultural milieu, a change in cohort or generational groups, developmental changes, and the interactions among these influences" (Canino & Spurlock, 1994, p. 8). Furthermore, minority parents who are immigrants may try to resist the Americanization of their children. The marked difference between American ways and those of the country of origin can significantly strain the parent-child relationship (Canino & Spurlock, 1994).

The difficulty in defining the concept of "culture" limits a discussion on cultural differences (Miller-Jones, 1989). A first step in understanding a minority group is to define that group (Puente, 1990). According to Puente (1990), several variables can determine group composition: biological, social and legal. The easiest and most accepted variable is biological, such as skin colour. Social and legal variables rely on societal traditions to define membership. In the field of psychological assessment, biology has been the most widely studied variable, but less understood and accepted variables could also assist in determining group membership. These variables include gender, physical status (e.g., disability), social class, and religion (Puente, 1990). In addition, language may also be an important variable in determining group membership. Language is not only a means of communication, but also a means of cognitively structuring the world in a way which is closely related to one's world view, identity, self-concept, and self-esteem (Canino & Spurlock, 1994). Therefore, bilingualism may be more than the knowledge and usage of
two linguistic systems; it may also involve the social dimension encompassed by the languages (Hakuta & Garcia, 1989; Helms, 1992).

**Bilingual Children**

**Statistics on Bilingualism in Canada.** English and French are the official languages in Canada. They are the principal languages the great majority of Canadians use to communicate. The 1996 census indicated that 83% of the Canadian population (22.5 million Canadians) could speak English, 68% (18.4 million) spoke English most often at home, and 60% (16.3 million) identified English as their mother tongue. Thirty-two percent of the Canadian population (8.5 million Canadians) could conduct a conversation in French, 23% (6.3 million) spoke French most often at home, and 24% (6.6 million) identified French as their mother tongue. The 1991 census also indicated that 18% of the population (5 million Canadians) could speak a language other than English or French, 8% (2.3 million) spoke a non-official language most often at home, and 15% (4.1 million) had a non-official language as their mother tongue (Harrison & Marmen, 1994).

English-French bilingualism has increased markedly over the last 40 years. Between 1951 and 1991, the number of English-French bilinguals more than doubled, rising from 1.7 million to 4.4 million Canadians. The 1991 census showed that 86% of all English-French bilinguals lived in Quebec, Ontario, and New-Brunswick. Fifty-five percent of bilinguals are located in Quebec, with the largest concentration in the Montreal area. In Ontario and New-Brunswick, it is mainly the municipalities bordering Quebec that
have the larger proportions of bilinguals (Harrison & Marmen, 1994). Most Francophones in Ontario are bilingual (Harrison & Marmen, 1994) and have a great exposure to English.

Nearly one in four Canadians reports French to be his/her first language. The majority of Francophones are located in Quebec where they represent 83.3% of the population. New Brunswick has the next largest concentration with Francophones representing 34.6% of the population. The Francophone population in Ontario (547,000) is larger than that of New Brunswick, but Francophones in Ontario represent only 5.4% of the population (Boudreau & Nielsen, 1994). The concentration of Francophones is greater in Northern Ontario (19.8%) than it is in Southern Ontario (4.2% of the population) (Statistics Canada, 1991).

Minority groups have a higher rate of bilingualism than do majority groups. At the national level, people reporting French as their mother tongue have an almost five times greater rate of reporting that they speak both English and French than do people who report English as their mother tongue (39% versus 8%) (Harrison & Marmen, 1994). Seventy-four percent of Francophone youths living outside Quebec are able to speak English well enough to conduct a conversation. It is only in New Brunswick that there is a large proportion (50%) of Francophone youth who are unable to speak English. In the other provinces, the percentage of bilingual youths is very high. In Ontario, 82% of Francophone youths are reported to be able to speak English (Statistics Canada, 1991). Furthermore, the rate of bilingualism also varies as a function of age for Francophones and Anglophones. For Francophones, the bilingualism rate is at its peak at ages 20-24, and
stays high at subsequent ages. For Anglophones, the rate of bilingualism is at its peak at ages 15-19, and declines at subsequent ages. For Francophones, the ages correspond to high labour force participation. Anglophones outside Quebec learn French as a second language at school (Harrison & Marmen, 1994), and may not need to use it past grade 9.

The growth or decline of a language depends on one generation passing the language to the next. When both parents have the same official language, the children almost always have that mother tongue. However, of the children of parents who have French as their mother tongue and who live outside Quebec, only 93% have French as their mother tongue; the remaining 7% have English as their mother tongue (Harrison & Marmen, 1994).

**Bilinguals Versus Monolinguals.** A theoretical distinction can be made between two basic types of bilinguals: compound or early bilinguals and co-ordinate or later bilinguals (Lambert, 1969). Compound bilinguals are individuals who have been brought up in a bilingual environment. They have a good command of both of their languages. Both languages form a single conceptual system. Thus, compound bilinguals have a verbal system that is likely to have multiple connections converging on a common set of imaginal representations. For example, the English word "bread" and the French word "pain" would have identical meanings for a compound bilingual (Paivio, 1986).

Co-ordinate bilinguals are individuals who have learned their second language later in life. As a consequence, the two conceptual systems that are acquired through each language are differentiated rather than fused as is the case in the compound bilinguals.
Therefore, co-ordinate bilinguals function like unilinguals in each of their languages. Thus, co-ordinate bilinguals have a verbal system that is likely to have multiple connections activating relatively independent sets of imaginal representations. For example, the English word "bread" may represent a different kind of bread than the French word "pain" (Paivio, 1986). "Bread" may activate the image of a sliced soft bread wrapped in a plastic bag, while "pain" may activate the image of a non-sliced crusty bread in a paper bag.

Bilinguals who learned their second language in a bilingual environment where frequent translation was involved, are likely to have developed strong direct interconnections between translation equivalents. Bilinguals who acquired their two languages independently in different environments where minimal translation was required, are likely to have developed weak direct interconnections between language equivalents. Skilled simultaneous translators would represent one extreme in the number and strength of direct interconnections between language equivalents. At the other extreme, one would hypothetically find bilinguals who acquired their two languages entirely independently, without translation experience. These individuals would find it very difficult to translate directly between their two languages. However, most bilinguals are likely to be somewhere between these two extremes. They may be able to translate many words and expressions with relative ease, and may find it difficult to find appropriate translation equivalents in other cases (Paivio, 1986). Bilinguals may also go in and out of bilingualism (Grosjean, 1989). That is, bilinguals can acquire a second language that gradually replaces their first language, and eventually they may totally forget their first language.
Grosjean (1989) warns that bilingual individuals are not simply two monolingual individuals in one person. Grosjean (1989) argues that monolinguals have been considered to be the norm and that the methods and techniques used to study monolinguals have been applied to the study of bilinguals with several consequences. The first consequence is that bilinguals have been described and evaluated in terms of their fluency in each of their languages. Thus, there is the assumed existence of the perfect bilingual who does equally well in both languages. However, the majority of bilinguals who use both languages in their everyday life are not perfect bilinguals (Grosjean, 1989). They may be proficient using a language in one situation, such as interpersonal communication, but not in another, such as academic situations. They may reach different degrees of proficiency in the two languages and may switch between the two (Hakuta & Garcia, 1989).

A second consequence is that bilinguals are evaluated in terms of monolingual standards. The instruments used to evaluate bilinguals do not take into consideration the purpose, the people, or situations for which each language is used (Grosjean, 1989).

A third consequence is that bilingualism has been considered to be the exception rather than the rule, and that it may have significant effects on an individual's psychology, cognition, and development. However, a very large portion of the world's population is bilingual (Grosjean, 1989). In addition, Grosjean (1989) reports that the literature has not been able to identify a bilingualism variable distinct from other linguistic and socio-cultural factors.
A fourth consequence is that the contacts between the two languages that bilinguals speak are considered to be anomalous and accidental. The ideal bilingual is assumed to function as a monolingual in each language (Grosjean, 1989).

A fifth consequence is that research on bilinguals is conducted in the context of each separate language that the bilingual speaks. Thus, all that is known about bilinguals is biased by a monolingual approach to the topic of bilingualism (Grosjean, 1989).

A sixth consequence is that bilinguals often do not consider that their language competencies are adequate. They take the monolingual view in evaluating their linguistic competence in each of the languages they speak. Often bilinguals report that they neither speak nor write their different language adequately, and they either "strive to reach monolingual norms or hide their knowledge of their 'weaker' language" (Grosjean, 1989, p. 5). Bilinguals are not like a monolingual in their two languages. They may reach different degrees of proficiency in their two languages and they may mentally organise their languages differently than monolinguals.

**Mental Representation in Bilinguals.** According to Grosjean (1989), the co-existence and constant interaction of bilinguals' two languages result in a complete linguistic entity different from that of monolinguals'. Bilinguals have developed competencies in both of their languages that are sufficient for their day-to-day communication needs. Their competencies depend on their situation, the interlocutor or the topic. Therefore, bilinguals' communication abilities cannot be assessed through only one of their languages. Grosjean (1989) suggests that a study of bilingualism should
include the study of the structure and organization of bilinguals' language competencies and should stress the similarities and differences that exist between monolinguals and bilinguals. The dual-coding theory (Paivio, 1986) takes such an approach and provides a useful framework for the study of bilingualism.

Dual-coding theory (Paivio, 1986) hypothesizes that different types of information are represented by different modes. A basic assumption in dual-coding theory is that there are two types of external experiences that are processed cognitively by separate subsystems; the imagery system and the verbal system. The imagery system is specialized for representing and processing non-verbal objects and events, and generating mental images. The verbal system is specialized for dealing with linguistic units or words, and language production (Paivio, 1986). The two systems are structurally and functionally distinct (Clark, 1983; Clark & Paivio, 1987; Paivio, 1986; Paivio & Desrochers, 1980). They differ structurally in the nature of their representations and in the organization of their representations into higher order structures. Verbal information is presumed to be organized sequentially with its meaning determined by the temporal and serial characteristics of the auditory-motor systems involved in the auditory and speech aspects of a language. Imagistic information can be organized sequentially like language, or synchronously, so that different components of a complex object or scene are available simultaneously in memory. For bilinguals, dual-coding theory suggests that there are three independent systems (Paivio, 1986; Paivio & Desrochers, 1980). There is one imagery system and two verbal systems, one verbal system for each language.
In monolinguals, the verbal and imagery systems are assumed to be functionally independent (Clark, 1983; Clark & Paivio 1987; Paivio, 1986; Paivio & Desrochers, 1980). Perceptual and cognitive activities may occur independently in either system. Both systems may be active without the other and both may be active in parallel. However, the two systems are functionally interconnected so that activity in one system can initiate activity in the other. These connections are partial in that they are only available between certain representations in each system. The interconnections are activated in a probabilistic manner, meaning that some pathways are used under certain conditions but not others. How these connections operate is reflected in tasks like naming pictures and creating mental images from words. An important variable in such tasks is concreteness. Concreteness is the capacity of words to elicit images. Imagery and related tasks are easier to perform with concrete concepts like "table" than with abstract concepts like "philosophy." According to dual-coding theory, concrete words have relatively direct access to the imagery system, although they can be coded linguistically as well. Abstract words are generally coded linguistically within the verbal system (Paivio, 1986).

For bilinguals, dual-coding theory also assumes functional independence among the imagery system and the two language systems. The imagery system is independent of both verbal systems. The independence of the imagery system allows bilinguals to perceive, remember, and think about non-verbal objects and events, and to generate mental images without the intervention of their language systems. Verbal thought can also occur without constant input from the non-verbal system, and it is possible for bilinguals to operate
verbally in one language without input from the other language (Paivio, 1986; Paivio & Desrochers, 1980).

Although the three systems are independent, they are connected at a referential level. Verbal activity in either of the bilingual's language systems can be influenced by the imagery system, and the imagery system can be influenced by either of the bilingual's language systems. Thus, referential connections permit the English word "apple" or the French word "pomme" to activate an imaginal representation of an apple, and an appropriately shaped object to activate the word "apple" or the word "pomme." The two verbal systems have referential connections with the imagery system that are partly shared and partly independent. The translation equivalents in the two languages may or may not activate the same imaginal representation depending in part on the manner in which the bilinguals acquired their two languages (Paivio, 1986; Paivio & Desrochers, 1980).

**Language Acquisition and Development.** The literature on language acquisition and development suggests that children as young as 3 years of age are able to differentiate the languages in which they are addressed. Their performance in their languages is similar to that of a monolingual child. The native language does not interfere in a significant way with the development of the second language (Berko Gleason & Bernstein Ratner, 1993; Hakuta & Garcia, 1989). When children learn two languages simultaneously, the structure of each language develops in the same sequence as if each language were learned separately (Berko Gleason & Bernstein Ratner, 1993; Langdon, 1983).
The rate of acquisition of the second language is highly related to the proficiency level in the first language, suggesting that the capacity for each language shares and builds upon a common underlying base (Berko Gleason & Bernstein Ratner, 1993; Hakuta & Garcia, 1989). The acquisition of a first and second language appears to be guided by common principles across languages and is part of the human cognitive system (Berko Gleason & Bernstein Ratner, 1993; Hakuta & Garcia, 1989; McLaughlin, 1987). In the theoretical context of dual-coding theory, children growing up in a bilingual environment would be bilinguals of the compound type since they are exposed to two languages during the same period of their life and both languages share and build upon a common underlying base.

Assessment of Minority and Bilingual Children

Performance on psychological tests and instruments is significantly influenced by non-English language home environments (Figueroa, 1990). However, there is only limited understanding about children with a linguistic minority background, and their needs are often not met adequately (Rosenfield & Esquivel, 1985). In fact, some authors (Vargas & Willis, 1994) argue that clinicians and researchers do not keep up with "the need for development and implementation of culturally responsive assessment methods, prevention programs, interventions, and service delivery systems" (p. 2). These authors (Vargas & Willis, 1994) report that this problem was evident when they invited submissions for a special issue of the Journal of Clinical Child Psychology dealing with
ethnic minority children and adolescents. They did not receive enough submissions for a special issue and published a special section instead.

This lack of research, theoretical and conceptual descriptions of assessment, and intervention strategies with minority children contrasts with the increasing sensitivity and attention that professional organizations give to minority groups (Vargas & Willis, 1994). For example, the Office of Ethnic Minority Affairs of the American Psychological Association (APA) published the "Guidelines for providers of psychological services to ethnic, linguistic, and culturally diverse populations" (APA, 1991). These guidelines were also published in the American Psychologist in 1993 (APA, 1993). The purpose of these guidelines was to "enlighten all areas of service delivery, not simply clinical or counselling endeavours" (p.2). These guidelines provide more specific recommendations for psychologists working with minority groups than do the guidelines of the APA's ethical principles (APA, 1992).

While most of the literature deals with the state of research with minority groups in the United States, the same dearth of research and theoretical or conceptual descriptions of assessment of minority children and adolescents exists in Canada. This shortage of literature is evident for the Francophone minority in Canada. The issue of psychological tests and instruments is a chronic problem for Francophone psychologists (Vallerand, 1989; Wyss, 1997). Every newsletter of the Association francophone de psychologie de l'Ontario (AFPO, Francophone Psychological Association of Ontario) alludes to this problem.
For years, psychologists assumed that minority groups were deficient in important ways. Studies often compared minority groups with the majority group on psychological measures normed on White Anglo samples. Linguistic, cultural, and socio-economic status differences were minimized, or were simply not taken into consideration in the interpretation of test results (Jones & Thorne, 1987), and the differences were attributed to race and hereditary influences (Jones & Thorne, 1987; Sanchez, 1932). Caution about the tests and instruments where language or environmental factors affect test performance were often ignored or misinterpreted. In fact, it has been argued that in this misuse of tests and instruments, the greatest mistakes were made in the treatment of the problems associated with children of bilingual or underprivileged background (Jones & Thorne, 1987; Sanchez, 1934).

**Intelligence Testing.** The question of whether the psychological tests and instruments used in assessment are biased against linguistic and ethnic minorities has been hotly debated (Malgady, Rogler, & Costantino, 1987). Intelligence tests have been particularly criticized because they rely heavily on language (Gonzalez, 1974; Hilliard, 1979; Sanchez, 1932, 1934; Sattler, 1990). In fact, for many years, most studies ignored the effects of a second language on test scores (Figueroa, 1990). However, several lawsuits by linguistic minority groups alleged test bias on the grounds that the tests were administered in the wrong language. Among the key provisions of the judicial settlements was the requirement that children from non-English homes be tested in their home language as well as in English (Figueroa, 1990; Olmedo, 1981). In addition, the Education
for All Handicapped Children Act included a provision that required that testing materials be administered in the child's native language or mode of communication, unless it is clearly not possible (Figueroa, 1990).

A common practice is to translate existing English tests into the required language. The practice was common in the United States and Spanish speaking countries (Krieger Wilen & van Maanen Sweeting, 1986); however, reliable and validated Spanish psychological assessment instruments are becoming available (Figueroa, 1990).

A translation of an English instrument is nothing more than a translation and it does not insure the validity and reliability of the instrument in the context of the second language (Sattler, 1990; Vallerand, 1989). A common translation technique is back-translation (Brislin, 1970; Geisinger, 1994; Jones, 1986; Sperber, Devellis, & Boehlecke, 1994; Triandis & Brislin, 1984; Vallerand, 1989). Back-translation involves translating the original version into a second language, and this translated version is then translated back into the original language by an independent translator with no prior exposure to the instrument. The back-translation is then compared with the original version of the instrument to identify problematic items. However, it has been established that when translators know that their translation will be back-translated, they tend to use wording that favours the faithfulness of the back-translation rather than trying to find the optimal wording in the target language (Geisinger, 1994).

To validate a translated version, researchers use field testing (Sperber, Devellis, & Boehlecke, 1994). The results of the newly translated instrument are compared with the...
results obtained from a previously used and recognized test in the same language, on the same topic, and on the same people. However, this technique is difficult to implement as there is seldom a suitable test available. In addition, if there were already an appropriate test available, it would not make much sense to develop another one (Sperber, Devellis, & Boehlecke, 1994; Vallerand, 1989).

