

## **2.2 THE ADAPTATION OF THE FFPI**

In the following, the adaptation process of the personality measure is described and self-rating data are used from 10-13 year old young adolescents with a Big Five personality questionnaire to test its applicability at this early age.

### **2.2.1 Introduction**

Only little research is devoted to self-rating data of personality characteristics in children and adolescents. John et al. (1994) found that measures were simply not available for this age group. Costa and McCrae (1994) argued, that although under the age of ten self-reports are not reliable or valid (c.f. Eysenck & Eysenck, 1975), in adolescence they may form a useful technique. They suggested adult measures for adolescents and pointed to the advantages of making comparisons between adult and adolescent ratings. Therefore, it is rather interesting to investigate how reliably and adequately young adolescents work with a personality inventory when they are asked to provide self-reports on their personality characteristics.

Asking young people themselves about their personality instead of relying on adult perception is not completely unproblematic but it has some advantages. First, it is a direct way of investigation, not biased through parental disposition, emotion, or attitude. If you ask parents to describe their children, the special and strong relationship to their offspring may prevent them from being unbiased and influence their perception (Mebert, 1991). As Van Lieshout and Haselager (1994) found, parents are less proficient in describing their children than teachers are. Also, parents pay more attention to social and relational skills of their children, and have a broader view on Openness to Experience.

The relationship with teachers may not be as emotional as with parents, but because achievement plays an important role at school, this may indeed affect teachers' ratings. School performance may have an effect on how teachers see their pupils. Tatum (2000) failed to find substantial correlations for Conscientiousness and Emotional Stability between teachers' and pupils' self-ratings. It is problematic to generalize a personality picture gained in such a

special situation such as school and take it as a comprehensive picture of personality.

Thus, until very recently research concentrated on parental or teachers ratings of young adolescents, without much reasoning on the purpose of favoring adult decision to self-ratings.

### **2.2.2 Self-ratings in personality relevant developmental research**

Assessment in childhood and adolescence mostly relies on adult observations, as concluded by Johnson and Murray (2003) in their paper on the incremental validity of the psychological assessment of children and adolescents. Personality relevant self-report studies with adolescent subjects have only been published during the last five years. Those studies all support the supposition of the present study with respect to the capability of adolescents to judge their own personality characteristics. In the following, the self-rating studies with adolescents are first presented and then the importance of a suitable measure for self-ratings is discussed.

Parker and Stumpf (1998) compared personality relevant parental and self-reports of academically talented adolescents and found that the adult Big Five model is applicable to youth as they managed to validate the adult personality dimensions in the adolescent self-report data. Tatum (2000) made a promising step with the construction of an 85 item long Adolescent Big Five Inventory (ABFI). She obtained fairly high internal consistencies for all domains (between .72 and .85). However, the scales measuring Conscientiousness and Neuroticism (Emotional Stability) showed close to zero correlations with the corresponding ratings by teachers.

Markey, Markey, Tinsley and Ericksen (2002) applied the NEO Five-Factor Inventory (NEO-FFI) to adolescents. Here, the adult language used in the inventory caused some difficulties but when these problems were eliminated through standardized verbal prompts the problems disappeared. The authors reported that preadolescents (in their case aged 10 - 13 years) were indeed able to provide reliable information regarding their personality. Markey et

al. (2002) also reported that the self-report findings did significantly correspond to the ratings provided by the mothers of the preadolescents.

De Fruyt, Mervielde, Hoekstra and McCrae (2000) administered the NEO-PI-R to adolescents in a recent personality study with self-ratings. Even though the NEO-PI-R is an adult inventory with items such as “human need should always take priority over economic considerations” or “I believe that the <<new morality>> of permissiveness is no morality at all”, it was used with young adolescents. Although they were allowed to skip items if they were too difficult. The authors reported to have replicated the Big-Five domains in self-ratings of 12-14 year olds (De Fruyt et al., 2000).

The above finding also supports the need for an easily understandable and adequate Big Five measure that can be administered like the adult versions, but verbally simple enough for 10 year olds. It is not only important for the younger age groups and for research purposes to develop such an inventory, but it may also be of interest for adults with a lower educational or intellectual level.

As soon as young adolescents are able to comprehend simple statements that are formulated in a way that matches their grammatical and semantical abilities, they are also able to give personality relevant self-ratings. Although a certain level of development is needed to use pen and pencil tests in younger ages, the problem is not so much the ability of adolescents to reflect on their personality, but rather that the inventories have thus far not been constructed for use at basic levels of language comprehension and more restricted reading or abstraction capabilities. Around the age of ten, children (young adolescents) reach a level in their development where they should be able to think relatively abstract and generalize over situations: their reading and writing skills allow them to read and fill out an easy-to-handle inventory (Eysenck & Eysenck, 1975; Markey et. al., 2002). The length of an inventory should be adjusted for a shorter duration of concentration and should not exceed the normal school performance requirements. It is supposed that when the above conditions are fulfilled,

personality relevant self-ratings can be obtained without difficulties at a young age such as ten years.

