

## **4. DISCUSSION AND SUMMARY**

In the previous empirical chapters personality and health relevant studies were described and the relevance of the Big Five model was explored in each separate research segment.

However, there was no opportunity to summarize the findings and to present the relations between the results in an appropriate overview. This discussion aims to fill this gap.

### **4.1 The FFPI in adolescence**

The first research question was, whether an adult personality inventory could give reliable information on the adolescent personality structure. An additional question was whether adolescents could be asked directly through a personality measure to provide answers. The results in the first part of chapter 3 provided a clear yes as an answer to this question.

The reliability analysis of the FFPI scales produced sufficient and satisfying results. Although the factor structure after the item level factoring showed developmental effects and differed from the traditional adult structure, the communalities were more striking than the discrepancies and a robust Big Five structure was actually found.

Emotionality appeared to be an important domain in adolescent personality, together with a rather socially colored Extraversion dimension. Items at the non-agreeable end of the dimension specifically characterized Agreeableness. Autonomy contained aspects of positive emotionality, but it kept its core meaning expressing autonomous and self-assured aspects of personality. Although a high correlation between the adult Conscientiousness scale and the explorative adolescent Conscientiousness factor was observed, the factoring result was contradicting. Both the negative and the positive Conscientiousness items did load clearly together on the positive pole Conscientiousness, which expressed an initial developmental stage towards adult Conscientiousness rather than mirroring a somewhat blurred picture of this factor in adolescent self-reports. It was suggested that, in particular, this personality relevant result should gain more attention in adolescent personality research. However, it can

be concluded that the FFPI proved to be an eligible candidate for personality studies with self-rating and can be suggested for use in the research of linkages between adult and child personality characteristics.

#### **4.2 Personality and psychosomatic complaints in adolescence**

Several studies have already been devoted to the investigation of personality and psychosomatic complaints, but thus far none of them have concentrated on self-reports and Big Five relevant personality frames in adolescence. This study made this aspect one of its goals.

The results showed that Big Five personality variables could predict psychosomatic health problems in early adolescence. Emotional Stability was found to carry a predicting role in the development of psychosomatic complaints and this was also supported by the correlation between the dependent and the personality variable. The predictive effect was also found in the one-year longitudinal analysis and pointed to a strong relationship between the appearance of psychosomatic complaints and the lack of Emotional Stability in early adolescence.

#### **4.3 Adolescent smoking and personality**

Primary prevention and personality stood in the focus of the study of adolescent personality and smoking behavior. Moreover, the effectivity of a life-skills oriented and school focused primary prevention program was evaluated longitudinally, together with the personality variables. The research question was about the possible predicting effects of the self-reported Big Five personality variables toward a self-reported behavioral change in current smoking and intention to smoke.

Although no major positive effects were found for the prevention program, the personality variables Agreeableness and Conscientiousness together with Emotional Stability turned out to have a predicting character in smoking. In the long-term one-year period of evaluation, Emotional Stability remained a good predictor of non-smoking behavior. When

subjects were asked about their intention to smoke, the short-term results corresponded fairly well to the smoking behavior results as presented above but, in the long-term evaluation the prediction model failed to become statistically significant. Nevertheless, agreeable boys kept their negative attitude toward smoking over a twelve months period. An interesting negative side effect of the prevention showed up in extraverted girls: they seemed to be encouraged by the program to try smoking. However, this effect did not persist longitudinally.

It may be concluded that while the prevention program did not cause any statistically significant prevention effects, personality variables did prove to play an important role in the development of smoking behavior and in the change in attitude toward smoking.

#### **4.4. Adolescent alcohol use and personality**

The other legal drug that was included in the study was alcohol. The main question was, whether personality variables predicted alcohol consumption and attitude toward alcohol in early adolescence. Effects of the primary prevention program didn't stand in the foreground of this study because the alcohol specific life-skills sequences of the prevention were not yet administered at the time of the evaluations.

As in smoking, Conscientiousness and Emotional Stability played a major role in the prevention but Agreeableness could also prove its effectivity, especially in the five-month short-term period in the group of boys. The attitude toward alcohol consumption was influenced by Emotional Stability and slightly negatively by Autonomy in the short-term prediction period but, in the one-year term prediction, Agreeableness proved to be an efficient predictor. In the case of current alcohol consumption, no long-term gender specific effects could be detected for girls. It is probable, that this effect is due to the fact that relatively few girls were among the alcohol-consuming adolescents.

Concluding, the alcohol relevant results demonstrated the relevance of the Big Five variables in this applied field and pointed to the developmental characteristics of alcohol use in adolescence.

#### **4.5 Methodical issues and implications for future research**

It is necessary not only to summarize the major findings and stress the relevance of the personality dimension in primary prevention, but also to point to some of the major difficulties and methodical problems of the study. It should be mentioned here that the personality, psychosomatics and the substance use relevant results were based on self-reports without any control over the accuracy of the answers (e.g., medical check for psychosomatic complaints or peer-reported current substance use rates). This fact makes it difficult to make reliable behavioral predictions on the basis of the present data and restricts the practical relevance of the findings.

Therefore, the aim of this thesis was more to present these first Big Five relevant developmental result than to draw far-reaching consequences on the basis of the findings. The overall methodical difficulties and the weakness of the statistical analyses did not provide extensive conclusions and broad-range implications but pull one's attention to the cautiousness that is needed in applied developmental personality research, especially when results were based exclusively on self-reported data.

Nevertheless, without taking the first steps toward better designed and operationalized primary prevention research, more reliable and convincing result are not to be obtained. It is suggested, in primary prevention studies with young adolescents, to concentrate on some cautiously selected aspects rather than to conduct a wide-range questioning. Looking at the questionnaire booklet it is easy to imagine that some students could be overwhelmed by the great amount of items asked. Furthermore, the substance use relevant items need some corrections. It was not always clear to the subjects what kind of beverages fell under the label of "alcohol" (for example beer was frequently mistaken for a soft drink) and some unclear categories in the substance use specific scales (like "quitted smoking already") were not eligible for the inclusion in the prediction models and so larger groups of subjects were inevitably excluded from the study.

It is presumed that it is fairly possible to gain more reliable results from young adolescents in primary prevention but, for that purpose, not only the prevention programs but also the evaluation methods must be more carefully tailored to the actual developmental stage of the age-groups in focus.

#### **4.6 Conclusion**

It can be concluded that personality characteristics do already play a determining role in early adolescence, contribute to the individual developmental process and have a significant effect in the development of health relevant attitudes and problems such as legal drug use and psychosomatic complaints. The here presented studies expressed the need for more individualistic and personality tailored prevention programs that start around the age of ten and last through adolescence. An early detection of potential risk factors makes an intervention possible before the developmental process becomes disturbed and problem behavior, illness and drug use appears.

The results showed that personality has predicting power in the development of unhealthy behavioral and psychosomatic symptoms and also supports the emergence of a firm resistance against legal drugs. Moreover, these studies provided useful information for school oriented primary prevention and supported the relevance of the Big Five model in applied adolescent personality research.

An inventory, such as the FFPI, was apparently capable to cover developmental changes and it proved to to be a useful self-rating measure in adolescence. Nevertheless, the discrepancies compared to the adult structure showed, what John et al. (1994) also proposed ten years ago, there is still more research needed on developmental transformation on linking child personality development to adult personality.

These studies aimed to accomplish a better undersanding of this interesting field of research and the author hopes to have encouraged others to continue with such investigations.