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Candidate session number

Candidate name

School name

Examination session (May or November)

MAY

Year

2015

Diploma Programme subject in which this extended essay is registered:

PSYCHOLOGY

(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay:

The Cultural Universality of the Five-Factor Model of Personality

Candidate's declaration

This declaration must be signed by the candidate; otherwise a mark of zero will be issued.

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

I am aware that the word limit for all extended essays is 4000 words and that examiners are not required to read beyond this limit.

This is the final version of my extended essay.

Candidate's signature:

Date:

13.02.2015

Supervisor's report and declaration

The supervisor must complete this report, sign the declaration and then give the final version of the extended essay, with this cover attached, to the Diploma Programme coordinator.

Name of supervisor (CAPITAL letters) _____

Please comment, as appropriate, on the candidate's performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate's own work. You may attach an additional sheet if there is insufficient space here.

The student did a very good job overall. Most of the deadlines were kept and with every draft he handed in, a clear progress could easily be detected. The student first consulted me in December 2013 to show interest in an extended essay in the field of psychology. He mentioned that he was somehow interested in the Five-Factor Model of Personality. Soon after that first meeting we managed to narrow down the research question in a way that allows effective treatment within the word limits. Soon after that the student started the bibliographic research and in June 2014 he handed in a complete outline as well as a detailed work plan. Finally, a first draft was handed in September 2014. The first draft was already pointing in the right direction with only some drawbacks, most of which had to do with the essay's coherence. In a short meeting we managed to discuss these points and to clarify any uncertainties regarding references. In November 2014 the student eventually handed in the final version of the extended essay, which seems to be a very good piece of work and it seems obvious to me that he really put a lot of effort into it and the result is impressive, particularly when keeping in mind that this was his first piece of academic writing. Soon after the final version had been handed in, we conducted a viva voce in presence of the school's IB coordinator. During the viva voce the student could answer all the questions very well and there is no doubt that the result of the working process is the student's personal achievement which he can be very proud of. ✓

This declaration must be signed by the supervisor; otherwise a mark of zero will be issued.

I have read the final version of the extended essay that will be submitted to the examiner.

To the best of my knowledge, the extended essay is the authentic work of the candidate.

As per the section entitled "Responsibilities of the Supervisor" in the EE guide, the recommended number of hours spent with candidates is between 3 and 5 hours. Schools will be contacted when the number of hours is left blank, or where 0 hours are stated and there lacks an explanation. Schools will also be contacted in the event that number of hours spent is significantly excessive compared to the recommendation.

I spent hours with the candidate discussing the progress of the extended essay.

Supervisor's signature: _____

Date: 16/02/2015

Assessment form (for examiner use only)

Candidate session number		
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Achievement level

Criteria	Examiner 1	maximum	Examiner 2	maximum	Examiner 3
A research question	2	2	<input type="text"/>	2	<input type="text"/>
B introduction	2	2	<input type="text"/>	2	<input type="text"/>
C investigation	3	4	<input type="text"/>	4	<input type="text"/>
D knowledge and understanding	3	4	<input type="text"/>	4	<input type="text"/>
E reasoned argument	2	4	<input type="text"/>	4	<input type="text"/>
F analysis and evaluation	1	4	<input type="text"/>	4	<input type="text"/>
G use of subject language	4	4	<input type="text"/>	4	<input type="text"/>
H conclusion	0	2	<input type="text"/>	2	<input type="text"/>
I formal presentation	3	4	<input type="text"/>	4	<input type="text"/>
J abstract	2	2	<input type="text"/>	2	<input type="text"/>
K holistic judgment	2	4	<input type="text"/>	4	<input type="text"/>
Total out of 36	24		<input type="text"/>		<input type="text"/>

Name of examiner 1: _____ Examiner number: _____
(CAPITAL letters)

Name of examiner 2: _____ Examiner number: _____
(CAPITAL letters)

Name of examiner 3: _____ Examiner number: _____
(CAPITAL letters)

IB Assessment Centre use only: B: _____

IB Assessment Centre use only: A: _____

Extended Essay – Psychology ✓

The Cultural Universality of the Five-Factor Model of Personality

To what extent can the five-factor model of personality by Tupes and Christal be applied to
different cultures? ✓

May 2015

Word Count: 3997 ✓

Abstract

The aim of this essay is to evaluate the extent to which the five-factor model of personality by Tupes and Christal (1961) is valid in different cultures. As such, it deals with the following research question:

To what extent can the five-factor model of personality by Tupes and Christal be applied to different cultures? ✓

20.