Another evaluation method uses bilingual participants (Sperber, Devellis, & Boehlecke, 1994; Vallerand, 1989). In this approach the original version and the translated version of the test are administered to bilingual individuals in alternating language order. High correlations indicate congruence between the two versions. However, the use of bilingual participants may create some problems. Some lines of research suggest that bilingual individuals differ from monolingual individuals in their semantic structure, their word use, and interpretation (Ellis, Minsel, & Becker, 1989). Also, bilingual individuals may adopt some concepts, values, attitudes, and role expectations of the culture of the second language they have mastered (Sperber, Devellis, & Boehlecke, 1994). Thus, Sperber et al. (1994) suggest that bilinguals may represent a separate population whose responses cannot be generalized automatically to the monolingual population. This limitation is a major problem if the translated test is intended to be used with a monolingual population. However, Francophones outside Quebec are essentially bilinguals and have a great exposure to English (Harrison & Marmen, 1994; Statistics Canada, 1991). In fact, Francophones in Ontario are at risk of being assimilated and losing their use of French (Harrison & Marmen, 1994). Thus, the instrument would be
used with an essentially bilingual population and therefore the use of bilingual participants
to evaluate test equivalence would be justified. In fact, psychologists working with a
French clientele do report switching between English and French in the process of an
assessment (Wyss, 1997).

**Personality and Emotional Testing.** Personality and emotional assessment of
bilinguals has received less attention than cognitive assessment (Moran, 1990), and the
controversy has been less intense (Williams, 1987). An instrument that is popular for
cross-cultural use is the MMPI (Williams, 1987). It has been translated into many
languages and has been used all around the world. The University of Minnesota Press has
published a Spanish version for use in the United States and has a listing of other available
translations (Williams, 1987). The commercially-made Spanish version of the MMPI is
available without any validation study with Hispanic populations. Furthermore, no test
manual for the Spanish version or information about the potential limitations of the
Spanish version are available (Rogers, Flores, Ustad, & Sewell, 1995). These short-
comings are worsened by the fact that considerable differences are found between Anglo-
Americans and Hispanic-Americans on the English version (Rogers et al., 1995;
Whitworth & McBlaine, 1993). There is also a commercial Spanish translation of the
Personality Assessment Inventory available (Rogers et al., 1995). But again, there is no
Spanish manual and no information about the possible limitations of the Spanish version
(Rogers et al., 1995).
Personality assessment with inventory-type indices is problematic since minority status is an important source of variance (Jones & Thorne, 1987). Jones and Thorne (1987) argue that it would be feasible to adapt inventory-type measures to different minority groups. However, such adaptation would be easier to accomplish in a foreign population than on minority populations within national boundaries. Minority groups can be very heterogeneous and evolve within a socio-cultural context that is always changing. Different norms for different minority groups would acknowledge the multicultural aspect of a society; however, it fails to take into consideration factors such as acculturation. To develop different norms for different minority groups would assume that minority groups maintain their culture in a stable and enduring fashion. With different norms, minority group members would be considered as members of only one category. The degree to which they are acculturated to the majority population, and the shared values and perceptions by the minority and majority groups would be obscured (Jones & Thorne, 1987). Furthermore, acculturation may be situation specific. A member of a minority group may act, feel, and speak as a member of the majority group at work, but could speak and maintain a lifestyle that is more like that of the minority group at home (Malgady, Rogler, & Costantino, 1987).

In this context, it may be ill advised to develop new instruments. The development of new instruments may only create confusion in research and practice when similar but different instruments are created to measure the same concept in two languages.
(Vallerand, 1989). Therefore, when a psychological instrument already exists in English, Vallerand (1989) recommends that the instrument be validated in French.

**Influence of a Second Language on Assessment.** Having a second language may affect the outcome of an assessment or a psychiatric interview (Canino & Spurlock, 1994; Malgady, Rogler, & Costantino, 1987; Marcos & Alpert, 1976). Patients in cross-cultural settings may frequently speak the language of the clinician and, as a consequence, the interview and assessment are conducted in the common language (Westermeyer, 1987). However, several problems may result. Bilinguals may experience a loss in their second language fluency when they are under stress (Peck, 1974). In fact, Peck (1974) observed that the greater the stress or the severity of a disorder, the greater the effect on the patient's second language fluency. Second language speakers may be able to communicate their thoughts adequately in their second language in school or at work; however, they may be unable to adequately communicate their feelings in their second language. Feelings are reported with more emotion in the first language. Also, patients disclose significantly more when they use their first language (Canino & Spurlock, 1994). The effort of using a second language may result in an abbreviated history, void of emotional content, and missing important information for appropriate assessment (Marcos & Alpert, 1976; Westermeyer, 1990). Therefore, it may be desirable to conduct the interview and assessment in the patient's primary or preferred language. In fact, the language used may have a significant influence on assessment, prognosis, and outcome (Canino & Spurlock, 1994; Marcos & Alpert, 1976).
The clinician may work in the patient's primary or preferred language. However, unless clinicians have lived and worked in that language, they may not be able to reach an adequate level of comprehension and appreciation of the patient's expressions (Westermeyer, 1987). A survey of 85 Francophones in Ontario revealed that on 33 occasions there have been critical incidents resulting from miscommunication due to language difference between the patient and a physician. The survey also revealed that even bilingual Francophones seek services in French, especially for emergencies, family medicine, care of children and elderly people, and for mental health concerns (Le Regroupement, no. 4, 1996, p. 6).

A study in New Brunswick (St-Amand & Vuong, 1994) showed differences between Anglophones and Francophones regarding access to services in English and French, as well as their perception of mental health. Francophones turn to community groups and family for help. Anglophones rely heavily on psychiatrists, hospitals, and psychiatric institutions for help. The authors (St-Amand & Vuong, 1993) suggest that the political context of mental health services has been developed on an Anglophone conceptualization of mental health services and efficacy, designed by and for an Anglophone majority population. Because few institutional and community resources are provided for the minority Francophone population, they are forced to rely on alternative networks for mental health services.

Language differences may greatly influence interview and assessment outcome. Language is an important issue to consider, and ethical and legal obligations to provide
services in the client's primary or preferred language have been established. The Guidelines for providers of psychological services to ethnic, linguistic, and culturally diverse populations (APA, 1990) include the recommendation for "psychologists to interact in the language requested by the client and, if it is not feasible, make an appropriate referral" (APA, 1990, p. 3). On November 18, 1986, the province of Ontario promulgated the French Language Services Act which guarantees Francophones the accessibility to medical and psychological services in French. French services should be available in designated regions where the Francophone population represents 10% of the general population or in an agglomeration where there are 5000 Francophones (Brazeau, 1992).

There are few reports in the literature that address the reliability of assessment instruments for minority groups. There is a shortage of culturally sensitive and competent professionals, and "an overwhelmed system of care with minimal testing resources" (Canino & Spurlock, 1994). In Ontario, while Francophones are entitled to receive psychological services in French, there is a dearth of psychological tests and instruments in French. As mentioned previously, a survey of registered psychologists and psychological associates able to provide psychological services in French in Ontario (Wyss, 1997) revealed that few psychological instruments are available to them.

Assessment of Youths

Sources of Information. Youth psychopathology assessment is complicated by an important source of error: informant variance. A complete youth assessment involves
obtaining information from both parents and the child. However, when more than one source of information is used, the consequence may be disagreement between informants (Kashani, Orvaschel, Burk, & Reid, 1985; Kazdin, French, Unis, & Esveldt-Dawson, 1983). Thus, one of the most important issues in the assessment of youth psychopathology is to decide who should rate the youth's behaviour and emotional well-being (Kashani et al., 1985; Stanger & Lewis, 1993).

Usually, youths do not refer themselves for assessment or identify themselves as suffering from behavioural or emotional problems. The absence of a perceived problem on the part of the youth may affect his/her motivation to actively participate and co-operate in the assessment and treatment processes. Instead, problems are usually identified by significant others such as parents who view the youth's behaviour as disruptive or disturbing (Kazdin, 1994; Thurber & Osborn, 1993). Therefore, psychologists need to obtain information from parents and other adults as well as from the youths themselves (Achenbach, 1991a; Elliot, Busse, & Greshman, 1993; McConaughy, 1993; McConaughy, Achenbach, & Gent, 1988; McConaughy, Stanger, & Achenbach, 1992). This reliance on others as sources of information is a fundamental characteristic of the process of youth psychopathology assessment (Kashani et al., 1985; Kazdin, French et al, 1983; Stanger & Lewis, 1993).

Clinicians tend to doubt the validity of children's self-reports, and they seek additional information from parents and other adults to validate children's self-reports (Moretti, Fine, Haley, & Marriage, 1985). The concept of cross-informant agreement is a
long standing and important issue for psychologists involved in the assessment of youth psychopathology (Hinshaw, Han, Erhardt, & Huber, 1992; Jensen, Salzberg, Richters, & Watanabe, 1993; Jensen, Traylor, Xenakis, & Davis, 1988; Jensen, Xenakis, Davis, & Degroot, 1988; Kashani et al., 1985; McCombs Thomas, Forehand, Armisted, Wierson, & Fauber, 1990). Moretti et al. (1985) report that the belief that children were considered to be unreliable informants was particularly evident in an early conceptualization of childhood depression. This conceptualization of childhood depression assumed that the overt manifestations of depression were not the same in children as in adults. The approach stressed the importance of assessing behaviours that indicated a masked depression that was not directly expressed in youths' verbal reports. Indeed, most notable inconsistencies have been found in studies of youth depression where only a low degree of agreement between parents' and youths' ratings is obtained (Jensen, Traylor et al., 1988; Kazdin, French et al., 1983). Research has shown that agreement between parents' and youths' ratings is high when specific questions about concrete and observable behaviours are asked (Kashani et al., 1985). Similarly, Jensen, Traylor et al. (1988) found a higher degree of agreement between mothers', fathers', and teachers' ratings for externalizing behaviours than for internalizing symptoms. Overall, research suggests that the best agreement between raters occurs when parents and child rate externalizing behaviours that are obvious and troublesome to parents, and the least agreement between raters occurs for internalized behaviours such as depressed or anxious feelings that may not be evident to parents (Jensen, Xenakis et al., 1988).
Research indicates that raters' reports of behaviour can be affected by a number of factors (Jensen et al., 1993; Jensen, Traylor et al., 1988; Jensen, Xenakis et al., 1988; McConaughy, 1993). Jensen and colleagues (Jensen, Xenakis et al., 1988; Jensen, Traylor et al., 1988) investigated cross-informant rating agreements in non-referred samples limited to military families. While their findings may be limited by the relative homogeneity of the families in terms of socio-economic status, absence of unemployment and other moderating variables, this research represents a unique attempt to study variables that potentially may affect cross-informant agreement (Jensen, Xenakis et al., 1988). In summary, these investigators found that age and family socio-economic status had no major effect on the agreement of parents', teachers', and youths' ratings. However, variables such as frequency of parental contact with the youth, family size, social desirability, family stress, gender, and the youth's characteristic play patterns may affect cross-informants' ratings of youths' problematic behaviour and emotional well-being.

Jensen, Xenakis et al.'s (1988) study did not provide support for an effect of the youths' age on the pattern of responding. Meta-analysis of 119 studies (Achenbach, McConaughy, & Howell, 1987) indicated that there was significantly greater cross-informant agreement for 6- to 11-year-olds than for adolescents. With adolescence, youths may distance themselves from their parents and may take a more independent attitude (Thurber & Osborn, 1993). Frequency and extent of contact do affect raters' report agreement (Jensen, Xenakis et al., 1988; McConaughy, 1993). Furthermore, cognitive changes may have an influence on how behavioural problems and emotional
well-being are conceptualized and understood in adolescence (Thurber & Osborn, 1993). With adolescence, youths may become more sensitive to private information and develop growing confidence in their capacity to take their own position, independent from their parents and their teachers. In a four-year longitudinal study of self-reported problem behaviours from adolescence into young adulthood, no significant changes in self-ratings were observed (Ferdinand, Verhulst, & Wiznitzer, 1995). This finding may indicate that adolescents' ratings stabilize into adulthood.

**Agreement of Informants' Ratings on the CBCL/YSR.** No significant differences in agreement of parental ratings on the CBCL were reported for boys and girls (Achenbach et al., 1987). When youths rate their own behaviour and emotional well-being, both referred and non-referred girls report more problems than do boys of the same age (Achenbach, 1991d). This finding was replicated for referred youths in a study by Thurber and Osborn (1993). Girls' self-ratings were more severe than boys'. However, both parents and teachers tend to endorse more behavioural and emotional problems for both referred and non-referred boys than girls, independent of age (Achenbach, 1991bc). In referred samples, youths' ratings (both males and females) of behavioural and emotional problems were significantly lower in comparison to ratings provided by parents, in particular the mothers' (Thurber & Osborn, 1993; Thurber & Snow, 1990).

The type of symptoms reported may affect the degree of agreement between raters. Achenbach et al. (1987) found greater cross-informant agreement for externalizing than for internalizing problems. Jensen, Traylor et al. (1988) reported higher correlations between
raters for externalizing than for internalizing behaviours. Stanger and Lewis (1993) reported that in their study, cross-informant consistency was highest between mothers' and fathers' ratings on internalizing and externalizing symptoms, and lowest between fathers' and teachers' ratings on internalizing symptoms. Jensen, Xenakis et al. (1988) suggested that the weight of the evidence indicates more stable agreements between mothers', fathers', and youths' ratings when the parents rate externalizing symptoms and when the youth rates internalizing symptoms than when both parents and youth rate both internalizing and externalizing symptoms. Children are in a unique position to report their subjective experiences while it may be difficult for parents to accurately infer children’s internalized pathology (Hinshaw et al., 1992; McCombs Thomas, Forehand, Armistead, Wierson, & Fauber, 1990). Therefore, adults may be better informants than children on externalizing symptoms (Loeber, Green, Lahey, & Stouthammer-Loeber, 1991) and children better informants on internalizing symptoms (Moretti et al., 1985).

Context and Agreement of Informants' Ratings on the CBCL/YSR. Raters' agreement can be affected by the situation in which the raters see the youth and their relationships to the youth (Jensen et al., 1993; Jensen, Traylor et al., 1988; Jensen, Xenakis et al., 1988; McConaughy, 1993). Achenbach, McConaughy, and Howell (1987) reported that a consistent finding in cross-informant agreement studies is the greater agreement between raters who interact with the child in similar contexts, such as mothers and fathers (mean $r = 0.59$) than between raters who interact with the child in different contexts, such as parents and teachers (mean $r = 0.27$). Achenbach, McConaughy, and Howell (1987)
found a mean correlation of 0.25 between report of parents and children and 0.20 between reports of teachers and children. Parents' in-depth knowledge of their child may make them more sensitive raters of their child's behavioural problems and emotional well-being than are more objective raters (Jensen, Xenakis et al., 1988). In fact, greater agreement has been reported between parents when they rate their own child than when they rate an unfamiliar child (Burrows & Kelley, 1983).

Raters' agreement can increase with the youth's tendency to respond in a socially desirable manner; however, Jensen, Xenakis et al. (1988) found only moderate support for this hypothesis. Only modest correlations were found for girls and none for boys.

**Consistency of Self-report on the YSR.** For self-administered instruments such as the YSR, it is important to know the degree of agreement between repeated assessments over a period of time during which the youth's behaviour is expected to remain constant (Achenbach, 1991bd). The test-retest reliability of the YSR was assessed in two ways over a 7 day period for a sample of 50 youths: through Pearson correlations which reflect similarities in rank ordering between the two assessments, and t-test, which reflect the mean magnitudes of the two assessments (Achenbach, 1991d). A reliable instrument should result in a non-significant t-test, with the consequence of failing to reject the null hypothesis (Vallerand, 1989). The use of t-tests for determining test-retest reliability may be problematic since failure to reject the null hypothesis can be interpreted in two ways (Howell, 1992). Howell (1992) suggests that one interpretation for an non-significant result is that it is an inconclusive result and that judgment should be suspended. The
reasoning behind this option is that an hypothesis cannot be demonstrated to be true, but that it can sometimes be demonstrated to be false. Howell (1992) suggests that another interpretation for a non-significant result is to accept the null hypothesis. However, this does not mean that the null hypothesis is demonstrated to be true, but rather, this means that one will act as if the null hypothesis were true until more adequate data are available.

The broad-band syndromes Internalizing and Externalizing were derived through factor analyses. Achenbach (1991d), reported high Cronbach's coefficient alpha for Internalizing (0.89 to 0.91), for Externalizing (0.89), and for Total Problems (0.95). The test-retest data provided by Achenbach (1991d) demonstrated acceptable test-retest reliability for the broad-band syndromes Internalizing $\alpha = 0.80$ and Externalizing $\alpha = 0.81$, and for the Total Problems $\alpha = 0.79$ score.

Age differences were more constant. For the problem scales, the mean Pearson correlations were 0.65 for 11 to 14 year olds and 0.83 for 15 to 18 year olds. For the Total Problems score, the test-retest correlation was 0.70 for 11 to 14 year olds and 0.91 for 15 to 18 year olds. YSR Total Problems ratings by 15 to 18 year olds are as reliable as parents' ratings on the CBCL, but the YSR ratings of 11 to 14 year olds are less reliable (Achenbach, 1991d).

Cross-cultural Use of the CBCL/YSR. The CBCL and YSR have been investigated outside of the United States in different languages. The CBCL/YSR is available in 33 different languages. If a youth cannot read English, but can read another language, the YSR can be given in the youth's reading language. Cross-cultural research
with the CBCL/YSR include epidemiological and factor structure comparisons (Achenbach, 1991d).

Spanish translations of the instrument have been tested in Puerto Rico. "Spanish versions of the CBCL and YSR were prepared from the original English versions using accepted procedures for translation and back translation..." (Rubio-Stipec, Bird, Canino, & Gould, 1990, p. 395). Rubio-Stipec et al. (1990) reported good internal consistency and validity with psychiatrists' judgments of maladjustment for criterion. A pilot study to determine the usefulness of the CBCL in Puerto Rico as a screening instrument for epidemiological research concluded that the CBCL provided adequate sensitivity and specificity for determining the presence or absence of DSM-III diagnosis, clinical study, overall functional impairment, and severity of psychopathology (Bird, Canino, Gould, Ribera, Rubio-Stipec, Woodbury et al., 1987). Epidemiological comparisons of Puerto Rican and U.S. mainland non-referred adolescents revealed a tendency for Puerto Rican parents to report significantly more problems than do mainland parents, while Puerto Rican youths report significantly fewer problems than do mainland youths. However, Puerto Rican and mainland adolescents reported significantly more problems than did their parents.