Instead of developing a new personality inventory for the younger age group, it seemed to be more appropriate to search for a reasonable candidate among contemporary adult personality questionnaires and to investigate its applicability at young age. If a measure can be found, which both adults and adolescents without many alterations and without much difficulty can fill out, self-ratings and peer-ratings can be obtained from adolescents, parents, teachers, friends on a comparable set of variables. For the present study, it seemed appropriate to investigate whether the Five Factor Inventory (FFPI; Hendriks, Hofstee & De Raad, 1999), which was developed largely for adult use, could also be used for self-ratings at early ages.

### **2.2.3 The Five-Factor Personality Inventory**

In this study the FFPI was adapted for young adolescents. A general criterion for the administering of such an inventory consists of two basic components: children must have reached an age enabling them to understand the task and reply consequently to the items, and the personality questionnaire must fit to the children's understanding of the world. The Five-Factor Personality Inventory (FFPI) (Hendriks et al., 1999) suited these conditions.

The FFPI assesses the Big Five dimensions: Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Autonomy in 100 brief and clear situation independent statements. The items are formulated in an easy to understand way, avoiding difficult wording and negation. The FFPI includes no conditional sentences and long expressions. The meaning of personality traits is expressed in active, direct and short statements (for example: "tries to prevent quarrels", "I work hard" and "I love big parties"). The FFPI is supposed to be understood by a broad range of subjects with different educational levels. Therefore, in the original item selection phase, possible FFPI items and their corresponding trait expressions were tested for their difficulty in comprehension in a sample of 45 students (mean age: 18 years) with lower educational levels and was found that items

formulated as direct behavioral sentences were significantly easier to comprehend than trait adjectives (Hendriks, 1997)

The FFPI is constructed according to the principles of the so-called Abridged Big Five Dimensional Circumplex (AB5C; Hofstee, de Raad & Goldberg, 1992). The basic idea behind this inventory lies in the fact that the majority of the personality descriptors are best understood in terms of their relations to two factors of the Big Five. A representation that would consider only one factor to be relevant for each descriptor (simple structure) would ignore important aspects of the personality relevant meanings captured in traits. Terms have usually two substantial loadings: a higher primary loading and a lower secondary loading on two of the five factors (Hofstee et al., 1992). In the AB5C model of personality, both types of loadings of personality terms are taken into account. All terms are represented on the basis of their relation to a subset of two factors of the Big Five dimensions. The AB5C structuring of the information allows the representation of the results in two-dimensional circumplexes which represent not only factor-pure meanings, but also the blends between the pairs of the five personality dimensions (see De Raad, Hendriks & Hofstee 1994).

The FFPI has been developed in parallel in English, Dutch and German, so the original items are available in all these three languages without translation. For the purpose of the present study, the German items were chosen and included in the Health Promotion Program (Hurrelmann, Leppin & Nordlohne, 1995; Pieper, Szirmák, Leppin, Freitag & Hurrelmann, 1999). The original FFPI was applied two times in an adolescent sample, in Pilot study 1 and 2, in order to identify and adapt any problematic item formulations. The difference between the two pilot studies was that, while the first pilot study contained only the original 100 items of the FFPI, the second pilot study was enlarged with a set of adolescent relevant formulations of items that were specified as problematic in the first pilot study and so reached a length of 119 items.

#### 2.2.4 Pilot study 1

The first pilot study was aimed at identifying problematic items of the FFPI by administering the original adult version to 83 subjects (40 male, 40 female, 3 gender unknown) aged 9-13. The pupils were not only instructed to rate themselves, but also to mark any item that was too difficult or not clear in meaning to them. Such terms did not have to be used for self-ratings. In order to ease the task of reading and replying, the inventory was presented in larger print than is normally done in adult samples. This arrangement served to get as close as possible to the level of understanding and the perception of ten-year-olds.

An item was considered problematic if marked as such by more than three school children. As a result of the first pilot study, 19 items were marked as problematic. These items were analyzed to explore the reasons for the difficulties, reformulated and then prepared for administration in the second pilot study (Table 3).

The young adolescents worked consistently, they rejected a statement most often if its formulation appeared to be adult-specific or if it included a Latin origin (e.g., *respektieren*) or a less frequently used word or expression (e.g., *Plausch*). In every case it was easy to find an equivalent to the problematic item and sometimes a direct translation of the Dutch or English wording gave a suitable solution (For example, for the German item “*Ich sehe das Licht am Ende des Tunnels*” [I see the light at the end of the tunnel], which turned out to be too symbolic and difficult for the ten years olds, “is able to see the best in every situation” [*Ich sehe das Beste in jeder Situation*] was taken, which was the available English language version of the item).