The essay first introduces the model and its origins. It then proceeds to evaluate the model's validity in diverse cultures. Succeedingly, it assesses the model's aptitude in intercultural research as a basis for comparing national character. I conducted a literature study and did an extended research of published studies in the National Library as well as on the Internet in order to find an answer to my question. ✓

In conclusion, the contemporary model seems to be cross-culturally valid to a very large extent. Support for its claim to human universality comes from different kinds of research conducted in a multitude of cultures. Studies like McCrae & Terracciano (2005b) clearly demonstrate that the model is valid in an overwhelming majority of cultures. However, studies such as Gurven et al. (2013) cast some doubts on the model's claim to complete cultural universality, especially when it comes to smaller cultures. Additional research would be needed for the model to become accepted as truly universal to all mankind, if this is possible. ✓

In the area of intercultural research the model seems to have great potential. Studies like McCrae (2001) were able to draw some conclusions from aggregate trait data and relate it back to perceived features of cultures, making the model seem to be a good tool for comparing cultures. However, methodological issues as well as the general lack of a solid foundation for intercultural research will have to be tackled for the field to truly advance.

Word Count: 297 ✓

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1. Introduction

1.1 Background of Investigation

As our world has become more globalized and connected, we find it easier to see how human beings are alike in some aspects, but also how we are different in other aspects. Our scope used to be very limited, as we did not know much about other peoples. Nowadays, it has become easier to learn about those far away from us. But this has also raised new questions.

As we begin to learn more about other people and cultures, we are left wondering how alike we really are and how we could possibly find out. Personality being regarded as the feature that makes us unique and which is supposed to distinguish us from other species, seems like the best source to answer this question. ✓

Personality psychology, as the study of unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (American Psychological Association, 2002), is expanded to an entirely new dimension when confronted with the task of exploring the phenomenon of national character. ✓ McCrae et al. address this problem when claiming that:

[i]t is becoming more feasible to conduct the integrated series of studies needed to understand personality differences among cultures and as the world grows smaller, that understanding is becoming increasingly necessary (McCrae et al., 1054). ✓

While the effort to devise a universal taxonomy of personality traits dates back to the beginnings of the last century, the five-factor model, initiated by Tupes and Christal in 1961, provided the first unified theory of how personality is structured (John & Srivastava, 103). This enabled further research into cross-cultural personality structure, which my investigation is based on. ✓

1.2 Purpose of Investigation

I was wondering to what extent research on personality had been expanded to include cross-cultural examinations and comparisons. While the individual's personality has been the focus of intensive research for a long time, I wanted to know if and how it is possible to measure ✓

and describe cultural differences in personality structures. Thus, I chose to look at the seemingly universal model of personality, the Five-Factor Model of Personality (FFM) and chose the following research question: ✓

To what extent can the five-factor model of personality by Tupes and Christal be applied to different cultures? RQ.

As the existence of different cultures literally defines the breadth of human diversity, one should be skeptical if one universal instrument could be applied to all human individuals equally, no matter what culture they come from. ✓

Finding an answer to my research question is important in many ways. Having one universal model of personality would allow us to compare cultures and their members using objective criteria instead of relying on our own subjective judgments. It would also enable further research into cultures' features and the origins of personality differences. ✓

1.3 My Approach to the Investigation

At first, I mainly wanted to focus on the more theoretical aspects of the FFM and its applicability and validity in various cultures, generally referred to as 'transcultural' research (McCrae 2001, 821). ✓

During the course of my research, however, I found some exciting scientific work in the field of 'intercultural' research, which focuses on associations between traits and features of a culture by comparing mean levels of its members' traits (McCrae 2001, 822). This field of research is based on the assumption that the FFM is valid in different cultures, as will be seen in chapter 2.2. ✓ Thus, I chose to include this field, even if only briefly, in the last subchapter of my essay.