There was no significant difference between boys and girls and no significant interaction between sex and age or culture for the problem scores on the CBCL. Girls attributed more problems to themselves than did boys, but there was no significant interaction between sex and other variables for the problem scores on the YSR. Overall,
Puerto Rican adolescents and mainland adolescents did not differ significantly in the proportion of Internalizing versus Externalizing items scored (Achenbach, Bird, Canino, Phares, Gould, & Rubio-Stipec, 1990). In another study in Puerto Rico (Bird, Gould, Rubio-Stipec, Staghezza, & Canino, 1991), the authors concluded that the sensitivity of the YSR by itself was poor, with the exception of screening for affective disorders. However, the poor performance of the YSR at discriminating between referred and non-referred groups may be partly attributed to the generally greater role of parental judgment in initiating a referral (Achenbach et al., 1990).

Several studies used a Dutch version of the instrument. The Dutch version was established with the help of a linguist to ensure that the Dutch version referred as specifically as possible to the same behaviours as the original version (Achenbach, Verhulst, Baron, & Althaus, 1987). Epidemiological studies in the Netherlands showed that for non-referred children there was little difference in the behavioural and emotional problems that Dutch and U.S. parents reported. Parents for both nationalities reported more problems for boys, younger children, and children from lower socio-economic status than for girls, older children, and children from upper socio-economic backgrounds (Achenbach, Verhulst, Baron, & Akkerhuis, 1987). Factor analyses of the CBCL for clinically referred Dutch boys (Achenbach, Verhulst, Baron, & Althaus, 1987) and for clinically referred Dutch girls (Verhulst, Achenbach, Althaus, & Akkerhuis, 1988) confirmed the cross-cultural construct validity and generality of most syndromes.
A study comparing problems reported by Australian and American parents of non-referred children revealed that Australian parents reported more problems for their children than did American or Dutch parents. However, patterns were similar for sex, age, socioeconomic status, and Externalizing versus Internalizing problems (Achenbach, Hensley, Phares, & Grayson, 1990).

A Thai version of the CBCL has been investigated. The content and format of the Thai version was designed to be sufficiently similar to the original version to permit cross-cultural comparisons. However, the Thai version was modified in order to be sensitive to Thai culture to detect patterns of behaviours that are important in Thailand. Most competency items are different from the original version. For the problem items, 24 items were added to the original 118 problem items. These additions were derived from data on the referral problems of admissions to Thai child guidance centres (Weisz, Suwanhert, Chaiyasit, Weiss, Achenbach, & Walter, 1987).

A comparison between Thai and American parents of non-referred 6-11 year olds revealed significant differences, but generally of modest magnitude (Weisz et al., 1987). Thai parents rated their children as showing more problems than did American parents. The differences were mainly concentrated in the domain of somatic complaints. Both Thai and American boys exhibited more fighting, impulsivity, and other undercontrolled behaviour than did girls (Weisz et al., 1987).

A study by Auerbach and Lerner (1991) used a Hebrew translation of the CBCL to compare syndromes derived from a sample of clinically referred Israeli boys. A clinical
psychologist and a psychiatrist fluent in both Hebrew and English translated the CBCL items. Seven syndromes were highly correlated with both the American and Dutch syndromes derived from the CBCL. Five Israeli syndromes (immature, unpopular, aggressive, uncommunicative, and odd) were different from the American and Dutch syndromes.

An epidemiological study in Ontario using questions based on the CBCL (Boyle, Offord, Hofman, Catlin, Byles, Cadman et al., 1987; Offord, Boyle, Szatman, Rae-Grant, Links, Cadman et al., 1987) yielded higher problem scores than in the U.S.A., Netherlands, and Thailand. However, the addition of "never" to the CBCL instructions for the 0 category affected the reported prevalence of behaviour problems. Woodward, Thomas, Boyle, Links, and Offord (1989) demonstrated that parents completing the CBCL using the standard instructions "not true" to the definition of the 0 point on the CBCL reported significantly fewer problems than parents responding to the version using the word "never". The addition of the word "never" to the instructions for the 0 point category decreased the use of that category and increased the use of the 1 category.

The Present Study

Psychological assessment of young Francophones in Canada is hindered by lack of appropriate assessment tools with known psychometric properties. The goal of the present study is to assess reliability of a promising self-report measure, Achenbach's Youth Self-Report. The Child Behavior Checklist (CBCL) (Achenbach, 1991b) has been selected for
the present study for two reasons. It is one of the most widely used problem behaviour checklists in both clinical and research settings (Chen, Faraone, Biederman, & Tsuang, 1994; Clarke, Lewinsohn, Hops, & Seely, 1992), and there is a French version of the Youth Self-Report available from the publisher. The version used in the present study was translated by J. Lemay. He asked a bilingual adult and a bilingual adolescent to evaluate the equivalence of the French and English versions of the Youth Self Report and to determine if each item meant the same thing on both versions (J. Lemay, personal communication, June 19, 1997).

The psychometric properties of the French Youth Self Report have not been determined. Assessment of reliability is a necessary first step in establishing the usefulness of the test. There are three basic reliabilities (Corcoran & Fischer, 1987; Sattler, 1990) that address three relevant questions that should be asked of the French-Canadian version as of any new instrument: (a) For bilinguals, are test results comparable across the English and the translated version?, (b) are test results stable for the translated version when examined through test-retest reliability over a 1 week period?, and (c) are the translated items consistent with one another for the broad-bands? These questions should be addressed with reference to translated instruments if they are to be used with non-English speaking populations (Rogers, Flores, Ustad, & Sewell, 1995). The three questions address the consistency of the measure. Before a psychological instrument is made available for general use, a check of its reliability should be carried out (Anastasia, 1989).
It is especially important that instruments used for individual assessment have a high reliability coefficient (Sattler, 1990).

The present study will evaluate the original CBCL and YSR for both an English and French-Canadian population sample to determine the degree of agreement between parent and youth ratings.

**Hypothesis 1: Inter-rater Comparisons.** Research indicates that when non-referred youths rate their own behaviour and emotional well-being, they report more problems than do their parents (Achenbach, Bird et al., 1990). It was therefore hypothesized that both Anglophone and Francophone youths in Canada would endorse more problems on the items common to the CBCL and the YSR than did their parents.

**Hypothesis 2: Gender Comparisons.** Achenbach et al. (1987) reported gender differences in the number of problems reported by non-referred boys and girls. Research on youths self-reporting in the United-States and in Puerto Rico indicated that non-referred girls' self-ratings tend to be more severe than boys self-ratings (Achenbach, 1991d; Achenbach, Bird et al., 1990; Thurber & Osborn, 1993). It was therefore hypothesized that a similar pattern would be observed for both Anglophone and Francophone youths in Canada. It was anticipated that both Anglophone and Francophone girls would rate themselves more severely than would the boys on the YSR.

**Hypothesis 3: English and French YSR Comparisons.** The French version was evaluated by two raters to ensure that the translated items meant the same as in the original version (J. Lemay, personal communication, June 19, 1997). It was therefore anticipated
that the FCYSR and YSR would correlate highly for bilingual youths in Canada.

Furthermore, Achenbach (1991d) reported high Cronbach’s coefficient alpha for the YSR.

It was therefore anticipated that the internal consistency of the FCYSR for the broadbands would also be high.

**Hypothesis 4: Influence of Preferred Language.** Some authors (Canino & Spurlock, 1994; Malgady, Rogler, & Costantino, 1987; Marcos & Alpert, 1976) suggest that having a second language may affect the outcome of an assessment or a psychiatric interview. Bilingual patients tend to disclose significantly more when they use their first language (Canino & Spurlock, 1994). It was therefore hypothesized that bilingual youths will report more problems in their preferred language.

**Hypothesis 5: Test-Retest Reliability.** A relevant question asked of a translated instrument is whether the results obtained with the translated version are stable when evaluated through test-retest reliability over a 1 week period (Rogers et al., 1995). Achenbach (1991d) reported acceptable test-retest reliability for Internalizing, Externalizing and Total Problems scores on the YSR. It was therefore hypothesized that the FCYSR will have Pearson correlation coefficients similar to the YSR.
CHAPTER II

METHOD

Participants

Data were collected between spring 1997 and winter 2000. Data collection was significantly impeded by the government forced amalgamation of school boards during this time period. The details of this situation are described in the Discussion chapter. Participants were also recruited through personal contacts. A total of 136 youths 13 - 18 years of age, and 118 parents participated in the study. Twenty-four youths and 8 parents were excluded due to spoiled or incomplete data because either the parent or the child did not take part in the study or the child skipped pages or only completed the French version. After these exclusions, there remained 110 complete parent-youth dyads (64 girls and 46 boys), and two youth data sets without parent report: one male Francophone YSR/FCYSR data set, and one male Francophone YSR/FCYSR and FCYSR retest data set. Sixty-four Anglophone youths (39 female, 25 male) and 48 Francophone youths (23 female, 25 male) participated.

Procedure

The project was reviewed by the Ethics Committee of the University of Windsor. School Boards in Ontario, Manitoba, Quebec, and Nova Scotia were contacted. If the board agreed to the project, the school principals were approached personally to obtain the authorization to solicit the participation of the students and their parents in the project. If permission was granted, envelopes containing the following were sent to the schools:
Introduction Letters (Appendix A) and Consent Forms (Appendix B) Parent Instructions (Appendix C), Background Information (Appendix D), and the Child Behavior Checklist. Student Services at the school distributed the envelopes to students in grades 8 through 12 who volunteered to take part. The consent form explained what parents had to do. For parents of youths attending a French high school, the school boards requested that all personal communication be made in French only. French school boards were asked to leave an interval of one week between the first and second administrations of the FCYSR.

Parents or guardians were requested to complete the questionnaires and return them as soon as possible. Students participated in the study after parental consent and the completed parent-reported questionnaires were returned to the school.

English students completed the Youth Self-Report administered by Student Services in a group setting in their school. At the beginning of the session, students were given an information sheet to read and were asked to sign a consent form (Appendix B). After the students completed the Youth Self-Report, all the documents were returned by the school. Upon receipt, the questionnaires completed by parents or guardians and by students were coded with an identification number to ensure confidentiality.

Francophone youth completed both the Youth Self-Report and a French-Canadian Youth Self-Report in a group setting in their school. The order of administration of the two forms was counter-balanced. Thirty-five Francophone youths completed the French-Canadian Youth Self-Report a second time. Francophone youths also completed a
bilingual Language Fluency Questionnaire (Appendix E) and a bilingual Language Preference Questionnaire (Appendix F).

Envelopes containing revised instructions for parents and youths (Appendices B and C) were sent out to those participants accessed through personal contacts. The completed questionnaires were returned in their sealed envelopes to the contact person or sent directly to the researcher depending on the situation.

To find a sufficient number of Francophone youths and parents, some participants were recruited from sources outside of the schools. The participants were paid $5 per questionnaire. Nine females and 2 males were recruited through personal contacts. Five males were recruited through the Canada Student Employment Centre.

The Anglophone participants completed the Problem Items of the YSR; their parent completed the Problem Items of the CBCL. The Francophone participants completed the Problem Items of the YSR and the FCYSR, and those parents who chose to participate completed the Problem Items of the CBCL. Twenty female and 15 male Francophone youths completed the Problem items of the FCYSR a second time.

Measures

The following questionnaires were used in the present study. The parents completed a Background Information Questionnaire and the Child Behavior Checklist (CBCL) (Achenbach, 1991b). Anglophone youths completed the Youth Self-Report (YSR) (Achenbach, 1991d). Francophone youths completed the YSR and a French-
Canadian Youth Self-Report (FCYSR), a bilingual Language Fluency Questionnaire, and a bilingual Language Preference Questionnaire.

**The Child Behavior Checklist (CBCL).** The CBCL is a screening instrument for childhood psychopathology and it provides standardized descriptions of behaviour problems of children age 4 to 18 based on parental ratings. A principal-component analysis yielded Internalized and Externalized syndromes, and narrow-band scales varying by age and gender (e.g., Depressed, Uncommunicative, Social Withdrawal). This methodology has been extended to youths' self-reports, with the Youth Self-Report (YSR) for age 11 to 18 (Achenbach, 1991d).

The CBCL items were developed from Achenbach's (1966) behaviour problem checklist. The behaviour problem checklist items were derived from a survey of the existing literature and the case histories of a thousand referred youths. The behaviour problem checklist was designed to be completed by raters who had to decide whether a problem was present or absent based on the youth's case history data. This checklist was eventually adapted to be used by parents. The wording was simplified, the rating choices were expanded to a 0-1-2 indexing of how true an item is of the youth, and new items were added. Several pilot drafts were revised based on item analyses and feedback from parents and clinicians. The final checklist contained 118 problem behaviour items. The purpose of the items is to provide broad but non-redundant information about behaviour problems exhibited by the child. The parents are instructed to score 2 for items that are *very true or often true* of their child now and in the past 6 months; 1 for items that are
somewhat or sometimes true of their child now and in the past 6 months; and 0 for items that are not true of their child now and in the past 6 months. Ambiguity in some items is reduced by asking parents to provide a description of the behaviour. For example, item 28: "Eats or drinks things that are not food—don't include sweets (describe): __." The description given by the parents permits distinction between concern about consumption of junk foods and concern about consumption of non-food items such as dirt or paint. Thus, only the eating of non-comestible substances is scored. In addition, the CBCL gives parents the opportunity to report physical problems without known physical cause and any additional problems that are not covered by the items (Achenbach, 1978, 1991a; Martin, Hooper, & Snow, 1986).

The CBCL was designed to provide information about specific behaviour problems and to identify syndromes of problems. Syndrome scales or narrow-band behaviour problems were identified through principal-component analyses on the behaviour problem items for each sex and age group. To reflect the frequency and pattern of behaviour problems reported for youth of each gender and age group, items that were rated for at least 5% of referred youth in each gender and age group were included in the analysis. The largest factors provided the basis for the behaviour problem scale for that group. For each sex and age group the following syndromes were identified: withdrawal, thought problems, attention problems, delinquent behaviour, and aggressive behaviour. An additional factor for gender problems was identified for the age group 4-11 on both sexes (Achenbach, 1978; 1991a).
Second-order factor analyses of the narrow-band behaviour problems identified two factors: **Externalizing** and **Internalizing**. The two factors reflect a distinction between problems of withdrawal, somatic complaint, and anxiety/depression and problems of delinquent and aggressive behaviour. The two factors are not mutually exclusive. However, youths who have a much higher **Externalizing** than **Internalizing** score may differ in some important aspects from children who have the reverse pattern (Achenbach, 1991a; McConaughy, Achenbach, & Gent, 1988).

**The Youth Self-Report (YSR).** The Youth Self-Report (YSR) (Achenbach, 1991d) was derived from the CBCL. The YSR includes 17 of the same competence items as on the CBCL and 118 problem items. Of the 118 problem items, 102 have counterparts on the CBCL. Sixteen problem items on the CBCL were deemed inappropriate for adolescents and were therefore replaced with 16 socially desirable items. These socially desirable items are not included in the problem score, but they yield background information and can be used as starting points for interviews (Achenbach, 1991c). The YSR items are worded in the first person. The youths are asked to rate themselves on each item on a 0-1-2 scale on how true the item is now and within the past 6 months.

**French Version of the YSR: l'Inventaire personnel de comportements pour jeunes de 11 à 18 ans.** Two French versions of the YSR developed in Quebec are available from the publisher. One is the **Auto évaluation du comportement--pour les âges de 11 à 18 ans.** There are no data available concerning the author of this translation. The other French version is **l'Inventaire personnel de comportements pour jeunes de 11 à 18 ans.** This
version was developed at the Centre d'Accueil St-Joseph de Joliette in Joliette QC by Jacques Lemey. The translation was evaluated for equivalence with the original version by a bilingual adolescent and a bilingual adult (J. Lemey, personal communication, June 19, 1997).

**Background Information Questionnaire.** (Appendix D) The Background Information Questionnaire requires the parent who completed the CBCL to provide information about the language spoken at home as well as the necessary information to determine the socio-economic status (SES). The SES was determined by using the Hollingshead Index (cited in Hopkins, Stanley, & Hopkins, 1990). The Hollingshead Index is likely the most widely used measure of SES in the behavioural sciences. The information required to derived the Index are the parent’s education and occupation. The education scale and the occupation scale are divided into seven levels. An index of social position is obtained by means of a simple calculation. The Hollingshead Index categorizes scores into five social classes (Social class 1 to 5) (Hopkins, Stanley, & Hopkins, 1990). For parents of youth attending a French high school, the questionnaire was in French.

**Determining Language Competency and Preference in Bilinguals.** A common method to evaluate language competency and preference in bilinguals is self-evaluation. Self-evaluation procedures have been shown to correlate highly with proficiency tests of bilingualism (Fishman & Cooper, 1969). In a method developed by Gonzalez-Reigosa (1976) and modified by Vallerand and Halliwell (1983), bilinguals are required to rate their language abilities by rating their reading, writing, listening comprehension, and speaking
skills in both languages on a four-point scale with: (1) poor, (2) fair, (3) good, and (4) very good. The degree of bilingualism is obtained by adding-up all the points endorsed on all the scales. The higher the number of points endorsed, the higher the degree of bilingualism.

Language Fluency Questionnaire. (Appendix E) The method used to evaluate the degree of bilingualism was developed by Gonzalez-Reigosa (1976) and modified by Vallerand and Halliwell (1983). The questionnaire requires the youth to rate on a scale of 1 to 4 with: (1) poor, (2) fair, (3) good, and (4) very good, their ability to read, write, comprehend, and speak both English and French. The items were written in both English and French. Two forms were used so that the order of language presented first could be counterbalanced.

