

Validation of the Translated Dutch Personality Questionnaire in Papiamento Speaking Prisoners

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Abstract

Background: Personality disorders have a high prevalence among prisoners worldwide. Yet, in prisoners with an Antillean Caribbean background, personality disorder rates are low probably due to a lack of standardized personality tests in the Caribbean language of Papiamento which to render objective diagnoses. This also has a great potential to result in inappropriate treatment and negative interaction. Therefore, in hopes of proving better diagnostics and treatment and fill this absence, the purpose of this article is to describe a study of the effectiveness and relevance of a standard personality disorder diagnostic interview translated into Papiamento.

Methods: The Dutch Personality Questionnaire was translated to Papiamento by two independent experts and retranslated into Dutch by two other independent experts. Prisoners having both parents born in Bonaire, who had been detained for at least 18 days by the Judicial Detention Centre of the Caribbean Netherlands in Bonaire, during the period from January 1, 2013 to July 1, 2014 were examined using this questionnaire.

Results: There were 23 Papiamento speaking prisoners assessed using the translated Dutch Personality Questionnaire during the study period. There was a sufficient internal reliability and a validity of the personality test. Preliminary norms for use of the NPV in Papiamento were also included.

Conclusion: The use of the NPV in Papiamento may lead to more valid results about the rates of personality disorders among Carib prisoners, and well as improved treatment. Future research should include larger numbers of participants.

Keywords Papiamento; Personality; Validation

Introduction

Personality disorders are highly prevalent among prisoners [1-4]. In prisoners with a Caribbean cultural background, personality disorders are less often diagnosed than in other ethnic groups [5-7]. It remains unclear if this reflects an underdiagnosis or a truly lower prevalence [8]. Ethnic minorities living in the Netherlands tend to score less favorably on personality questionnaires compared to native Dutch subjects [9,10]. The differences can be explained by cultural differences, degree of acculturation, level of education, and amount of time spent in the Netherlands [11, 12].

Dutch personality questionnaires are usually designed to be used with a Dutch research population; as a result, this leads to ethnocentric theorems. Examples of theorems used in the NPV are, "I think poor countries should be able to manage themselves", and, "I believe that the best bridge builders are Dutch" [13]. Another objection may be that the norm groups used to interpret the questionnaires consist of Dutch subjects only [10]. According to different studies, personality can be divided in to five factors [14-17]. However, differences in prevalence of personality disorders occur between different population groups, though, it is not clear if the differences are true differences or the consequence of a measurement error [8,18].

A personality questionnaire validated for the Papiamento language is, therefore, needed. Papiamento is the mother language of Caribbeans born in the former Dutch Antilles. This study aims to translate the Dutch Personality Questionnaire, which is often used in forensic settings, and to validate it for Papiamento speaking defendants.

Methods

Participants

All suspects born or raised on the island of Bonaire, with parents born on Bonaire staying between January 1, 2013 and July 1 2014 at the local prison (Justitiële Instelling Caribisch Nederland locatie Bonaire; JICN), were approached to participate after eighteen days of incarceration. The criteria of "born or raised on Bonaire" was used because many Bonairians were born on the island of Curaçao due to the lack of adequate medical facilities at that time. To prevent influence on court reports and this study, participation was ended if the participant were to be the subject of a psychological or psychiatric court report.191 possible participants were screened; 57 participants met the origin criteria and stayed at least 18 days in the JICN. 24 participants were included in this study. 28 participants became participants of a psychological or psychiatric court report and were eliminated from the study, two participants were released from the prison, one participant was transported to a prison on another island, and two did not want to participate anymore.

The Dutch Personality Questionnaire (Nederlandse Persoonlijkheidsvragenlijst; NPV)

The NPV is the most-used self-report questionnaire to assess personality traits of adolescents and adults [20]. The questionnaire measures neuroticism and emotional stability (NES), social anxiety (SA), rigidity (RG), offendedness (OF), egoism (EG), dominance (DO) and self-respect (SR). The NPV consists of 133 items. All items are scored on a 3 point Likert scale: correct=2 points,? (question mark)=1 point, and incorrect=0 points. The NPV was first published in 1985 and was revised in 2000, being compared to the Big-Five model [21].