Many of my sources stem from the Western scientific world, but given the nature of the topic, maintain an international perspective. My scientific research was done primarily on the

Internet and in the National Library. I conducted a broad literature study of published research papers investigating my topic and related areas. This equipped me with a broad knowledge of cross-cultural personality research, which was necessary in order to understand the aspects I was most interested in. ✓

In my opinion, the area of cross-cultural personality research, particularly the field of intercultural research will gain a lot more traction in the future and I think that my investigation provides a comprehensive overview of the current state of affairs, which might help to clarify certain issues when it comes to the understanding of different cultures. ✓

1.4 Research Context

My study focuses on the applications of the five-factor model of personality to different cultures. Chapter 2.2 evaluates the cross-cultural validity of the model by reviewing studies like McCrae and Costa (1997) and Gurven et al. (2013). They investigate the cross-cultural validity of the FFM through a variety of emic and etic methods, such as lexical analyses, translated questionnaires, and third person observation. The general consensus of these studies seems to be that the model's five factors can indeed be found in virtually every culture. ✓

Chapter 2.3 focuses on the usefulness of the model in comparing cultures. For this, studies like McCrae (2001) and McCrae and Terracciano (2005a), which attempt to draw conclusions from mean levels of personality scores, were evaluated.

Countless researchers have investigated the cross-cultural validity of the model and used it to compare cultures' features, which led to the entire field becoming very cluttered. Finding an answer to my research question will yield a holistic judgment of the model's validity and usefulness in intercultural research. ✓

2. The Five-Factor Model

2.1 The Inception of the Model

The contemporary model consists of five factors, which are commonly labeled as 'Extraversion', 'Agreeableness', 'Conscientiousness', 'Neuroticism', and 'Openness to Experience' (McCrae & John, 1987-79). The assumption behind the model is that its five factors build the basic dimensions of personality, which are to be found in every human being, independent of factors such as age or culture. ✓

Each factor consists of six so-called 'sub-facets', which further refine it. For example, extraversion consists of 'Warmth', 'Gregariousness', 'Assertiveness', 'Activity', 'Excitement Seeking', and 'Positive Emotions' (McCrae & John, 1987-79). It is important to note that there is a wide array of inventories used to measure trait levels, the Revised NEO-Personal Inventory (NEO-PIR) by McCrae and Costa being the most prominent one (McCrae 2002, 4). ✓

A wide range of models existed prior to the FFM's emergence, based on wildly different perceptions of what personality is and how it can be measured. Generally speaking, support for the model came from two domains of research. ✓

The statistical method of factor analysis can be used to determine common factors influencing people's answers to personality questionnaires. Tupes and Christal (1961) applied this method to 30 trait scales and extracted five factors. While their findings failed to attract much attention, they can be credited with the discovery of the model, as we know it today (Digman, 1990). ✓

The lexical tradition played a much smaller role in the discovery of the FFM (McCrae & John, 1985). John gives a good explanation of its approach when saying:

The lexical hypothesis posits that most of the socially relevant and salient personality characteristics have become encoded in the natural language [...]. Thus, the personality vocabulary contained in the dictionaries of a natural language provides an extensive, yet finite, set of attributes that people speaking that language have found important and useful in their daily interactions (John & Srivastava, 1999). ✓

As lexical analyses involve subjective judgments on the researcher's part, they do not fall into the same category as strictly empirical methods such as factor analysis. One could argue however that they provide a more holistic view of personality, as they capture everything that we regard to be important when describing others' behavior. ✓

The lexical approach is of much greater interest when it comes to Transcultural research. Most of the research contributing to the FFM, including lexical analyses, was conducted in English-speaking countries. Therefore, even though the FFM was established as a universal illustration of personality structure, this could only be said for the countries and cultures that had been the focus of research so far. ✓ One of the ways to effectively prove that the FFM is valid across culture, is by performing lexical analyses in other languages and thus in other cultures, as McCrae and John suggest: ✓

If we assume that personality structure is universal, we should be able to extract the same basic factors from analyses of any natural language, and there is some evidence to support this position (McCrae & John, 1984-85). ✓

Much of the research in the transcultural field of study applies this principle when trying to assess the cross-cultural validity of the FFM, as will be seen later.