Language Preference Questionnaire. (Appendix F) This questionnaire asked the youth to report which YSR version they preferred, and whether they prefer to use English or French in playing sports/hobbies, to talk about personal matters and problems, and which language they prefer. The items were written in both English and French. Two forms were used so that the order of language presented first was counterbalanced.
CHAPTER III

RESULTS

Demographics.

There were 110 complete parent-youth dyads. The data from 64 girls and their parents, and from 46 boys and their parents were analysed. Geographic origins of data are presented in Table 1. All the participants were between the ages of 13-18, inclusive. Demographic data for the sample are presented in Table 2. The overall age difference between girls ($M = 15.53$, $SD = 1.44$) and boys ($M = 15.31$, $SD = 1.64$) was not significant, $t (110) = 0.74$, $p = 0.46$. There was no significant age difference between the Anglophone ($M = 15.28$, $SD = 1.57$) and the Francophone youths ($M = 15.65$, $SD = 1.45$), $t (110) = 1.27$, $p = 0.21$. The mean socio-economic status for girls ($M = 3.23$, $SD = 0.72$) and for boys ($M = 3.07$, $SD = 0.66$) was not significantly different, $t (110) = 1.19$, $p = 0.24$. There was also no significant difference in the SES for Francophone youths ($M = 3.13$, $SD = 0.58$) and for Anglophone youths ($M = 3.19$, $SD = 0.78$), $t (110) = -0.47$, $p = 0.64$. Finally, there was no difference in age between those who were paid ($M = 14.88$, $SD = 1.02$) and those who were not paid ($M = 15.33$, $SD = 1.58$), $t (110) = 1.607$, $p = 0.111$, and in SES for those paid ($M = 2.87$, $SD = 0.52$) and for those who were not paid ($M = 3.21$, $SD = 0.71$), $t (103) = 1.796$, $p = 0.75$.

The self-reported language preference and fluency of Francophone youths are presented in Table 3. The mean rated fluency for boys was 12.30 ($SD = 2.66$) for English and 12.13 ($SD = 2.72$) for French. The mean rated fluency for girls was 13.96 ($SD = \ldots$)
Table 1

**Geographic origins of data**

<table>
<thead>
<tr>
<th>Province</th>
<th>English dyads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 64 )</td>
</tr>
<tr>
<td>British Columbia</td>
<td>3</td>
</tr>
<tr>
<td>Manitoba</td>
<td>16</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>1</td>
</tr>
<tr>
<td>Ontario</td>
<td>21</td>
</tr>
<tr>
<td>Quebec</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>French dyads</th>
</tr>
</thead>
<tbody>
<tr>
<td>( n = 48 )</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>21*</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

* CBCL missing for two participants, but usable youth data
### Table 2

Means and standard deviations for age, grade, and socio-economic status (SES) of the participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>n</th>
<th>Age</th>
<th>Grade</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglophone girls</td>
<td>39</td>
<td>15.56 (1.52)</td>
<td>10.08 (1.55)</td>
<td>3.28 (0.85)</td>
</tr>
<tr>
<td>Anglophone boys</td>
<td>25</td>
<td>14.84 (1.57)</td>
<td>9.32 (1.55)</td>
<td>3.05 (0.65)</td>
</tr>
<tr>
<td>Francophone girls</td>
<td>25</td>
<td>15.48 (1.30)</td>
<td>9.92 (1.16)</td>
<td>3.16 (0.46)</td>
</tr>
<tr>
<td>Francophone boys</td>
<td>23</td>
<td>15.83 (1.55)</td>
<td>10.13 (1.45)</td>
<td>3.09 (0.67)</td>
</tr>
<tr>
<td>Anglophones</td>
<td>64</td>
<td>15.28 (1.57)</td>
<td>9.78 (1.58)</td>
<td>3.19 (0.78)</td>
</tr>
<tr>
<td>Francophones</td>
<td>48</td>
<td>15.65 (1.45)</td>
<td>9.83 (1.86)</td>
<td>3.13 (0.58)</td>
</tr>
<tr>
<td>Girls</td>
<td>64</td>
<td>15.53 (1.44)</td>
<td>9.87 (1.80)</td>
<td>3.23 (0.71)</td>
</tr>
<tr>
<td>Boys</td>
<td>48</td>
<td>15.31 (1.64)</td>
<td>9.71 (1.56)</td>
<td>3.07 (0.66)</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>15.36 (1.53)</td>
<td>9.87 (1.47)</td>
<td>3.16 (0.69)</td>
</tr>
</tbody>
</table>

**Note.** Background information sheets were missing or incomplete for 3 Anglophone girls, 3 Anglophone boys, and 1 Francophone boy.

Numbers in parentheses are standard deviations.
Table 3

Self-reported language preference and language fluency of Francophone youths

<table>
<thead>
<tr>
<th>Language preference</th>
<th>English</th>
<th></th>
<th>French</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>13.96</td>
<td>1.80</td>
<td>12.40</td>
<td>2.14</td>
</tr>
<tr>
<td>French</td>
<td>12.30</td>
<td>2.66</td>
<td>12.13</td>
<td>2.72</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>12.30</td>
<td>2.66</td>
<td>12.13</td>
<td>2.72</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>12.30</td>
<td>2.66</td>
<td>12.13</td>
<td>2.72</td>
</tr>
</tbody>
</table>

Note. English and French fluency were rated for reading, writing, listening and speaking abilities on a scale with: (1) poor, (2) fair, (3) good, and (4) very good. These scores for each language were then summed to give a total out of 16.
1.80) for English, and 12.40 (SD = 2.14) for French. As is apparent in Table 4, most of the bilingual Francophones (79%) learned both languages at an early age. The remaining 21% learned English after age 6. All the parents of Anglophone youths reported English as the language most often used at home except one who reported Polish. The language spoken in the homes of the Francophone participants was fairly evenly distributed between French and English (Table 5).

Analyses

Power tests were performed based on available data to evaluate the magnitude of the sample size (Howell, 1992; Norman & Steiner, 1999). The lowest degrees of agreement are expected for agreement between parents’ and youths’ ratings. Achenbach (1991d) reported correlations of 0.69 between mothers’ and boys’ ratings, and 0.59 between mothers’ and girls’ ratings. A power test set at 0.80 with an effect size of 0.69 and a significance level of 0.01 suggested that 20 parent-son dyads would be acceptable to compare parents’ and sons’ ratings. For girls, a power test set at 0.80 with an effect size of 0.55 and a significance level of 0.01 suggested that 22 parent-daughter dyads would be acceptable to compare parents’ and girls’ ratings. For analyses of variance, Cone and Foster (1993) report that between a liberal 7 participants per variable and a conservative 20 participants per variable are required.

Hypothesis 1: Inter-rater Comparisons. The analyses involving parents’ reports on the CBCL and youths’ reports on the YSR were performed on the 102 items common to both versions to unconfound the source of any variance. The hypothesis that youths would report more problems than their parents was supported. Univariate analyses of variance were conducted to evaluate simultaneously the effect of Gender, Language, and Informant. Three 2 × 2 between × 2 within (Gender (girls vs. boys) by Language (Anglophones vs. Francophones) by Informant (CBCL vs. YSR)) analyses of variance were performed on the common items for the CBCL and the YSR on the broad band Internalizing and Externalizing, and for Total Problems.
Table 4

Age at which bilingual Francophones learned their two languages

| Age at language acquisition (years) | Males  
(n = 23) | Females  
(n = 25) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>French 0 - 2</td>
<td>n = 5</td>
<td>n = 4</td>
</tr>
<tr>
<td>English 0 - 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French 0 - 2</td>
<td>n = 5</td>
<td>n = 6</td>
</tr>
<tr>
<td>English 3 - 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French 0 - 2</td>
<td>n = 8</td>
<td>n = 2</td>
</tr>
<tr>
<td>English 7 - 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English 0 - 2</td>
<td>n = 5</td>
<td>n = 13</td>
</tr>
<tr>
<td>French 3 - 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

*Parent report of language spoken in the home of Francophone participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>English</th>
<th>French</th>
<th>English &amp; French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>5</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Girls</td>
<td>13</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>
The $2 \times 2 \times 2$ (Gender by Language by Informant) analysis of variance for Internalizing yielded a significant main effect of Informant, $F(1, 109) = 52.56, p < 0.001$. Youths reported significantly more internalizing problems ($M = 11.55, SD = 7.14$) than did their parents ($M = 6.61, SD = 5.67$). This result remained significant at 0.01 when a Bonferroni correction was applied to account for the three analyses of variance. There were no significant interactions. The results of the $2 \times 2 \times 2$ analysis of variance for Internalizing are presented in Table 6.

For Externalizing, the $2 \times 2 \times 2$ (Gender by Language by Informant) analysis of variance yielded a significant main effect of Informant. Youths reported significantly more Externalizing problems ($M = 13.70, SD = 7.24$) than did their parents ($M = 7.28, SD = 5.87$), $F(1, 109) = 99.87, p < 0.001$. This result remained significant at 0.01 when a Bonferroni correction was applied to account for the three analyses of variance. There were no significant interactions. The results of the $2 \times 2 \times 2$ analysis of variance for Externalizing are presented in Table 7.

For Total Problems, the $2 \times 2 \times 2$ (Gender by Language by Informant) analysis of variance yielded a significant main effect of Informant, $F(1, 109) = 139.92, p < 0.001$. Youths reported significantly more problems ($M = 44.39, SD = 19.53$) than did their parent ($M = 22.08, SD = 14.78$). This result remained significant at 0.01 when a Bonferroni correction was applied to account for the three analyses of variance. There were no significant interactions. The results of the $2 \times 2 \times 2$ analysis of variance for Total Problems are presented in Table 8.

Pearson product-moment coefficients were calculated on the common items to assess the degree of agreement between parent and child for Internalizing and Externalizing. The child Internalizing ($M = 11.72, SD = 7.35$) was significantly correlated with the parent Internalizing ($M = 6.61, SD = 5.29$), $r = 0.38, p = <0.001$, and the child Externalizing ($M = 13.70, SD = 7.24$) correlated with the parent Externalizing ($M = 7.74, SD = 6.22$, $r = 0.53, p < 0.001$.
Table 6

2 x 2 x 2 (Gender by Language by Informant) analysis of variance results for Internalizing

<table>
<thead>
<tr>
<th>Source</th>
<th>$F$ (1, 109)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>2.73</td>
<td>0.101</td>
</tr>
<tr>
<td>Language</td>
<td>0.34</td>
<td>0.559</td>
</tr>
<tr>
<td>Informant</td>
<td>52.56</td>
<td>0.001*</td>
</tr>
<tr>
<td>Gender x Language</td>
<td>0.68</td>
<td>0.795</td>
</tr>
<tr>
<td>Gender x Informant</td>
<td>1.95</td>
<td>0.165</td>
</tr>
<tr>
<td>Language x Informant</td>
<td>2.99</td>
<td>0.86</td>
</tr>
<tr>
<td>Gender x Language x Informant</td>
<td>0.116</td>
<td>0.734</td>
</tr>
</tbody>
</table>

* Significant at 0.01 after Bonferroni correction
Table 7

2 x 2 x 2 (Gender by Language by Informant) analysis of variance results for Externalizing

<table>
<thead>
<tr>
<th>Source</th>
<th>$F (1, 109)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.08</td>
<td>0.302</td>
</tr>
<tr>
<td>Language</td>
<td>0.87</td>
<td>0.354</td>
</tr>
<tr>
<td>Informant</td>
<td>99.87</td>
<td>0.001*</td>
</tr>
<tr>
<td>Gender x Language</td>
<td>0.33</td>
<td>0.566</td>
</tr>
<tr>
<td>Gender x Informant</td>
<td>0.39</td>
<td>0.534</td>
</tr>
<tr>
<td>Language x Informant</td>
<td>0.23</td>
<td>0.629</td>
</tr>
<tr>
<td>Gender x Language x Informant</td>
<td>2.80</td>
<td>0.097</td>
</tr>
</tbody>
</table>

*Significant at 0.01 after Bonferroni correction
Table 8

2 x 2 x 2 (Gender by Language by Informant) analysis of variance results for Total Problems

<table>
<thead>
<tr>
<th>Source</th>
<th>$F(1, 109)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.09</td>
<td>0.763</td>
</tr>
<tr>
<td>Language</td>
<td>0.87</td>
<td>0.353</td>
</tr>
<tr>
<td>Informant</td>
<td>139.92</td>
<td>0.001*</td>
</tr>
<tr>
<td>Gender x Language</td>
<td>0.41</td>
<td>0.526</td>
</tr>
<tr>
<td>Gender x Informant</td>
<td>1.69</td>
<td>0.196</td>
</tr>
<tr>
<td>Language x Informant</td>
<td>0.45</td>
<td>0.505</td>
</tr>
<tr>
<td>Gender x Language x Informant</td>
<td>0.01</td>
<td>0.924</td>
</tr>
</tbody>
</table>

*Significant at 0.01 after Bonferroni correction
Hypothesis 2: Gender Comparisons. The hypothesis that girls would report more psychopathology than boys was not supported.

Two sample t-tests were performed on the raw scores of the YSR. Results indicated that girls ($M = 12.59$, $SD = 7.54$) did not rate themselves more severely than boys ($M = 10.02$, $SD = 5.97$) for Internalizing, $t(110) = 2.02$, $p = 0.057$. There was also no significant difference between girls ($M = 13.80$, $SD = 7.18$) and boys ($M = 14.00$, $SD = 7.24$) for Externalizing, $t(110) = -0.15$, $p = 0.88$, and for Total Problems, girls ($M = 45.9$, $SD = 20.60$) and boys ($M = 42.40$, and $SD = 19.30$), $t(110) = 0.92$, $p = 0.36$.

Hypothesis 3: English and French YSR Comparisons. The hypothesis that the English and French versions of the YSR would be significantly correlated was supported. Two approaches are used in the evaluation of translated instruments. They attempt to empirically demonstrate that the translation is closely linked to the original version. One approach involves determining if the translated version is equal to the original version by assessing whether there is a significant difference between the two versions (Khanna, Singh, & Rushton, 1993; Vallerand, 1989). However, the reliance on non significant difference to determine equivalence may be problematic, since a null hypothesis cannot be demonstrated to be true (Howell, 1992). Another approach is to use correlations. This approach has been used in several studies of validation of a translated version (Diaz, 1984; Lubin & Collins, 1985; Palaniappan, 1993, 1994; Powers & Medina, 1984; Rodriguez-Charbonier & Burnette, 1994; Rogers, Flores, Ustad, & Sewell, 1995; Shapurian, Hojat, & Noyerahmadi, 1987; Sperber, Devellis, & Boehlecke, 1994; Valencia & Rankin, 1983; Valencia & Rothwell, 1984; Vance, Blixt, & Elise, 1980).

To evaluate the agreement between the YSR and the FCYSR, correlations and intra-class correlation coefficients were calculated for Internalizing raw scores, Externalizing raw scores, and Total Problems raw scores. The correlation measures the degree to which one variable can be equated to another variable by a linear transformation that minimizes errors of prediction. Intra-class correlation coefficients (Fleiss, 1975) were
calculated between the two versions to determine whether there was systematic change. The intra-class correlation assumes equal variance. It is an additivity index that measures the degree to which one variable can be equated to another variable by adding a constant. Therefore, whereas a correlation using a linear scale definition of agreement, minimizing error, judges a set of paired scores to be in perfect agreement, the intra-class correlation, which assumes equality, judges the same set of paired scores to be in imperfect agreement (McGraw & Wong, 1996). The results of the correlations are presented in Table 9.

Power analyses following the formula proposed by Howell (1992) indicate that at the 0.01 level of significance, the power of the correlations were 0.99 for Internalizing, Externalizing, and Total Problems.

**Internalizing** on the FCYSR ($M = 12.83$, $SD = 7.40$) was significantly correlated with **Internalizing** on the YSR ($M = 11.81$, $SD = 7.73$), $r = 0.97$, $p \leq 0.001$. This correlation remained significant at 0.01 with a Bonferroni correction to account for the three correlations. The intra-class correlation coefficient was negative (-0.35).

**Externalizing** on the FCYSR ($M = 13.54$, $SD = 6.67$) was significantly correlated with **Externalizing** on the YSR ($M = 13.21$, $SD = 6.76$), $r = 0.96$, $p \leq 0.001$. This correlation remained significant at 0.01 with a Bonferroni correction. The intra-class correlation coefficient was negative (-0.90).

The **Total Problems** score of the FCYSR ($M = 44.77$, $SD = 20.51$) was significantly correlated with the **Total Problems** score of the YSR ($M = 43.17$, $SD = 21.99$), $r = 0.98$, $p \leq 0.001$. This correlation remained significant at 0.01 with a Bonferroni correction. The intra-class correlation coefficient was negative (-0.77).

Paired $t$-tests were performed for each item to identify the items that significantly differed on the two versions. There were six items that resulted in a significant difference between the English and the French version. The differences were not significant when corrected for the number of $t$-tests. The items are listed in Appendix H.
Table 9

Youth Self-Report and French-Canadian Youth Self-Report correlations

<table>
<thead>
<tr>
<th>Youth Self-Report (English)</th>
<th>Internalizing</th>
<th>Externalizing</th>
<th>Total Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>$r = 0.97$</td>
<td>$p &lt; 0.001$</td>
<td></td>
</tr>
<tr>
<td>Externalizing</td>
<td>$r = 0.96$</td>
<td>$p &lt; 0.001$</td>
<td></td>
</tr>
<tr>
<td>Total Problems</td>
<td>$r = 0.98$</td>
<td>$p &lt; 0.001$</td>
<td></td>
</tr>
</tbody>
</table>

Note. All correlation coefficients significant at 0.01 after Bonferroni correction
The internal consistency was also calculated using the Cronbach’s coefficient alpha. This is a general reliability coefficient that reflects the extent to which items measure the same characteristic. The coefficient is based on the variance of the test scores and the variance of the item scores (Sattler, 1990). Cronbach’s coefficient alpha was 0.85 for Internalizing, 0.83 for Externalizing, and 0.92 for Total Problems.