The pupils had no further difficulties in understanding the task. The majority needed no more than 15 minutes for completing the inventory and to mark the items. At a later step of research, it was observed that the children needed about five to ten minutes more when the task had to be completed right after summer holidays. It seemed that pupils at this age need some time to readjust to school after enjoying some “school-free” weeks.

**Table 3. The list of adapted items, means and standard deviations**

<u>I.</u>				
Nr.	original item	adapted item	M	SD
01.	Ich nehme mir Zeit für einen Plausch.	Ich nehme mir Zeit zum plaudern.	2.74	1.66
76.	Ich tue mich leicht im Umgang mit anderen.	Ich komme mit anderen Kindern leicht klar.	3.09	1.81
06.	Ich bringe eine <b>Party</b> in Schwung.	Ich bringe eine Fete in tolle Stimmung.	2.34	1.65
56.	Ich sondere mich ab.	Ich ziehe mich von anderen zurück.	1.81	1.27
86.	Ich verschließe mich, wenn Fremde anwesend sind.	Ich lerne ungern Leute kennen.	1.65	1.33
<u>II.</u>				
Nr.	original item	adapted item	M	SD
17.	Ich ziehe die <b>Interessen</b> anderer in Betracht.	Ich nehme Rücksicht auf andere.	3.20	1.72
87.	Ich <b>respektiere</b> die Meinungen anderer.	Ich beachte die Meinungen anderer.	2.72	1.73
27.	Ich <b>akzeptiere</b> andere, wie sie sind.	Ich nehme andere hin, wie sie sind.	3.15	1.81
<u>III.</u>				
Nr.	original item	adapted item	M	SD
13.	Ich folge gerne einem regelmäßigen Plan.	Ich folge gerne einem festen Tagesablauf.	2.15	1.54
68.	Ich erledige Dinge vorschriftsgemäß.	Ich mache alles, wie es sich gehört.	2.14	1.48
<u>IV.</u>				
Nr.	original item	adapted item	M	SD
19.	Ich sehe <b>immer</b> das Licht am Ende des Tunnels.	Ich sehe das beste in jeder Situation.	2.52	1.66
44.	Ich überwinde Rückschläge schnell.	Ich überwinde es schnell, wenn ich etwas nicht geschafft habe.	2.90	1.73
84.	Ich bin <b>deprimiert</b> .	Mir geht's schlecht.	1.53	1.34
79.	Ich <b>reagiere</b> mit Panik.	Ich gerate schnell in Panik.	1.76	1.39
<u>V.</u>				
Nr.	original item	adapted item	M	SD
50.	Ich ergreife die <b>Initiative</b> .	Ich schlage gerne selber vor, was wir machen.	2.92	1.69
45.	Ich betrachte Dinge aus unterschiedlichen <b>Perspektiven</b> .	Ich betrachte Dinge aus unterschiedlichen Ansichten.	2.63	1.61
65.	Ich warte darauf, dass andere die <b>Initiative</b> ergreifen.	Ich warte darauf, dass andere vorschlagen, was wir machen.	2.20	1.50
05.	Ich tue, was mir gesagt wird.	Ich gehorche den Erwachsenen.	2.55	1.63
25.	Ich lasse mir alles weismachen.	Ich glaube leicht, was mir erzählt wird.	1.75	1.27

Note: the discrepancies between the German adult version and the original FFPI construction guidelines are written **bold**

### 2.2.5 Pilot study 2

In the second pilot study an enlarged questionnaire was administered to 148 young adolescents (80 males, 63 females, 5 gender unknown), aged 10-13 years. The questionnaire contained 119 items: the original adult version (100 items) and the additional 19 items, which were adaptations of the problematic items (Table 3). It is striking that the half of the items that were picked out by the students to be adapted were the ones that violated the basic FFPI construction guidelines. This example illustrates the relevance of such guidelines in order to reduce semantical difficulties in personality measuring.

The items were all presented in a first person form to avoid problems in understanding their self-relevance and to enhance the self-relevance of the statements.

The pupils were again instructed only to reply to an item when they were sure about its meaning and fully understood the wording. This second pilot study was also used to identify remaining comprehension difficulties, but no additional original items were rejected and the new item formulations were all well understood. There is one adapted item that needs special mention, namely item 44 (original: Ich überwinde Rückschläge schnell [I readily overcome setbacks], adapted: Ich überwinde es schnell, wenn ich etwas nicht geschafft habe [I overcome it easily when I haven't succeeded in something]). The adaptation of this term deviates from the FFPI construction guidelines not to use negations (“nicht”) and conditions (“wenn”). The reason is that the original item seemed difficult in its wording because of the noun “Rückschlag” (setback), and it seemed appropriate to replace it with a well known and frequently used phrase: “Ich habe es nicht geschafft!” in English “I haven't succeeded”. This second pilot study yielded the final version of the FFPI for child usage that was administered in the empirical studies about developmental aspects of personality in adolescence, psychosomatic symptoms, tobacco and alcohol use (see Appendix A).