Despite being discovered as early as 1961 by Tupes and Christal, ✓ the FFM did not gain widespread attention until 1980 when Goldman and Digman, two respected personality researchers at the time, agreed that “[f]ive-factor solutions were remarkably stable across studies, whereas more complex solutions were not” (Digman, 1983). ✓

McCrae and Costa had developed their own model. First their three factors were ‘Neuroticism’, ‘Extraversion’, and ‘Openness’. They then added ‘Agreeableness’ and ‘Conscientiousness’. Their publication led to the FFM soon being internationally well known and triggered many other researchers to replicate their findings (Digman, 1983). ✓ The subsequent publishing of the ‘NEO Personality Inventory’ by Costa and McCrae further promoted the model and made replication easier (McCrae 2002, 9). ✓

2.2 Cross-Cultural Validity

One of the FFM's biggest limitations in its beginnings was its background. Having been developed exclusively by American researchers, the model could hardly claim to be relevant in other cultures (McCrae & Allik, 2). Fortunately, as the field of cross-cultural psychology was growing at the time, the model gained more international attention, which it has remained ever since. This has led to many efforts of applying the FFM to various cultures, a few of which will now be examined more closely. ✓

The aim of transcultural research is to investigate the cross-cultural validity of the model, which can be defined as "the extent to which it is relatively independent of cultural systems" (Rolland, 9). That is to say, the extent to which it can be applied to different cultures without having to be adapted. There are a number of ways to evaluate the model's cross-cultural validity, but they are all either emic or etic approaches. ✓

While the emic approach tries to find personality constructs specific to each culture, the etic approach tries to find cross-cultural constructs, valid in different cultures. In other words, the emic approach focuses on finding the idiosyncrasies of each culture, while the etic approach tries to prove that they do not exist (Helfrich, 132-133). ✓

A research method typical of the emic approach would be lexical analysis, as it extracts the personality structure relevant to a culture from its language without presupposing the existence of a certain model. Studies such as McCrae and Costa (1997), on the other hand, applying translations of a questionnaire based on a model discovered in one language to other cultures would be a good example for the etic approach. In the end, for a model to be universally valid and accepted, both emic and etic research should yield conclusive evidence of its existence. ✓

McCrae and Costa (1997) performed a factor analysis on data from six cultures¹ using translated administrations of the NEO-PIR and compared them to the original factor structure. In an examination of the principal components, they found that “it is clear that all five factors can be readily recognized” (McCrae & Costa, 512) and that “both primary and secondary loadings [...] closely resembled the American structure” (McCrae & Costa, 512). The fact that the five-factor structure could be found in cultures as diverse and geographically spread-out as the ones examined here, can be considered strong evidence that the FFM is valid in a wide array of cultures. However, the authors caution that it is not possible to generalize to the entire human race from this limited sample. For example, it is possible that trait structure is different in preliterate societies. Nonetheless, the researchers conclude that the “FFM at least provides a solid beginning for understanding personality everywhere” (McCrae & Costa, 515).

In another etic study, Gurven et al. (2013) investigated the validity of the FFM in the Bolivian indigenous Tsimane population. They used both, self-reports and observer ratings, on various samples of the population, accounting for age, sex, education and Spanish-fluency. They found support for two factors, which they labeled ‘prosociality’ and ‘industriousness’ that “cut across the Big Five domains” (Gurven et al., 365), not bearing resemblance to any particular FFM factors. Their results bear significance, not only because they show that the FFM does indeed not seem to be valid in some cultures, but also because “data from small-scale societies contributes to our understanding of the evolution of human personality differences” (Gurven et al., 367). This study highlights the need for more attention to be paid to numerous smaller cultures that are often neglected by researchers.

McCrae and Terracciano (2005b) used third person observer data gathered using the Revised

¹ Germany, Portugal, Israel, China, Korea, and Japan

NEO-Personal Inventory from 50 cultures to investigate the universality of the trait-structure. They found the structure to be highly universal, reaching congruence scores² above .90 in all but 4 cultures (India, Morocco, Botswana, and Nigeria) (McCrae & Terracciano 2005b, 551). While their sample was far from representative, using primarily college students, the fact that the structure could be found in almost 50 different cultures from all over the world strongly supports the model's claim to cultural universality.

While etic studies, such as the ones just presented, usually produce substantial evidence of the model's cultural universality, emic studies turn out to be more complicated. They clearly show the cross-cultural validity of the 'extraversion', 'agreeableness', and 'conscientiousness' dimensions. The factors of 'neuroticism' and 'openness to experience', however, are more problematic. The dimension of neuroticism, always having been strongly represented on personality inventories tends to be accepted nonetheless (Rolland, 14).