**Hypothesis 4: Influence of Preferred Language.** The hypothesis that bilingual youths would report more problems in their preferred language was partially supported. Seventeen bilinguals indicated that they preferred using French and 30 bilinguals indicated preferring using English. To evaluate whether bilinguals’ preferred language influences their rating, two paired t-tests were performed on the YSR and the French Canadian YSR’s raw scores. Separate calculations were made for bilinguals preferring French and those preferring English.

Francophone youth preferring French (n = 17) reported significantly more problems for Internalizing on the FCYSR (M = 13.24, SD = 8.27) than on the YSR (M = 11.67, SD = 8.55), t (16) = -3.18, p = 0.006. This difference remained significant at 0.01 after a Bonferroni correction. Francophone youths preferring French did not report significantly more problems on the FCYSR (M = 12.71, SD = 7.27) than on the YSR (M = 12.41, SD = 7.73), t (16) = -0.77, p = 0.452 for Externalizing or for Total Problems (M = 44.82, SD = 23.52 on the FCYSR and M = 43.06, SD = 24.58 on the YSR, t (16) = -1.86, p = 0.081.

Francophone youths preferring English (n = 27) did not report significantly more problems on the YSR than on the FCYSR for Internalizing (M = 12.26, SD = 7.63 on the YSR and M = 12.85, SD = 6.96 on the FCYSR, t (26) = -1.28, p = 0.212); for Externalizing (M = 14.37, SD = 6.38 on the YSR and M = 14.85, SD = 6.42 on the FCYSR, t (26) = -1.212, p = 0.236, or for Total Problems (M = 45.52, SD = 18.67 on the YSR and M = 46.52, SD = 17.27 on the FCYSR, t (26) = -1.305, p = 0.203).
Several Francophone youths indicated that they preferred English because their friends spoke English, but preferred to use French to discuss problems because that is the language they have grown up speaking. To evaluate if the language used predominantly in the home influenced the youths’ ratings, paired t-tests were performed on the YSR and the FCYSR. Bilinguals for whom French is the predominant language spoken in the home \( (n = 25) \) reported significantly more Total Problems on the French version \( (M = 44.40, \ SD = 20.38) \) than on the English version \( (M = 42.04, \ SD = 21.81), t(24) = -2.757, p = 0.011 \). Bilinguals for whom English is the predominant language spoken in the home \( (n = 20) \) did not report significantly more Total Problems on the English version \( (M = 46.90, \ SD = 19.71) \) than on the French version \( (M = 47.20, \ SD = 18.74), t(19) = -0.394, p = 0.698 \).

To explore whether this trend would also be apparent for Internalizing and Externalizing, the two groups were also compared for these scales. Bilinguals for whom French is the predominant language spoken in the home \( (n = 25) \) reported significantly more problems on the French version \( (M = 13.12, \ SD = 7.56) \) than on the English version \( (M = 11.68, \ SD = 8.14), t(24) = -2.859, p = 0.009 \) for Internalizing. They did not report significantly more problems on the French version \( (M = 13.08, \ SD = 6.22) \) than on the English version \( (M = 12.40, \ SD = 6.70), t(24) = -1.537, p = 0.137 \) for Externalizing. After a Bonferroni correction was applied to account for the three paired t-tests, both the difference for Total Problems and for Internalizing remained significant at 0.05.

Bilinguals for whom English is the predominant language spoken in the home \( (n = 20) \) did not report significantly more problems on the English version \( (M = 12.45, \ SD = 7.58) \) than on the French version \( (M = 12.90, \ SD = 7.19), t(19) = -1.106, p = 0.283 \) for Internalizing. They also did not report significantly more problems on the English version \( (M = 14.90, \ SD = 6.99) \) than on the French version \( (M = 14.95, \ SD = 7.34), t(19) = -0.181, p = 0.858 \) for Externalizing.

**Hypothesis 5: Test Retest Reliability.** Based on dates recorded on the forms by the participants, the mean time between test and retest was 4.87 days \( (SD = 2.94) \) for boys
and 4.94 days ($SD = 2.60$) for girls. To evaluate test-retest reliability of the FCYSR, correlations were calculated between the two administrations of the FCYSR on **Internalizing, Externalizing, and Total Problems**. The results of the correlations are presented in Table 10. Power analyses following the formula proposed by Howell (1992) indicate that at the 0.01 level of significance the power for the correlations were 0.99 for **Internalizing, Externalizing, and Total Problems**. Intra-class correlation coefficients (Fleiss, 1975) were calculated between the two versions to determine whether there was systematic change between the two administrations of the FCYSR.

The correlation between the two administrations of the FCYSR on **Internalizing** ($M = 14.09$, $SD = 7.27$ at test, and $M = 11.30$, $SD = 7.96$ at re-test) was significant, $r = 0.88$, $p < 0.001$. This correlation remained significant at 0.01 with a Bonferroni correction to account for the three correlations. The intra-class correlation was low (0.43). A paired $t$-test revealed a significant decrease in the scores between test ($M = 14.09$, $SD = 7.27$) and retest ($M = 11.30$, $SD = 7.96$) $t(34) = 4.279$, $p < 0.001$ for the FCYSR on **Internalizing**.

The correlation between the two administrations of the FCYSR on **Externalizing** ($M = 13.23$, $SD = 6.11$ at test, and $M = 11.58$, $SD = 5.61$ at re-test) was significant, $r = 0.85$, $p < 0.001$. This correlation remained significant at 0.01 with a Bonferroni correction. The intra-class correlation coefficient was low (0.17). A paired $t$-test revealed a significant decrease in scores between test ($M = 13.23$, $SD = 6.11$) and retest ($M = 11.58$, $SD = 5.61$), $t(34) = 2.989$, $p = 0.005$, for **Externalizing**.

The correlation between the two administrations of the FCYSR on **Total Problems** ($M = 46.77$, $SD = 20.21$ at test, and $M = 39.66$, $SD = 19.63$ at retest) was significant, $r = 0.87$, $p < 0.001$. This correlation remained significant at 0.01 after a Bonferroni correction. The intra-class correlation was low (0.35). A paired $t$-test revealed a significant decrease in scores between test ($M = 46.77$, $SD = 20.21$) and retest ($M = 39.66$, $SD = 19.63$), $t(34) = 4.124$, $p < 0.001$, on **Total Problems**.
Table 10
French Canadian Youth Self-Report test-retest correlation

<table>
<thead>
<tr>
<th>French Canadian Youth Self-Report Retest</th>
<th>Internalizing</th>
<th>Externalizing</th>
<th>Total Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>$r = 0.88$</td>
<td></td>
<td>$r = 0.87$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; 0.001$</td>
<td></td>
<td>$p &lt; 0.001$</td>
</tr>
<tr>
<td>Externalizing</td>
<td></td>
<td>$r = 0.85$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$p &lt; 0.001$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Problems</td>
<td></td>
<td></td>
<td>$r = 0.87$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$p &lt; 0.001$</td>
</tr>
</tbody>
</table>

Note. All correlation coefficients significant at 0.01 after Bonferroni correction.
Paired t-tests were performed for each item to identify the items that significantly differed between test and retest. There were 18 items that resulted in a significant difference between test and retest. The differences were not significant when corrected for the number of t-tests. The items are listed in Appendix H.
CHAPTER IV

DISCUSSION

The results supported the study hypotheses and suggested that the French version of the Youth Self-Report is reliable and generally comparable to the standard English version. Present study results will be reviewed by hypothesis below, followed by a discussion of methodological challenges and directions for future research in this area.

The present study was conducted with a nonclinical sample and the findings may be limited to that population and may not apply to clinical populations. The results of the present study may also have been affected by the difficulties encountered in the sampling process, and the heterogeneity of the sample.

Hypothesis 1: Inter-rater comparisons.

One prediction in the present study was that both Anglophone and Francophone youths would endorse more problems on the YSR than their parents on the CBCL. This hypothesis was supported. Youths reported more problems on Internalizing, Externalizing, and Total Problems. There was better agreement between parent and child for Externalizing, than for Internalizing.

These results are consistent with other studies which found that agreement was higher between parent and child for externalizing than for internalizing types of problems (Achenbach, Bird et al., 1990; Achenbach, McConaughy et al., 1987; Jensen, Traylor et al., 1988; Jensen, Xenakis et al., 1988; Loeber et al., 1991; Stanger & Lewis, 1993).
There were significant differences between parent and child reports. Poor agreement between parent and youth ratings may be perceived as casting doubt on one or both informants (Garrison & Shaffer, 1985), and may be equated with unreliability that needs to be resolved (Kashani, Orvaschel, Burk, & Reid, 1985). Such a perspective neglects the possibility that different informants contribute different but valid information. High degrees of agreement between parent and youth may indicate that their reports could be substituted for one another. Conversely, low degrees of agreement between parent and youth may indicate that their reports could not be substituted for one another, but rather that they supplement each other. Therefore, assessments of youths need to take into account differences between parent and youth ratings. Differences in reports between parents and youths may be as informative as high agreements in reports, as they reflect the variations in perceptions of youths’ functioning in various situations (Achenbach, McConaughy, & Howell, 1987). Multiple perspectives on child problem behaviour are essential for careful assessment. However, according to Hinshaw and Nigg (1999) the field currently lacks the database to make fully informed decisions concerning the primacy of various sources of information.

The literature reports relatively strong cross informant agreement for readily observable aspects of a child’s behavioural repertoire. The present study reported relatively small agreement between parent and youth for externalizing problems. It is possible that the age of the child is an important factor. The children in the present study were older than in other studies reviewed (range 13 - 18 years, \( M = 15.5 \)). The children
were 12 to 16 years old in Achenbach, Bird et al. (1990), 7 to 13 years old in Loeber et al. (1991), 13 years old in Stanger & Lewis (1993), and 7 to 11 years old, with averages of 8.9 and 8.7, in Jensen, Traylor et al. (1988) and Jensen, Xenakis et al. (1988). Research suggests that it is with their mothers that children tend to experience greater intimacy until 11 to 12 years (Buhrmeister, & Furman, 1987). Parents remain the most important confidants for children through ages 15 to 16. However, their importance levels off by around the age of 11, while the importance of peers progressively increases. By ages 15 to 16, youths report that they are significantly more likely to confide in peers than they are to confide in parents (Searight, Thomas, Manley, & Ketterson, 1995). Externalizing problems of younger children are quite obvious in the home and classroom. However, as children enter adolescence, there are areas of youths' behaviours on which parents lack knowledge (McCombs, Thomas et al., 1990; Reynolds, 1988). This is most notably true for drug use, alcohol use, lying, and stealing which require information from the youths (Kashani et al., 1985; McCombs, Thomas et al., 1990; Reynolds, 1998). The adolescents in this non-referred sample may have admitted to externalizing behaviours of which their parents were unaware. Research suggests that there is poor agreement between parents and youths 16 years and older for alcohol, drug use, or missing school (Mannuzza, & Gittelman, 1986). Experimentation with drugs or alcohol is an adolescent experience that is often not disclosed to parents (Brook, Whiteman, & Gordon, 1983; Searight et al., 1995). Adolescents report these behaviours more frequently than their parents (Kashani, Orvaschel, Burk, & Reid, 1985; Mannuzza, & Gittelman, 1986). The present finding is
actually not surprising, as many of the behaviours on this scale are covert in nature (e.g., lying, stealing, alcohol and drug use) and adults may not be aware of their occurrence. These results are consistent with Thomas, Forehand, Armistead, Vierson, & Fauber (1990) and Offord, Boyle, & Racine (1990) who found that youths and their parents disagreed about the presence of socialized aggression, with adolescents reporting significantly more problems than their parents.

In general adolescents as a group are relatively conservative (Cobb, 1992; Lansdown, & Walker, 1991; Weiner, 1992) and for most of them, risk taking behaviours, such as those involved in drinking for example, appear to be part of the normal transition from childhood to adulthood. Developmental changes during adolescence are accompanied by normative increases in substance use and other problem behaviours (Myers, Brown, & Vik, 1998). Adolescents may engage in many behaviours outside the purview of their parents, particularly behaviours their parents would disapprove of (Conners, 1997). Such behaviours are part of the socialization process (Cobb, 1992). The alcoholic drink and the cigarette are important vehicles for getting to meet peers. Early identification of the adolescent who engages in problematic alcohol or substance use is critical. However, recognition of the adolescent who is in trouble with alcohol, drugs, or dieting is not easy. Peers cover for them and parents often fail to notice the problem (Tonkin, Cox, Blackman, & Sheps, 1990). A clinical implication of the findings is that an assessment of adolescents may be incomplete if only one source of data is used.
**Hypothesis 2: Gender comparison.**

Contrary to predictions made, girls did not report more psychopathology than boys, nor were girls more severe in their self-ratings than boys. Achenbach (1991d) reported item by item analyses. There were significant gender effects for 57 of the items, with 42 scored higher by girls. Achenbach did not indicate whether girls in his sample scored higher on the broad bands. The **Internalizing**, **Externalizing** and **Total Problems** scales comprise the same items for both sexes, but to take account of sex differences in scores, **T** scores are based on separate normative samples for each sex. A particular raw score may represent a different degree of deviance for boys and girls. Therefore, in order for girls to report the same amount of psychopathology as boys, they have to report more problems than boys. The present study may not have detected a significant difference between boys and girls because the sample was a non-referred sample. The difference between boys and girls is small in the Normal range (**T** score of 59 and below), but is larger in the Borderline/Clinical range (**T** score of 60 and above). In the Normal range the difference between boys and girls is about 1 to 2 points for a given **T** score, while it is 4 to 5 in the Borderline and Clinical range.

The present sample may have been too small to find a significant 1 point difference between non-referred boys and non-referred girls. For example, for **Externalizing** Achenbach (1991d) reported a 1 point difference between boys and girls on the YSR. However, power tests indicate that with a sample of 518 girls and 536 boys he had a power of 0.63 at the 0.05 level. The present study had a power of less than 0.17. For
Internalizing, power tests suggest that Achenbach had a power of 0.99 at 0.01, while the power of the present study was 0.22 at the 0.05 level. Table 11 reports the means and standard deviations for boys and girls in the present study and for Achenbach’s (1991d) non-referred sample. As Achenbach (1991d) indicated, because of different sample selections, the means and standard deviations are likely going to differ between the samples.

Hypothesis 3: English and French YSR Comparisons.

The hypothesis that the FCYSR and YSR would correlate highly for bilingual youths was supported. The commonly reported Pearson Product Moment Correlations (r) were found to be high and indicate good parallel reliability for the FCYSR when compared to the YSR. The Cronbach’s coefficient alpha were also high suggesting good internal reliability for the broad band scales of the French version. The translated items are homogeneous throughout the broad bands in the FCYSR and are comparable to those reported by Achenbach (1991d) for the YSR. The more conservative intraclass correlations were negative, suggesting variability (McGraw & Wong, 1996) among the bilingual youths self-report on the English and French versions. Some of the variability may be attributed to the bilingual youths’ language. Bilinguals may represent a separate population from the monolingual population (Sperber, Devellis, & Boehlecke, 1994), and the use of a second language may affect the outcome of an assessment (Canino, & Spurlock, 1994; Malgady, Rogler, & Costantino, 1987; Marcos & Alpert, 1976). Bilinguals report feelings with more emotions and disclose more when they use their first
Table 11

YSR mean raw scores and standard deviations for boys and girls in the present study, ages 13 - 18, and non-referred boys and girls reported in Achenbach (1991d), ages 11 - 18.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Present study</th>
<th>Achenbach 1991d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalizing</td>
<td>10.12</td>
<td>6.24</td>
</tr>
<tr>
<td>Externalizing</td>
<td>14.00</td>
<td>7.20</td>
</tr>
<tr>
<td>Total Problems</td>
<td>42.48</td>
<td>19.75</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalizing</td>
<td>12.78</td>
<td>7.88</td>
</tr>
<tr>
<td>Externalizing</td>
<td>13.42</td>
<td>7.21</td>
</tr>
<tr>
<td>Total Problems</td>
<td>45.53</td>
<td>20.84</td>
</tr>
</tbody>
</table>
language (Canino & Spurlock, 1994), and it was hypothesized that bilinguals may endorse more problems on one version over the other depending on their language preference.

**Hypothesis 4: Influence of Preferred Language.**

There was a significant influence of preferred language for Francophones who self-reported a preference for French, on Internalizing but not on Externalizing and Total Problems. There was no difference between the French and the English version for Francophones who indicated preferring English. Francophone youths who preferred English indicated that it was because they "have lots of Anglophone friends", their "friends do", "all my friends speak English", they "have friends who speak only in English", or "most of my friends are English". Francophone youths who preferred French indicated that it was because it was “natural” for them, that they were Francophone or French and felt more comfortable in it, or simply because it was easier. Several youths also indicated that they often talk with their mother or both parents about their problems and that they use French. These comments suggest that Francophone youths may prefer English in a peer context, but actually feel more comfortable speaking French because they have grown up with and identify with the language. More than one-third of the girls and half of the boys who indicated a preference for English had French as their first language and, for the majority, as the sole language of the home.

It might be that the predominant language spoken at home is a better indicator of a youth’s comfort and familiarity with a language than youth self-reported language preference, which may be influenced by environmental factors such as friends. Figueroa
(1990) reported that performance on psychological tests and instruments is significantly influenced by non-English home environment. When the analyses were performed in the present study using the predominant language spoken in the home, Francophones tended to report more problems on the FCYSR than on the YSR. The youths for whom English was the predominant language spoken in the home did not report significantly more problems on the English version of the YSR. Francophones for whom French is the language predominantly used at home may behave more like coordinate (Paivio, 1986) bilinguals. They are unilingual at home and develop a strong conceptual system for French. It is outside the home that they find themselves in a bilingual milieu. They may thus function more as unilinguals in French. Francophones for whom English is the language predominantly used at home, may not have a context in which they can develop a strong French unilingual concept. They may be compound (Paivio, 1986) bilinguals, learning both English and French in a bilingual environment, or they may be like coordinate (Paivio, 1986) bilinguals, having developed a strong conceptual system for English, and then functioning in English as English unilinguals and in French as bilinguals. Only one youth's responses to both versions were the same. He reported anecdotally that he spoke only French with his father and only English with his mother. An implication of the distinction between coordinate and compound bilinguals may be the sensitivity to nuances in the meanings of the translated items.