The dimension of openness, on the other hand, is more difficult, with some researchers even going as far as suggesting to drop it entirely (Rolland,15). One explanation for this relates to the fact that the openness factor has often also been characterized as one determining intellect, resulting in "historical discontinuities between *personality* and *intellect* on the part of both laypersons and psychologists" (Somer & Goldberg, 449). In a lexical analysis of the Turkish language, Somer and Goldberg (1999) found evidence for a factor similar to openness, noting that adjectives describing this dimension are particularly prone to getting lost in the analysis process. In addition to this explanation, they added that the factor of openness might be the one most prone to cultural differences. This applies particularly to the Turkish culture, where the ideas of progressivism and openness to new things might not be encoded in language to

² Index of similarity between the extracted factors and the original factor structure, with values above 0.85 indicating fair similarity (Lorenzo-Seva & Berge, 61)

the same extent as in Western Cultures. This is not to say that they do not exist. Rather, they have not been adopted by the language to the same extent as in other cultures (Somer & Goldberg, 432-33). Additionally, Somer and Goldberg found support for the other four factors. ✓

Not only does this study support the FFM's claim to cultural universality as it validates the structure through emic means, it also offers an explanation for the difficulties that emic studies have had in trying to find evidence for the openness dimension. ✓

Saucier (1997) performed a lexical analysis of the 500 most common English person descriptors. This study was different in the selection of words, using not only personality descriptors, but also evaluative terms such as *disgusting* or *good-for-nothing*. While Saucier did not find the FFM to be wrong, he emphasized that the number of factors was greatly dependent on the words used in lexical analyses: ✓

There may be no single superior "magic number" of factors. Depending on variable-selection preferences, there are reasonable arguments for the "magicality" of the numbers three, five, or seven (Saucier, 1310). ✓

Given the fact that other researchers continue to find five-factor solutions to be the most stable, it can be argued that the established concept of personality is best represented in those solutions. ✓

This study also shows one of the problems with lexical analyses, which is that different languages emphasize different aspects of personality. McCrae and Costa allude to this problem when saying "[l]exical studies thus confound differences in personality structure with differences in personality language" (McCrae & Costa, 510). ✓

Ultimately, issues like this one only underscore the importance of both emic and etic research in the validation of the FFM. While both approaches come with their respective flaws, support from both is the best a model can get to back up its claim to cultural universality.

2.3 Value in Intercultural Research

While the FFM has been applied to a variety of fields, ranging from assessing work attitudes to patients' immune systems (Moss, 2008), one of the most exciting, but often underestimated applications is the field of intercultural research. It focuses on how the FFM can be empirically applied to compare cultures. ✓

This is done by looking at the mean level of FFM scores of members of a particular culture and comparing them to those of others. This kind of research is only possible due to the FFM's cultural universality, making it the ideal choice for research involving multiple cultures. ✓

When talking about cross-cultural applications of the FFM, it is impossible to leave out this rather novel and exciting field of research, as it illustrates the value of having a cross-cultural model of personality. Thus, I have chosen to include a small overview of research in this field. ✓

In what is described as a pilot study by the author, McCrae (2001) used pre-existing data collected from 26 cultures using the NEO-Personality Inventory. The study confirmed that the FFM was indeed suitable for intercultural comparisons, finding that the model's five-factor structure could also be found when using mean level data (McCrae 2001, 832).

It was found that some of the scores bear a respectable correlation to Hofstede's dimensions of culture, which are a generally accepted description of cultures' attitudes and values (Law et al., 135). For example, extraversion and openness both appear to be correlated with individualism, which squares with the general assumption that individualism encourages self-expression and free thinking (McCrae 2001, 837). This shows that cultural mean levels of FFM traits are indeed useful when studying features of a culture. ✓

In general, McCrae found that quite a few of the mean levels reported bore some resemblance to stereotypes of national character. For example it was confirmed that Spaniards are moody (high on neuroticism) and Malaysians, thought to be polite and nonconfrontational, indeed

scored high on agreeableness (McCrae 2001, 838). Apart from these superficial connections, however, very little can be told from the scores alone. ✓

Findings that do not seem to agree with common conceptions of a culture can be explained by the concept of norms of self-representation. For example, the fact that Japanese people, thought to be ambitious and hard-working, scored low on conscientiousness can be explained by their higher self-expectations, resulting in a rather negative self-image and thus more modest judgments about their own conscientiousness (McCrae 2001, 840). ✓

Other issues include acquiescence and response bias (McCrae & Terracciano 2005a, 409). Obviously, these factors make intercultural research difficult, as they influence participants' responses on questionnaires and thus bias the data, leading to a distorted image of a culture. It seems almost ironic that the cultural differences that are supposed to be studied make the process of doing so extremely difficult. Representative sampling is another big challenge with a huge number of factors to consider. Ethnicity, gender, age, and (particularly in bigger countries) location within the country are only the most obvious (McCrae 2001, 823-24) and (McCrae & Terracciano 2005a, 421). ✓

Given all these methodological issues, it is easy to understand why the studies discussed here did not even attempt to cover them all. It has to be said that they limit the applicability of the model in this field. That is not because the model per se is unsuitable for intercultural research, but because the process of applying it is made difficult by these ✓ methodological concerns.