The two versions are equivalent for Francophones who prefer English or use English in the home. However, for Francophones who speak French at home, the two
versions are not equivalent. The practical implication is that the language used in the home may influence assessment results if the assessment is conducted in a language other than the one spoken in the child’s home.

**Hypothesis 5: Test-retest reliability.**

Correlations were high between test and retest of the French-Canadian version suggesting good reliability over time for the French version. The French version is stable. However, there was a significant tendency for scores to decline from the first to the second rating. Achenbach (1991d) reported a similar trend between test and retest, with significant decreases in scores for Internalizing, Externalizing, and Total Problems, and also for parents’ ratings on the Child Behaviour Checklist (Achenbach, 1991b).

Achenbach (1991b) attributes this decline in scores to a practice effect.

Decrease between test and retest is a common phenomenon for self-report questionnaires (Costello, Burns, Angold, & Leaf, 1993; Hinshaw & Nigg, 1999). Practice effects do not occur to the same degree in all populations, and the decrease in scores seen among normal, non-referred, community samples may not occur in clinical samples (Sattler, 1990; Shaffer, Fisher, & Lucas, 1999). In spite of the practice effect, reliability tends to be greater in either normal samples or in patients with a severe disorder. In such cases, small changes in ratings are unlikely to result in a reclassification of the child’s status. However, children with a mild problem who obtain a score just above the diagnostic threshold pose a problem. A change in response to a single question could change whether the child is in the clinical range or not (Shaffer, Fisher, & Lucas, 1999;
Hinshaw & Nigg, 1999). However, with further repetitions of questionnaire administration, scores tend to increase to levels near or above those obtained from the initial ratings (Hinshaw & Nigg, 1999).

The time lapse between test and retest also influences practice effects, with shorter intervals producing greater practice effects (Sattler, 1990). The goal of the present study was a one week period between test and retest. However, the questionnaires were mailed at the same time to youths who completed them at home, and the instructions were not always followed diligently, thus making practice effects more likely. The time between test and retest was less than five days for many youths.

Another possibility for the decrease in scores is that the meaning of some items is ambiguous, and may be confusing to the respondent. Several times the youths put question marks by questions, seeming to indicate they were unsure of what the question was asking. They may have been confused by being exposed to the English version and being unsure of the French translation, marked it “Not True”. The respondent may also have focussed on and responded to different aspects of the item on the test and the retest, resulting in different ratings between test and retest.

**Methodology**

Data collection for the present study was significantly impeded by political and educational changes going on at the time. Right at the beginning of data collection, the Ontario government instituted a massive educational reform, affecting the school boards as well as the teachers’ workload, and school curriculum. This reform movement caused
great upheaval, disorder and discontent manifested by the strikes of 1997 and 1998. Access to students in the schools was then denied because of the disorder that board amalgamation created; lack of time due to lost class time because of the strikes; teachers feeling overworked, and government mandated Quality of Education evaluations and surveys that took as much as two weeks of class time every semester. As a result, it was necessary to collect data from a much larger geographic area than originally intended, with roughly one-third of the Anglophones coming from a different province than the majority of Francophones. Only small rural schools participated in data collection, and several schools refused to participate because the majority of their parents were not able to read English. The francophone youth in the sample were heterogeneous in their language preference. And, by having youths complete the forms at home, there was little control over the time that elapsed between test and retest. The dates on the questionnaires suggest that many participants completed the retest before the instructed one week time line.

Directions for future research

Youths may report behaviours of which their parents have no knowledge. Further research will be needed to investigate how the degree of agreement between parent and child is affected by the age of the child and the type of behaviours. In addition, Francophone parents could be asked to complete both the CBCL and a French version of the CBCL to determine if the difference between Francophone parents and Francophone youths is due to the language of the scale or the perception of the informant.
The present study identified items that resulted in a significant difference between the English and the French versions of the YSR. Future research could be directed towards the evaluation of the correspondence between various translation options, and attempt to identify more precise and unique translation options to refine the comparability of the two versions. The language spoken in the youth's home may be an important variable to consider, when refining the equivalence between the two versions. Also, Francophone youths who speak French at home reported more problems on the French version of the YSR. Future research will also need to evaluate the French version through external validation. For example, the French and English versions could be administered to depressed Francophone youths to see whether they report more on the French version and whether the French version is more sensitive to their psychopathology.

Finally, test-retest data indicated a significant decrease in the severity of the ratings. Such a tendency is commonly reported in the literature for self-report questionnaires.

Future research could investigate such within-subject fluctuations in self-report questionnaires and the potential influence of items ambiguity on test-retest results.

Conclusion

Three types of reliabilities were established for the FCYSR. The present French-Canadian version of the YSR may be an acceptable alternative for assessing Francophone youth. However, the following points should be kept in mind.

1) The concurrent reliability of the FCYSR with the YSR is good. However, the language spoken at home by the child may influence the assessment outcome if it is
different than the language used for the assessment.  2) The consistency of the FCYSR was good, with the items composing the broad bands being homogeneous.  3) The stability of the FCYSR over a four to five day period was good. However, there was a strong practice effect. Further research is needed to evaluate the FCYSR, in particular, with regard to reliability and validity for referred Francophone youths.
REFERENCES


APPENDIX A

Letter of Introduction to Parents/Guardians
Letter of Introduction to Parents/Guardians  
(English Version)  
Study of the Child Behavior Checklist and the Youth Self-Report  

School year 1998-1999

Dear Parent/Guardian

I am writing to request your permission to allow your child to participate in a study that will be conducted in his/her school. The school principal and the School Board have given their permission for this research to take place.

This study is being conducted as part of the requirements for my doctorate degree in psychology at the University of Windsor and looks at how different versions of a screening agree. I am asking youths in grades 8 through 12 and their parent/guardian to participate. Included is a Consent Form describing my study and what you and your child will be asked to do if you agree to participate.

Involvement in this study will be voluntary and you or your child may withdraw at any time. If you and your child would like to participate in this study, please read the Information Sheet and sign the enclosed Consent Form. You may keep the Information Sheet. Please return the signed consent form and completed questionnaires in the enclosed envelope. A contest has been organized which gives participating parents a chance to win a $60 long distance gift certificate, and a student the chance to win a Your completed consent form is also your ballot for the contest.

If you choose not to participate in this study, please return the form and the unused questionnaires to me in the enclosed envelope.

Please be assured that all information I receive from you and your child will remain confidential. No-one at your child's school will have access to your child's responses or your responses. At no time will your name or the name of your child, or school be identified in written reports of the study findings. The results of this study will be discussed with my academic supervisor and committee. A summary of this study may be published.

If you require any further information about the study, please do not hesitate to contact me at (902) 435-9693. I will be pleased to answer any questions you may have.

Sincerely,

Christian Wyss, M.A.
Lettre d'introduction aux parents/tuteurs
(Inventaire personnel de comportement pour jeunes)

Année scolaire 1998-1999

Cher parent/tuteur,

Je vous écris pour vous demander d'autoriser votre enfant à participer à un projet de recherche qui se tiendra à son école. La direction de l'école et le Conseil des écoles ont donné leur accord à la tenue de ce projet.

Ce projet de recherche fait partie des exigences requises pour l'obtention du degré de doctorat en psychologie clinique à l'Université de Windsor. Ce projet de recherche a pour but d'évaluer comment différentes versions d'un même questionnaire concordent. Je demanderai à tous les jeunes de la 9ème à la 12ème année et à leur parent/tuteur de participer à mon projet. Vous trouverez ci-joint une page d'information décrivant mon projet ainsi que ce que vous et votre enfant aurez à faire si vous acceptez de participer au projet.

La participation au projet est volontaire. Vous et votre enfant pourrez vous retirer du projet quand vous le voudrez. Si vous et votre enfant désirez participer à ce projet, je vous demanderai de lire la Page d'information et de signer le Formulaire de consentement ci-joint. Vous pouvez garder la Page d'information. Détachez le Formulaire de consentement signé et retournez-le accompagné des questionnaires complétés dans l'enveloppe ci-jointe. Le parent d'un étudiant aura une chance (une chance/nombre de participants) de gagner un certificat-cadeau d'appel interurbain de $60, et chaque étudiant aura une chance (une chance/nombre de participants) de gagner une chaîne stéréo portative avec radio, lecteur cassette et CD.

Si vous décidez de ne pas participer à ce projet, je vous demanderai de me retourner ce formulaire et les questionnaires non-remplis dans l'enveloppe ci-jointe.

Toute information que vous ou votre enfant me fournira demeura confidentielle. Personne à l'école de votre enfant n'aura accès aux réponses de votre enfant ou des vôtres. Votre nom et celui de votre enfant, ainsi que le nom de votre école n'apparaîtront sur aucun rapport écrit des résultats de ce projet. Les résultats de ce projet seront discutés avec ma directrice de thèse et les membres de mon comité de thèse. Un résumé de ce projet peut être publié.

Si vous désirez obtenir plus de renseignements au sujet de ce projet, n'hésitez pas de me contacter au (902) 435-9693. Je me ferai un plaisir de répondre à toutes questions que vous pourriez avoir.

Sincèrement,

Christian Wyss, M.A.
APPENDIX B

Consent Forms
Parent/Guardian Consent Form

(English Version)

Study of the Child Behavior Checklist and the Youth Self-Report

Purpose: There are two major purposes to this study. First, this is a study about how parents’ and youths’ versions of the same questionnaire agree. The questionnaire is the Child Behavior Checklist and its equivalent, the Youth Self-Report. These questionnaires are commonly used in schools in the context of academic assessments. The study will provide information about the properties of these questionnaires for youths in Canada.

Second, a part of this study conducted in the French school system will also determine the accuracy and usefulness of a French version of this questionnaire for youths attending French school.

What Participants Do: If you and your child agree to participate in this study, please complete the Child Behavior Checklist (a questionnaire about how you view your child’s behaviours), and the Background Information Sheet. These questionnaires take approximately 25 minutes to complete.

Your child will not be given the opportunity to participate in the study until after your responses and your consent for your child’s participation have been received. Your child will be asked to complete the Youth Self-Report to describe his or her feelings and behaviours. The questionnaire will be administered in your child’s school and will take approximately 20 minutes to complete.

After your child has completed the questionnaire at school he or she will receive a note to inform you of the date of completion. You may want to take this opportunity to discuss the study with your child. Please do not discuss the questions with your child until after your child has completed the questionnaire at school.

Participant’s Rights: If for any reason you or your child do not wish to continue participating once the study is underway, you and your child will be free to decline to answer any question or to discontinue participation at any time without penalty.

The paperwork for this project will be kept confidential. School personnel will not have access to your child’s responses or to your responses. Your names will not appear on any reports of this study.

You may ask questions about the procedure of the study at any time and your questions will be answered.

At the end of the study, the participants will have the chance to win a prize: a $60 long distance gift certificate for one parent, and a portable stereo (CD, tape deck, radio) for one student.

Feedback: Once the study has been completed, you may receive a copy of the summary of the study if you wish. Please put your name and mailing address on the bottom of the consent form if you wish to receive a copy of the summary.

This research has been reviewed by the Ethics Committee at the University of Windsor, and any concerns about the procedures may be addressed to that committee (Chair: Dr. S. Voelker 519-253
Your School Board and school principal have also cleared the procedure for this study.

If you have any questions about participating and would like further information about the study results, please feel free to contact me at any time. You may also contact my advisor, Dr. Sylvia Voelker.

Christian Wyss, M.A.
213-14 Churchill Ct.
Dartmouth NS B2X 1N4
(902) 435-9693

Dr. Sylvia Voelker
Department of Psychology
University of Windsor
Windsor ON N9B 3P4
(519) 253-4232, Ext. 2249
I, ________________________________ HAVE READ THIS CONSENT
(parent/guardian please print name)

FORM AND AGREE TO PARTICIPATE IN THIS STUDY AND I ALSO GIVE

PERMISSION FOR MY CHILD ________________________________ TO
(please print child's name)

PARTICIPATE IN THIS STUDY __________________________________
(signature & relationship to child)

DATE __________________

☐ Yes, I wish to receive a copy of the summary of this study.
☐ No, I do not want a copy of the summary of this study, name and address are for contest purposes only.

Name: ________________________________

Address: ________________________________

_____________________________________

_____________________________________
Formulaire de consentement (parent/tuteur)
(Version française)
(Inventaire personnel de comportement pour jeunes)

But: Ce projet de recherche a deux buts majeurs. Premièrement, c'est un projet de recherche qui va évaluer comment la version pour les parents et la version pour les jeunes d'un même questionnaire concordent. Le questionnaire est le Child Behavior Checklist. Ce questionnaire est couramment utilisé dans le cadre d'évaluations académiques faites à l'école. Le projet permettra d'obtenir de l'information au sujet des propriétés de ce questionnaire pour les jeunes Canadiens.

Deuxièmement, ce projet de recherche va déterminer la précision et l'utilité de la version française du questionnaire pour les jeunes qui vont à l'école française. Il y a peu de ressources disponibles en français. Ce projet représente une étape vers l'amélioration des services psychologiques en français pour la population francophone. Les informations obtenues au cours de cette recherche permettront d'avoir une meilleure connaissance des propriétés de ce questionnaire pour les jeunes francophones.

Ce que les participants feront: Si vous et votre enfant acceptez de participer à cette étude, s'il vous plaît complétez le «Child Behavior Checklist», un questionnaire en anglais sur les émotions et comportements de votre enfant, ainsi que le questionnaire de situation de famille. Vous aurez besoin d'environ 25 minutes pour les compléter. Renvoyez les questionnaires complétés à l'aide de l'enveloppe ci-jointe.

Votre enfant n'a pas la possibilité de participer au projet avant que vos réponses et votre consentement à la participation de votre enfant n'aient été reçus. Votre enfant complétera la version française et anglaise du Youth Self-Report, un questionnaire sur ses émotions et ses comportement, un questionnaire sur la facilité linguistique, et un questionnaire sur la préférence linguistique. Ces questionnaires seront administrés à l'école. Environ 40 minutes seront nécessaires pour compléter ces questionnaires.

Une fois que votre enfant aura complété les questionnaires à l'école, il ou elle recevra une note vous informant de sa participation au projet. Vous pourrez profiter de cette occasion pour discuter de ce projet avec votre enfant. S'il vous plaît, ne discutez pas des questions avec votre enfant avant qu'il ou elle ait complété les questionnaires à l'école.

Les droits des participants: Si pour une raison ou pour une autre vous ou votre enfant décidez que vous ne voulez plus participer une fois que le projet est lancé, vous et votre enfant êtes libres de décliner de répondre à toute question ou de vous retirer à tout moment du projet.

Tous les documents se reportant à ce projet demeureront confidentiels. Personne à l'école de votre enfant n'aura accès aux réponses de votre enfant ou aux vôtres. Votre nom, le nom de votre enfant, et le nom de votre école ne seront mentionnés dans aucun rapport concernant cette étude.

Si vous avez des questions au sujet de la procédure de ce projet de recherche, n'hésitez pas à me les poser et je vous répondrai.
A la fin de l'étude, les participants auront la chance de gagner un prix: un certificat-cadeau d'appel interurbain de $60 pour un parent d'étudiant et une chaîne stéréo portative avec radio, lecteur cassette et CD pour un étudiant/e.

Feedback: Si vous le désirez, vous pourrez recevoir une copie du résumé des résultats de la recherche une fois que le projet sera complété. Si vous désirez recevoir un résumé des résultats du projet, inscrivez votre nom et adresse en bas du Formulaire de consentement.

Ce projet de recherche a été examiné par le Comité d'éthique de l'Université de Windsor. Si vous avez des questions d'ordre éthique au sujet de ce projet, vous pouvez contacter Dr. S. Voelker, Ethics Committee, University of Windsor (519 / 253-4232, ext. 2249). Votre Conseil des écoles et la direction votre école ont également examiné la procédure de ce projet de recherche.

Si vous avez des questions au sujet de la participation à ce projet ou si vous désirez avoir plus d'information au sujet des résultats de cette étude, n'hésitez pas à me contacter. Vous pouvez également contacter ma directrice de thèse, Dr. Sylvia Voelker.

Christian Wyss, M.A.
213-14 Churchill Court
Dartmouth NS B2X 1N4
(902) 435-9693

Dr. Sylvia Voelker
Department of Psychology
University of Windsor
Windsor, ON N9B 3P4
(519) 253-4232, Ext. 2249
MOI, ____________________________, J'AI LU CE FORMULAIRE DE
(nom du parent/tuteur en lettres moulées)

CONSENTEMENT ET J'ACCEPTE DE PARTICIPER A CE PROJET DE RECHERCHE ET

J'AUTORISE EGALEMENT MON ENFANT ____________________________
(nom de l'enfant en lettres moulées)

A PARTICIPER A CE PROJET DE RECHERCHE ____________________________
(signature et relation avec l'enfant)

DATE ____________________

☐ Oui, je désire obtenir une copie des résultats de cette étude une fois qu'ils seront disponibles

☐ Non, je ne désire pas obtenir une copie des résultats de cette étude, mon nom et adresse sont exclusivement pour le concours.

Nom: ____________________________

Adresse: ____________________________

________________________________________

________________________________________

________________________________________
Parent/Guardian Consent Form

Study of the Child Behavior Checklist and the Youth Self-Report

Purpose: There are two major purposes to this study. First, this is a study about how parents' and youths' versions of the same questionnaire agree. The questionnaire is the Child Behavior Checklist and its equivalent, the Youth Self-Report. These questionnaires are commonly used in schools in the context of academic assessments. The study will provide information about the properties of these questionnaires for youths in Canada.

Second, a part of this study conducted in the French school system and with people who have French as their mother tongue, will also determine the accuracy and usefulness of a French version of this questionnaire for francophone youths.

What Participants Do: If you and your child agree to participate in this study, please complete the Child Behavior Checklist (a questionnaire about how you view your child's behaviours), and the Background Information Sheet. These questionnaires take approximately 25 minutes to complete.

Your child needs to complete the Youth Self-Report, a questionnaire about his or her feelings and behaviours. The questionnaire takes approximately 20 minutes to complete.

You may want to discuss the study with your child, but please do not discuss the questions with your child until after your child has completed the questionnaire.

Participant's Rights: If for any reason you or your child do not wish to continue participating once the study is underway, you and your child will be free to decline to answer any question or to discontinue participation at any time.

The paperwork for this project will be kept confidential. Your names will not appear on any reports of this study.

You may ask questions about the procedure of the study at any time and your questions will be answered.

At the end of the study, the participants will have the chance to win a prize: a $60 long distance gift certificate for one parent, and a portable stereo (CD, tape deck, radio) for one child.

Feedback: Once the study has been completed, you may receive a copy of the summary of the study if you wish. Please put your name and mailing address on the bottom of the consent form if you wish to receive a copy of the summary.
This research has been reviewed by the Ethics Committee at the University of Windsor, and any concerns about the procedures may be addressed to that committee (Chair: Dr. S. Voelker 519-253 4232, Ext. 2249).

If you have any questions about participating and would like further information about the study results, please feel free to contact me at any time. You may also contact my advisor, Dr. Sylvia Voelker.

Christian Wyss
92 Gertrude St. E.
North Bay, ON P1A 1K3
(705) 495-1810

Dr. Sylvia Voelker
Department of Psychology
University of Windsor
Windsor ON N9B 3P4
(519) 253-4232, Ext. 2249

(Please return this page in the provided envelope.)

I, ____________________________ HAVE READ THIS CONSENT
(parent/guardian please print name)

FORM AND AGREE TO PARTICIPATE IN THIS STUDY AND I ALSO GIVE

PERMISSION FOR MY CHILD ____________________________ TO
(please print child's name)

PARTICIPATE IN THIS STUDY ____________________________
(signature & relationship to child)

DATE ____________________________

☐ Yes, I wish to receive a copy of the summary of this study.
☐ No, I do not want a copy of the summary of this study, name and address are for contest purposes only.

Name: ____________________________

Address: ____________________________

________________________________________________________________________
Formulaire de consentement (parent/tuteur)
(For personal contacts)
(Inventaire personnel de comportement pour jeunes)

But: Ce projet de recherche a deux buts majeurs. Premièrement, c’est un projet de recherche qui
va évaluer comment la version pour les parents et la version pour les jeunes d’un même
questionnaire concordent. Le questionnaire est le «Child Behavior Checklist». Ce questionnaire
est couramment utilisé dans le cadre d’évaluations académiques faites à l’école. Le projet permettra
d’obtenir de l’information au sujet des propriétés de ce questionnaire pour les jeunes Canadiens.

Deuxièmement, ce projet de recherche va déterminer la précision et l’utilité de la version française.
Il y a peu de ressources disponibles en français. Ce projet représente une étape vers l’amélioration
des services psychologiques en français pour la population francophone. Les informations
obtenues au cours de cette recherche permettront d’avoir une meilleure connaissance des propriétés
de ce questionnaire pour les jeunes francophones.

Ce que les participants feront: Si vous et votre enfant acceptez de participer à cette étude, s’il vous
plait complétez le «Child Behavior Checklist», un questionnaire en anglais sur les émotions et
comportements de votre enfant, ainsi que le questionnaire de situation de famille. Vous aurez
besoin d’environ 25 minutes pour les compléter. Renvoyez les questionnaires complétés à l’aide de
l’enveloppe ci-jointe.

Votre enfant complétera la version française et anglaise du Youth Self-Report, un questionnaire sur
ses émotions et ses comportement, un questionnaire sur la facilité linguistique, et un questionnaire
sur la préférence linguistique. Environ 40 minutes seront nécessaires pour compléter ces
questionnaires. Dans la semaine qui suit l’administration de ces questionnaires, votre enfant
complétera la version française du Youth Self-Report une deuxième fois. Environ 20 minutes
seront nécessaires pour compléter ce questionnaire.

S’il vous plaît, ne discutez pas des questions avec votre enfant avant qu’il ou elle ait complété les
questionnaires.

Les droits des participants: Si pour une raison ou pour une autre vous ou votre enfant décidez que
vous ne voulez plus participer une fois que le projet est lancé, vous et votre enfant êtes libres de
décliner de répondre à toute question ou de vous retirer à tout moment du projet.

Tous les documents se reportant à ce projet demeureront confidentiels. Votre nom et le nom de
vos enfant ne seront mentionnés dans aucun rapport concernant cette étude.

Si vous avez des questions au sujet de la procédure de ce projet de recherche, n’hésitez pas à me les
poser et je vous répondrai.
A la fin de l’étude, les participants auront la chance de gagner un prix: un certificat-cadeau d'appel interurbain de $60 pour un parent d’étudiant/e et une chaîne stéréo portative avec radio, lecteur cassette et CD pour un étudiant/e.

**Feedback:** Si vous le désirez, vous pourrez recevoir une copie du résumé des résultats de la recherche une fois que le projet sera complété. Si vous désirez recevoir un résumé des résultats du projet, inscrivez votre nom et adresse en bas du Formulaire de consentement.

Ce projet de recherche a été examiné par le Comité d’éthique de l’Université de Windsor. Si vous avez des questions d’ordre éthique au sujet de ce projet, vous pouvez contacter Dr. S. Voelker, Ethics Committee, University of Windsor (519 / 253-4232, ext. 2249).

Si vous avez des questions au sujet de la participation à ce projet ou si vous désirez avoir plus d’information au sujet des résultats de cette étude, n’hésitez pas à me contacter. Vous pouvez également contacter ma directrice de thèse, Dr. Sylvia Voelker.

**Christian Wyss**  
92 Gertrude St. E.  
North Bay, ON P1A 1K3  
(705) 495-1810

**Dr. Sylvia Voelker**  
Department of Psychology  
University of Windsor  
Windsor, On N9B 3P4  
(519) 253-4232, Ext. 2249
MOI, ______________________________________, J'AI LU CE FORMULAIRE DE
(nom du parent/tuteur en lettres moulées)

CONSENTEMENT ET J'ACCEPTE DE PARTICIPER À CE PROJET DE RECHERCHE ET
J'AUTORISE ÉGALEMENT MON ENFANT ____________________________
(nom de l'enfant en lettres moulées)

A PARTICIPER À CE PROJET DE RECHERCHE ______________________
(signature et relation avec l'enfant)

DATE ___________________
Student Consent Form
(Anglophone Students)
Study of the Child Behavior Checklist and the Youth Self-Report

Purpose: There are two major purposes to this study. First, this is a study about how parents' and youths' descriptions of youths' feelings and behaviours agree. The study will compare parents' and students' answers on similar questionnaires, the Child Behavior Checklist and its companion measure, the Youth Self-Report. These questionnaires are commonly used in schools in the context of academic assessments. The study will provide information about the properties of these questionnaires for youths in Canada.

Second, the French portion of this project will also determine the accuracy and usefulness of a French version of this questionnaire for youths attending French school. The information from this study will result in better knowledge about the appropriateness of the French version of this questionnaire for young Francophones.

What You Will Be Asked To Do: If you agree to participate in this study you will be asked to complete the Youth Self-Report, a questionnaire about your own feelings and behaviours.

Your parent/guardian has already completed a similar questionnaire and has given permission for you to complete this questionnaire. It will take you about 20 minutes to complete this questionnaire.

What Are Your Rights: If for any reason you do not wish to continue to participate once the study is underway, you will be free to withdraw at any time or to decline to answer any questions.

The paperwork for this project will be kept confidential. Your name will be obliterated from the questionnaire and will not appear in any reports of this study. Neither your teacher nor your parents will see your answers.

You may ask questions about the procedure of the study at any time and your questions will be answered.

At the end of the study, the participants will have the chance to win a prize: a portable stereo (CD, tape deck, radio) for one student and a $60 long distance gift certificate for one parent.

This research has been reviewed by the Ethics Committee at the University of Windsor, and any concerns about the procedures may be reported to that committee. Your School Board and school principal have also cleared the procedure for this study.
(Detach and return this page)

If you agree to participate, please sign your name on the line below. You do not have to answer the questions if you do not want to and you can stop at any time if you decide that you do not want to keep going once you have started.

Name ___________________________  Date ____________________

(Signature)

Name and address: ____________________________

(Printed—so if you win I will know who to send the prize to)

________________________________________

________________________________________
Formulaire de consentement pour l'étudiant/e
(Inventaire personnel de comportement pour jeunes)


Deuxièmement, ce projet de recherche va déterminer la précision et l'utilité de la version française du questionnaire pour les jeunes qui vont à l'école française. Il y a peu de ressources disponibles en français. Ce projet représente une étape vers l'amélioration des services psychologiques en français pour la population francophone. Les informations obtenues au cours de cette recherche permettront d'avoir une meilleure connaissance des propriétés de ce questionnaire pour les jeunes Francophones.

Ce que les participants feront: Si vous acceptez de participer à cette étude, vous aurez à compléter le «Youth Self-Report», un questionnaire sur vos émotions et vos comportements. Vous compléterez ce questionnaire deux fois, une fois en français et une fois en anglais. Vous compléterez également un questionnaire d'Auto-évaluation de la facilité linguistique, et un questionnaire de Préférence linguistique. Vous aurez besoin d'environ 40 minutes pour compléter ces questionnaires.

Votre parent/tuteur a déjà complété des questionnaires semblables et a donné sa permission pour vous de compléter ces questionnaires.

Les droits des participants: Si pour une raison ou pour une autre vous décidez que vous ne voulez plus participer une fois que le projet est lancé, vous êtes libres de vous retirer à tout moment du projet ou de refuser de répondre aux questions.

Chaque participant/e aura une chance de gagner une chaîne stéréo portative (CD, cassette, radio).

Tous les documents de reportant à ce projet demeureront confidentiels. Votre nom, le nom de votre parent, et le nom de votre école ne seront mentionnés sur aucun rapport concernant cette étude. Ni vos professeurs, ni vos parents ne verront vos réponses.

Ce projet de recherche a été examiné par le Comité d'éthique de l'Université de Windsor. Si vous avez des questions d'ordre éthique au sujet de ce projet, vous pouvez contacter Dr. S. Voelker, Ethics Committee, University of Windsor, (519 / 253-4232, ext. 2249). Votre Conseil des écoles et la direction de votre école ont également examiné la procédure de ce projet de recherche.
Si vous acceptez de participer, signez votre nom sur la ligne ci-dessous. Vous n'êtes pas obligé de répondre aux questions et vous êtes libre de vous retirer du projet à tout moment.

Nom __________________________________________ Date ____________
(signature)

Nom et adresse: __________________________________________
(nom et adresse en lettres moulées pour le concours)

___________________________________________________________
Student Consent Form
(Personal Contacts)
Study of the Child Behavior Checklist and the Youth Self-Report

**Purpose:** There are two major purposes to this study. First, this is a study about how parents' and youths' descriptions of youths' feelings and behaviours agree. The study will compare parents' and youths' answers on similar questionnaires, the Child Behavior Checklist and its companion measure, the Youth Self-Report. These questionnaires are commonly used in schools in the context of academic assessments. The study will provide information about the properties of these questionnaires for youths in Canada.

Second, the French portion of this project will also determine the accuracy and usefulness of a French version of this questionnaire for youths attending French school. The information from this study will result in better knowledge about the appropriateness of the French version of this questionnaire for young Francophones.

**What You Will Be Asked To Do:** If you agree to participate in this study you will be asked to complete the Youth Self-Report, a questionnaire about your own feelings and behaviours.

Your parent/guardian has already completed a similar questionnaire and has given permission for you to complete this questionnaire. It will take you about 20 minutes to complete this questionnaire.

**What Are Your Rights:** If for any reason you do not wish to continue to participate once the study is underway, you will be free to withdraw at any time or to decline to answer any questions.

The paperwork for this project will be kept confidential. Your name will not appear in any reports of this study.

You may ask questions about the procedure of the study at any time and your questions will be answered.

At the end of the study, the participants will have the chance to win a prize: a portable stereo (CD, tape deck, radio) for one youth and a $60 long distance gift certificate for one parent.

This research has been reviewed by the Ethics Committee at the University of Windsor, and any concerns about the procedures may be reported to that committee.
If you agree to participate, please sign your name on the line below. You do not have to answer the questions if you do not want to and you can stop at any time if you decide that you do not want to keep going once you have started.

Name _______________________________ Date ________________
(Signature)

Name & Address: ________________________________________
(Printed—so if you win I will know who to send the prize to)

_______________________________________________________

_______________________________________________________
Formulaire de consentement pour l'étudiant/e
(Inventaire personnel de comportement pour jeunes)

But: Ce projet de recherche a deux buts majeurs. Premièrement, c'est un projet de recherche qui va évaluer comment les descriptions des sentiments et des comportements des jeunes par les parents et les jeunes eux-mêmes concordent. Ce projet comparera les réponses des parents et des étudiants à des questionnaires similaires; le Child Behavior Checklist et la mesure associée, le Youth Self-Report. Ces questionnaires sont couramment utilisés dans le cadre d'évaluations académiques faites à l'école. Le projet permettra d'obtenir de l'information au sujet des propriétés de ce questionnaire pour les jeunes Canadiens.

Deuxièmement, ce projet de recherche va déterminer la précision et l'utilité de la version française du questionnaire pour les jeunes qui vont à l'école française. Il y a peu de ressources disponibles en français. Ce projet représente une étape vers l'amélioration des services psychologiques en français pour la population francophone. Les informations obtenues au cours de cette recherche permettront d'avoir une meilleure connaissance des propriétés de ce questionnaire pour les jeunes francophones.


Votre parent/tuteur a déjà complété des questionnaires semblables et a donné sa permission pour vous de compléter ces questionnaires.

Les droits des participants: Si pour une raison ou pour une autre vous décidez que vous ne voulez plus participer une fois que le projet est lancé, vous êtes libres de vous retirer à tout moment du projet ou de refuser de répondre aux questions.

Chaque participant/e aura une chance de gagner une chaîne stéréo portative (CD, cassette, radio).

Tous les documents de reportant à ce projet demeureront confidentiels. Votre nom et le nom de votre parent ne seront mentionnés sur aucun rapport concernant cette étude. Vos parents ne verront pas vos réponses.

Ce projet de recherche a été examiné par le Comité d'éthique de l'Université de Windsor. Si vous avez des questions d'ordre éthique au sujet de ce projet, vous pouvez contacter Dr. S. Voelker, Ethics Committee, University of Windsor, (519 / 253-4232, ext. 2249).
Si vous acceptez de participer, signez votre nom sur la ligne ci-dessous. Vous n'êtes pas obligé de répondre aux questions et vous êtes libre de vous retirer du projet à tout moment.

Nom ______________________________________ Date __________
(signature)

Nom et adresse : ____________________________________________
(nom et adresse en lettres moulées pour le concours)

__________________________________________________________
APPENDIX C

Instructions to Participants
Instructions to Parents/Guardians
(English Version)
Study of the Child Behavior Checklist and the Youth Self Report

This envelope contains a Consent Form, a Background Information Sheet, and the Child Behavior Checklist (a questionnaire that asks how you view your child's behaviours).

Please, first complete the Consent Form.

Please complete the Background Information Form by answering the questions to the best of your knowledge.

The items of the Child Behavior Checklist describe children and youths. For each item that describes your child now or within the past 6 months, please circle the:
- 2 if the item is very true or often true of your child
- 1 if the item is somewhat or sometimes true of your child
- 0 if the item is not true of your child.
Please answer all items as well as you can, even if some do not seem to apply to your child.

Please return the completed questionnaires along with the signed consent form as soon as possible in the provided envelope. Your child will not be asked to participate in the study until after you give your consent and your information is received. Please do not discuss the questions with your child until he or she has completed the questionnaire. Your child will receive a note indicating the date on which s/he participated in the study. You may want to take the opportunity then to discuss the study and the types of questions asked with your child.

Thank you for your time and cooperation in completing these questionnaires.

Christian Wyss, M.A.
Instructions to Parents/Guardians  
(Personal contacts)  
Study of the Child Behavior Checklist and the Youth Self Report

This envelope contains a Consent Form, a Background Information Sheet, and the Child Behavior Checklist (a questionnaire that asks how you view your child's behaviours).

Please, first complete the Consent Form.

Please complete the Background Information Form by answering the questions to the best of your knowledge.

The items of the Child Behavior Checklist describe children and youths. For each item that describes your child now or within the past 6 months, please circle the:
- 2 if the item is very true or often true of your child
- 1 if the item is somewhat or sometimes true of your child
- 0 if the item is not true of your child.
Please answer all items as well as you can, even if some do not seem to apply to your child.

Please return the completed questionnaires along with the signed consent form as soon as possible in the provided envelope. Your child is not to participate in the study until after you give your consent. Please do not discuss the questions with your child until he or she has completed the questionnaire. You may discuss the study and the types of questions asked after your child has sent off his or her questionnaire.

Thank you for your time and cooperation in completing these questionnaires.

Christian Wyss
Instructions pour les parents/tuteurs
(Version française)
(Inventaire personnel de comportement pour jeunes)

Vous trouverez ci-joint un questionnaire sur la situation de famille et le «Child Behavior Checklist» (un questionnaire sur votre perception des comportements de votre enfant).

S'il vous plaît, complétez en premier lieu le Formulaire de consentement.

Complétez le Questionnaire de famille du mieux que vous le pourrez.

Les items du Child Behavior Checklist décrivent les jeunes. Si l'item décrit votre enfant maintenant ou au cours des derniers 6 mois, encercez:
- 2 si l'item est très vrai ou souvent vrai pour votre enfant,
- 1 si l'item est assez vrai ou quelques fois vrai pour votre enfant,
- 0 si l'item ne décrit pas ou n'est pas vrai pour votre enfant.
Répondez à tous les items aussi bien que vous le pourrez, même si certains items ne semblent pas être pertinent pour votre enfant.

Renvoyez aussi tôt que possible les questionnaires complétés ainsi que le Formulaire de consentement signé dans l'enveloppe ci-jointe. Votre enfant ne pourra compléter les questionnaires avant que j'ai reçu votre permission et les questionnaires que vous aurez complété. Je vous demanderai de ne pas discuter des questions avec votre enfant avant qu'il ou elle ait complété tous les questionnaires. Votre enfant recevra une note indiquant quand il ou elle aura participé au projet. Vous pourrez profiter de cette occasion pour discuter avec votre enfant du projet et des différentes questions posées.