McCrae and Terracciano (2005a), partly based on the findings of the previous study, gathered data from 51 cultures where college students rated the personality of a friend or acquaintance who was a native-born citizen of their country. ✓ This was supposed to eliminate cultural differences in self-representation. It was found that in countries where more than one sample had been taken, there were some significant differences between the groups. For example,

they found that scores for openness of Northern Irish and English people (both part of the same nation, but geographically quite distant) were on the opposite ends of the scale. This disrupts the rather basic assumption that comparing countries is equivalent to comparing cultures and highlights the need for more thoughtful sampling. This is another methodological issue that makes intercultural comparison using the FFM difficult. ✓

Allik and McCrae (2004) used pre-existing data from 36 cultures to perform various analyses. They found that, while climate and distance from the equator showed very little correlation with trait levels, it seems that the distribution of traits follows geographic patterns (Allik & McCrae, 23). For example, Germans scored similarly to Austrians while Taiwanese score similarly to Hong Kong Chinese (Allik & McCrae, 21). The question remains, however, what these geographic correlations actually represent. It is tempting to assume they show that geographically close cultures are also close in terms of personality and values, enabling a wide array of interpretations about issues such as the genetic influences of personality. However, it is equally possible that the geographic patterns found are merely a result of differences in self-report styles, where certain traits are more valued in some cultures, leading to distorted answers. This question can only be settled through methodological triangulation employing techniques, such as outside observer ratings. Until then, this study serves as another illustration of methodological issues. ✓

3. Conclusion

While the FFM does generally appear to be very valid across cultures, some issues seem to persist, leaving me to wonder whether the model will ever be considered universal to all mankind. Certainly, the five-factor model is the closest we have ever come to a truly cross-cultural theory of personality and without any doubt the model is valid enough to be applied to a variety of fields. The studies presented in 2.2 clearly point towards this conclusion with support for the model's cross-cultural validity coming from both etic and emic studies.

However, in order to be considered truly valid for all mankind, much more attention will have to be paid to the smaller issues that still seem to exist. For example, indigenous populations make up an incredibly small percentage of the world's population. Despite this, it would be important for the scientific community to further investigate the validity of the model in those groups, as this issue is one of the few that still stands in the way of the FFM becoming truly cross-cultural. ✓

The comparison of cultures using mean levels of trait scores is an exciting application of the model that illustrates the value of a cross-cultural model. While the studies reviewed here were able to make some interesting connections between trait patterns and cultural features, the field is very much still in its infancy and will have to overcome some rather elementary issues before any progress will be possible. ✓ First, acquiring representative data is an enormous challenge that will take more effort to be mastered fully. Until then, every conclusion drawn from the data should be viewed very critically. Second, very little can be said from the raw data alone. This is, again, not so much a problem of the model, but rather due to a lack of pre-existing models and data in this domain. While classifications such as Hofstede's offer some kind of basis to reference against, much more descriptive work on cultures will have to be ✓

conducted before the FFM data collected in the studies presented here will be able to be put into context. ✓

If the field manages to overcome all these issues, intercultural research holds the answer to a wide range of both psychological and anthropological questions. For example, it has been suggested that self-expression becomes more important as societies move past the mere struggle for survival, leading to an increase in extraversion scores (Inglehart & Oyserman, 22). ✓

Another area that hasn't even been touched upon is how cultural differences emerge in the first place and whether personality shapes culture or the other way around, a question comparable to the nature-nurture debate. ✓

In conclusion, it can be said that I was able to find a sufficient answer to which extent the five-factor model is valid across cultures, which, if put briefly, would be: "To a very large, yet not quite sufficient extent."

However, I regret not having been able to find more concerning the field of intercultural research. Given the novelty of the topic, it would have been satisfying to find newer and more extensive research. ✓

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