Je vous remercie pour votre temps et votre coopération.

Christian Wyss, M.A.
Instructions pour les parents/tuteurs
(Personal contacts)
Étude du "Child Behavior Checklist" et du "Youth Self-Report"
(Inventaire personnel de comportement pour jeunes)

Vous trouverez ci-joint un questionnaire sur la situation de famille et le "Child Behavior Checklist" (un questionnaire sur votre perception des comportements de votre enfant).

S'il vous plaît, complétez en premier lieu le Formulaire de consentement.

Complétez le Questionnaire de famille du mieux que vous le pourrez.

Les items du Child Behavior Checklist décrivent les jeunes. Si l'item décrit votre enfant maintenant ou au cours des derniers 6 mois, encerclez:
- 2 si l'item est très vrai ou souvent vrai pour votre enfant,
- 1 si l'item est assez vrai ou quelques fois vrai pour votre enfant,
- 0 si l'item ne décrit pas ou n'est pas vrai pour votre enfant.

Répondez à tous les items aussi bien que vous le pourrez, même si certains items ne semblent pas être pertinents pour votre enfant.

Retournez aussi tôt que possible les questionnaires complétés ainsi que le Formulaire de consentement signé dans une enveloppe. Votre enfant ne pourra compléter les questionnaires avant que vous ayez donné votre permission et complété les questionnaires.

Je vous demanderai de ne pas discuter des questions avec votre enfant avant qu'il ou elle ait complété tous les questionnaires.

Je vous remercie pour votre temps et votre coopération.

Christian Wyss
Instructions to youths who received payment

To earn $20 you need to:

☐ Read these instructions

☐ Get a parent or guardian to complete the following:
  ☐ "Formulaire de consentement (parent/tuteur)"
  ☐ "Questionnaire de famille"
  ☐ "Child Behavior Checklist"
For confidentiality of their responses an envelope has been provided.

☐ Pick a block of time to complete the questionnaires. They are to be completed in two parts. The first part will take about 40 minutes, the second part will take about 20 minutes.

☐ First Part: complete in this order:*
  ☐ "Formulaire de consentement pour l’étudiant/e”
  ☐ “Youth Self-Report”
  ☐ “French Canadian Youth Self-Report - 1”
  ☐ language preference questionnaire
  ☐ language fluency self-rating questionnaire

☐ Second Part: three (3) days later
  ☐ Complete the “French Canadian Youth Self-Report - 2”

☐ Call 495-1810 to arrange a time to bring the completed set of forms to 92 Gertrude St. E., and receive your $20. No payment will be given for forms returned after May 27, 2000.

☐ To make it easier for you to get your parent’s cooperation, they have a chance to win a $60 long distance gift certificate.

☐ Any questions? Call 495-1810.

*The order of presentation was changed for half of the forms, with the FCYSR coming before the YSR.
APPENDIX D

Background Information
Background Information
(English Version)
Study of the Child Behavior Checklist and the Youth Self-Report

1) Relationship to child: _______________________________________________________

2) Your highest grade achieved: ____________________________________________

3) Your type of work: _______________________________________________________

4) Your spouse's highest grade achieved: __________________________________

5) Your spouse's type of work: _____________________________________________

6) Indicate the age at which your child learned English: ______________________

7) Indicate the age at which your child learned French: ________________________

8) Language usually spoken at home: _______________________________________

9) Which language does your child prefer to use: _____________________________

10) What is your first language: ____________________________________________

11) Which language do you prefer to use: ____________________________________

12) How long has your child lived in the province of: ________________________
    (Province)         (No. of years)
Questionnaire de famille
(Version française)
(Inventaire personnel de comportement pour jeunes)

1) Quel est votre lien de parenté avec l'enfant: ________________________________

2) Année d'éducation que vous avez atteint: ________________________________

3) Quel est votre emploi: ________________________________________________

4) Année d'éducation atteint par votre époux: ________________________________

5) Quel est l'emploi de votre époux: ______________________________________

6) Indiquez l'âge auquel votre enfant a appris le français: ____________________

7) Indiquez l'âge auquel votre enfant a appris l'anglais: ________________________

8) Langue généralement parlée à la maison: _________________________________

9) Quelle est votre langue première: _________________________________________

10) Quelle est la langue que vous préférez utiliser: ____________________________

11) Quelle est la langue que votre enfant préfère utiliser: ______________________

12) Pendant combien de temps est-ce que votre enfant a habité en: __________________

              (Province) (Nb.d’années)
APPENDIX E

Language Fluency Self-Rating
1) How do you rate your **English reading** skills (Check only one choice):
   *Comment évaluez-vous votre habileté à **lire l’anglais** (Cochez un seul choix):*

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<tr>
<td>poor/pauvre</td>
<td>fair/passable</td>
<td>good/bon</td>
<td>very good/très bon</td>
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2) How do you rate your **French reading** skills (Check only one choice):
   *Comment évaluez-vous votre habileté à **lire le français** (Cochez un seul choix):*

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<tr>
<td>poor/pauvre</td>
<td>fair/passable</td>
<td>good/bon</td>
<td>very good/très bon</td>
</tr>
</tbody>
</table>

3) How do you rate your **English writing** skills (Check only one choice):
   *Comment évaluez-vous votre habileté à **écrire l’anglais** (Cochez un seul choix):*

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<td>poor/pauvre</td>
<td>fair/passable</td>
<td>good/bon</td>
<td>very good/très bon</td>
</tr>
</tbody>
</table>

4) How do you rate your **French writing** skills (Check only one choice):
   *Comment évaluez-vous votre habileté à **écrire le français** (Cochez un seul choix):*

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<td>fair/passable</td>
<td>good/bon</td>
<td>very good/très bon</td>
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</tbody>
</table>

5) How do you rate your **English listening comprehension** skills (Check only one choice):
   *Comment évaluez-vous votre habileté à **la compréhension orale de l’anglais** (Cochez un seul choix):*

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<td>poor/pauvre</td>
<td>fair/passable</td>
<td>good/bon</td>
<td>very good/très bon</td>
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</tbody>
</table>
6) How do you rate your French listening comprehension skills (Check only one choice):
   Comment évaluez-vous votre habileté à la compréhension orale du français (Cochez un seul choix):

   
   1   2   3   4
   poor/pauvre   fair/passable   good/bon   very good/très bon

7) How do you rate your English speaking skills (Check only one choice):
   Comment évaluez-vous votre habileté à parler l'anglais (Cochez un seul choix):

   
   1   2   3   4
   poor/pauvre   fair/passable   good/bon   very good/très bon

8) How do you rate your French speaking skills (Check only one choice):
   Comment évaluez-vous votre habileté à parler le français (Cochez un seul choix):

   
   1   2   3   4
   poor/pauvre   fair/passable   good/bon   very good/très bon
Auto-évaluation de la facilité linguistique

Language Fluency Self-Rating

1) Comment évaluez-vous votre habileté à lire l'anglais (Cochez un seul choix):
   How do you rate your English reading skills (Check only one choice):

   1  2  3  4
   pauvre/poor passable/fair bon/good très bon/very good

2) Comment évaluez-vous votre habileté à lire le français (Cochez un seul choix):
   How do you rate your French reading skills (Check only one choice):

   1  2  3  4
   pauvre/poor passable/fair bon/good très bon/very good

3) Comment évaluez-vous votre habileté à écrire l'anglais (Cochez un seul choix):
   How do you rate your English writing skills (Check only one choice):

   1  2  3  4
   pauvre/poor passable/fair bon/good très bon/very good

4) Comment évaluez-vous votre habileté à écrire le français (Cochez un seul choix):
   How do you rate your French writing skills (Check only one choice):

   1  2  3  4
   pauvre/poor passable/fair bon/good très bon/very good

5) Comment évaluez-vous votre habileté à la compréhension orale de l'anglais (Cochez un seul choix):
   How do you rate your English listening comprehension skills (Check only one choice):

   1  2  3  4
   pauvre/poor passable/fair bon/good très bon/very good
6) Comment évaluez-vous votre habileté à la compréhension orale du français (Cochez un seul choix):
   *How do you rate your French listening comprehension skills (Check only one choice):*

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<td>passable/fair</td>
<td>bon/good</td>
<td>très bon/very good</td>
</tr>
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</table>

7) Comment évaluez-vous votre habileté à parler l'anglais (Cochez un seul choix):
   *How do you rate your English speaking skills (Check only one choice):*

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<td>passable/fair</td>
<td>bon/good</td>
<td>très bon/very good</td>
</tr>
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</table>

8) Comment évaluez-vous votre habileté à parler le français (Cochez un seul choix):
   *How do you rate your French speaking skills (Check only one choice):*

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APPENDIX F

Language Preference
Language Preference
Préférence linguistique

1) You have completed the same questionnaire twice, once in English and once in French. In which language did you prefer to complete this questionnaire? (Check only one choice):
   
   Vous venez de compléter deux fois le même questionnaire, une fois en anglais et une fois en français. Dans quelle langue avez-vous préféré compléter ce questionnaire? (Cochez un seul choix):

   _ English/Anglais    French/Français _

   Why?/Pourquoi? __________________________________________________________

2) When you talk about your hobbies or sports, which language do you prefer to use? (Check only one choice):
   
   Quand vous parlez de vos passe-temps favoris ou de sport, quelle langue préféériez-vous utiliser? (Cochez un seul choix):

   _ English/Anglais    French/Français _

   Why?/Pourquoi? __________________________________________________________

3) If you have to talk about personal problems such as feelings of unhappiness or depression, which language do you prefer to use? (Check only one choice):
   
   Si vous avez à parler de problèmes personnels comme par exemple des sentiments de tristesse ou de déprime, quelle langue préfériez-vous utiliser? (Cochez un seul choix):

   _ English/Anglais    French/Français _

   Why?/Pourquoi? __________________________________________________________

4) Which is your preferred language? (Check only one choice):
   
   Quelle est votre langue préférée? (Cochez un seul choix):

   _ English/Anglais    French/Français _

   Why?/Pourquoi? __________________________________________________________
1) Vous venez de compléter deux fois le même questionnaire, une fois en anglais et une fois en français. Dans quelle langue avez-vous préféré compléter ce questionnaire? (Cochez un seul choix):

_ Français/French _ Anglais/English _

Pourquoi?/Why? ____________________________________________________________

2) Quand vous parlez de vos passe-temps favoris ou de sport, quelle langue préféerez-vous utiliser? (Cochez un seul choix):

When you talk about your hobbies or sports, which language do you prefer to use? (Check only one choice):

_ Français/French _ Anglais/English _

Pourquoi?/Why? ____________________________________________________________

3) Si vous avez à parler de problèmes personnels comme par exemple des sentiments de tristesse ou de déprime, quelle langue préféerez-vous utiliser? (Cochez un seul choix):

If you have to talk about personal problems such as feelings of unhappiness or depression, which language do you prefer to use? (Check only one choice):

_ Français/French _ Anglais/English _

Pourquoi?/Why? ____________________________________________________________

4) Quelle est votre langue, préférée? (Cochez un seul choix):

Which is your preferred language? (Check only one choice):

_ Français/French _ Anglais/English _

Pourquoi?/Why? ____________________________________________________________
APPENDIX G

Thank-you note
Thank-you note
(English Version)
Study of the Child Behavior Checklist and the Youth Self-Report

Your child completed a number of questions about his or her feelings and behaviours today. You may want to take this opportunity to discuss this study and the questions that were asked with your child.

I would like to thank you and your child for taking the time to participate in my study. If you have questions, please contact me at (902) 435-9693.

Sincerely,

Christian Wyss

Note de remerciement
-Version française-
(Inventaire personnel de comportement pour jeunes)

Votre enfant a complété une série de questions sur ses sentiments et son comportement aujourd’hui. Si vous le voulez, vous pouvez prendre avantage de cette occasion pour discuter des questions qui ont été posées.

Je vous remercie d’avoir pris le temps de participer à mon projet de recherche. Si vous avez des questions, vous pouvez me joindre au (902) 435-9693.

Sincèrement,

Christian Wyss
APPENDIX H

Lists of Problematic Items
Items that elicited different responses between the YSR and the FCYSR

31. I am afraid I might think or do something bad

J’ai peur de penser ou de faire des choses mauvaises

YSR, $M = 0.292$, $SD = 0.459$; FCYSR, $M = 0.458$, $SD = 0.503$, $t(47) = -2.69$

$p = 0.01$

44. I bite my fingernails

Je me ronge les ongles

YSR, $M = 0.979$, $SD = 0.812$; FCYSR, $M = 1.062$, $SD = 0.810$, $t(47) = -2.07$

$p = 0.044$

54. I feel overtired

Je me sens très fatigué(e)

YSR, $M = 0.687$, $SD = 0.689$; FCYSR, $M = 0.854$, $SD = 0.743$, $t(47) = -2.69$

$p = 0.1$

71. I am self-conscious or easily embarrassed

Je manque de confiance, je suis facilement embarrassé(e)

YSR, $M = 0.667$, $SD = 0.694$; FCYSR, $M = 0.771$, $SD = 0.751$, $t(47) = -2.34$

$p = 0.024$
87. My moods or feelings change suddenly

Mes émotions ou mes sentiments changent soudainement, rapidement

YSR, $M = 0.687$, $SD = 0.689$; FCYSR, $M = 0.792$, $SD = 0.683$, $t(47) = -2.34$, $p = 0.024$

112. I worry a lot

Je suis très préoccupé(e)

YSR, $M = 0.667$, $SD = 0.663$; FCYSR, $M = 0.917$, $SD = 0.739$, $t(47) = -2.48$, $p = 0.017$
Items that elicited different responses between test and re-test of the FCYSR

8. J'ai de la difficulté à me concentrer ou à être attentif

Test, $M = 0.743$, $SD = 0.657$; re-test, $M = 0.629$, $SD = 0.598$, $t (34) = 2.09$, $p = 0.044$

11. Je suis trop dépendant(e) des adultes

Test, $M = 0.543$, $SD = 0.561$; re-test, $M = 0.371$, $SD = 0.547$, $t (34) = 2.65$, $p = 0.012$

16. Je suis mesquin(e) (méchant/e) avec les autres

Test, $M = 0.343$, $SD = 0.482$; re-test, $M = 0.171$, $SD = 0.382$, $t (34) = 2.24$, $p = 0.032$

17. Je rêve tout éveillé(e)

Test, $M = 0.657$, $SD = 0.591$; re-test, $M = 0.514$, $SD = 0.612$, $t (34) = 2.38$, $p = 0.023$

24. Je ne mange pas aussi bien que je le devrais

Test, $M = 0.800$, $SD = 0.632$; re-test, $M = 0.629$, $SD = 0.598$, $t (34) = 2.24$, $p = 0.032$
31. J’ai peur d’avoir de mauvaises pensées ou de faire quelque chose de mal

Test, $M = 0.514$, $SD = 0.507$; re-test, $M = 0.286$, $SD = 0.458$, $t (34) = 3.17$,
$p = 0.003$

32. J’ai le sentiment que je dois être parfait(e)

Test, $M = 0.771$, $SD = 0.690$; re-test, $M = 0.571$, $SD = 0.608$, $t (34) = 2.23$,
$p = 0.033$

41. J’agis sans penser auparavant, sans réfléchir

Test, $M = 0.714$, $SD = 0.519$; re-test, $M = 0.514$, $SD = 0.507$, $t (34) = 2.50$,
$p = 0.017$

45. Je suis nerveux(euse) ou tendu(e)

Test, $M = 0.686$, $SD = 0.631$; re-test, $M = 0.486$, $SD = 0.562$, $t (34) = 2.23$, $p = 0.033$

47. J’ai des cauchemars

Test, $M = 0.600$, $SD = 0.651$; re-test, $M = 0.400$, $SD = 0.604$, $t (34) = 2.92$, $p = 0.003$

54. Je me sens très fatigué(e)

Test, $M = 0.943$, $SD = 0.725$; re-test, $M = 0.629$, $SD = 0.646$, $t (34) = 3.51$, $p = 0.001$
59. Je peux être assez amical(e)

Test, $M = 1.771$, $SD = 0.426$; re-test, $M = 1.486$, $SD = 0.658$, $t(34) = 2.72$, $p = 0.010$

71. Je manque de confiance, je suis facilement embarrassé(e)

Test, $M = 0.800$, $SD = 0.759$; re-test, $M = 0.514$, $SD = 0.658$, $t(34) = 2.95$, $p = 0.006$

74. Je fais le clown ou je fais des choses pour être remarqué(e)

Test, $M = 0.743$, $SD = 0.657$; re-test, $M = 0.571$, $SD = 0.608$, $t(34) = 2.24$, $p = 0.032$

85. J’ai des pensées que les autres trouvent étranges, bizarres (décrivez): ____________

Test, $M = 0.471$, $SD = 0.615$; re-test, $M = 0.294$, $SD = 0.579$, $t(34) = 2.24$, $p = 0.032$

86. Je suis obstiné(e), entêté(e)

Test, $M = 0.735$, $SD = 0.618$; re-test, $M = 0.471$, $SD = 0.507$, $t(34) = 2.72$, $p = 0.010$

104. Je suis plus bruyant que les autres jeunes de mon âge

Test, $M = 0.543$, $SD = 0.611$; re-test, $M = 0.343$, $SD = 0.482$, $t(34) = 2.50$, $p = 0.017$

112. Je suis très préoccupé(e)

Test, $M = 0.971$, $SD = 0.707$; re-test, $M = 0.714$, $SD = 0.710$, $t(34) = 2.17$, $p = 0.037$
VITA AUCTORIS

Christian Wyss was born in 1961 in Lausanne, Switzerland. He came to Canada to study at the University of Manitoba where he obtained a B.A. in Psychology in 1987. He received his B.A. Honour's in Psychology in 1991 from the University of Winnipeg with the special mention "Student of Distinction". From there he went to Lakehead University where he obtained his M.A. in Clinical Psychology in 1993. Christian is currently a Ph.D. candidate in Clinical Psychology, Child subspecialty, at the University of Windsor, and hopes to graduate in Fall 2000.