The NPV and the instructions of administration of the NPV were translated in to the Papiamento language, conforming to the Beaton guideline, to ensure the translation would be conceptually and linguistically, comparable to the Dutch version. The publisher of the NPV, Pearson Assessment, gave written permission to translate and validate the questionnaire. A bilingual psychologist and a bilingual non-psychologist translated the NPV independently from one another. Subsequently, an amended version was determined and back translated to Dutch by another bilingual psychologist and bilingual nonpsychologist. All translators spoke Dutch and Papiamento as their native languages. To increase the readability of the NPV, some words used in the NPV were spelled differently than recommended by the official orthography. A final version was determined by all four translators.

Barkley Functional Impairment Scale (BFIS)

The participants' functioning in daily life prior to being detained was assessed with the BFIS. De BFIS assesses functioning in daily life based on 15 major life activities like, for example "the person's home life with his/her immediate family", "in completing chores at home", and, "managing his/her household, in his/her work or occupation", "in his/her relationships with friends", "in any educational activities", and "in caring for him-/herself daily". A higher score on a scale or the BFIS means a higher level of functional impairment. The BFIS consists of a short and long self-report version (6 and 15 items), a long and short self-report version (6 and 15 items) and a BFIS impairment interview. In this study, the BFIS was administered by the researcher based on an interview with the participant. The BFIS is pre-eminently appropriate for assessing adolescents and the forensic population.

Translation of the BFIS has been the subject of an earlier study regarding the assessment of intelligence among Papiamento-speaking offenders. The same translation method used in the study of Van de Vorst and colleagues was used for the NPV.

Statistical analysis

To measure the internal consistency of the NPV subscales, Cronbach's alpha was calculated and compared with the values of the first manual (1990) and the reviewed manual (2000) of the NPV. Onesample t-tests were conducted to compare the NPV mean in the manual with the mean of the NPV translated into Papiamento A

T-test for independent samples was conducted to compare the results on the NPV depending on having a permanent resident or not, being single or cohabiting, level of education, recidivism, and substance abuse. An analysis of variance was done to determine if work influences the result of the NPV.

Pearson's product-moment correlation coefficient was calculated to determine how the different subscales from the NPV relate to the different domains of general functioning, measured with the BFIS. Ttests for independent samples were used to determine the difference in outcome between participants who are functional-impaired and not functional-impaired in different life domains. Finally, normative scores for the Bonaire prison population were calculated in the same way as done in the manual of the NPV.

Results

The research population has a mean age of 28.7 (SD=11.6), 20 participants have a permanent resident. The majority finished primary school, is single, and no participants are married. Twelve of the 24 participants are first offenders, while the other half experienced two or more detentions. Fourteen out of 24 participants are dependent of substances like alcohol, marihuana, or cocaine. Four participant uses a combination of alcohol and marihuana, one participant uses a combination of marihuana and cocaine, and one uses a combination of alcohol marihuana and cocaine, and one uses a combination of alcohol, marihuana, is the eleven participants had been unemployed before being incarcerated, 5 had a permanent job, and 8 had project-based work without being employed; in the local language, this is referred to as 'kue job' (getting work). The socio-demographic characteristics are summarized in table 1.

Age	n (%)		
18-20	5(20.8)		
21-30	13 (54.2)		
31+	6(25)		
Permanent resident			
Yes	20 (83.3)		
No	4(16.7)		
Marital status			
Single	21 (87.5)		
Cohabiting	3(12.5)		
Level of education			
No education	1(4.2)		
Primary school	15 (62.5)		
Secondary school	4(16.7)		

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Intermediate vocational education	3(12.5)						
Adult education	1(4.2)						
Work							
Jobs*	8(33.3)						
Permanent job	5(20.8)						
Unemployed	11 (45.8)						
Recidivism							
First detention	12 (50.0)						
Multiple detentions	12 (50.0)						
Substance abuse	1						
Yes	14 (58.3)						
No	10 (41.7)						
*Project-based work without being employed							

Table 1: Socio-demographic characteristics of Papiamento speaking prisoners (n=24)

Subscale Cronbach alpha study		Cronbach alpha original (range)		ce: 0.62; self-resp is lower than the				
Subtest	n	score	м	SD	t-test	df	р	95%-CI
NES	24	9.7	13.93	9.53	2.18	23	0.04	0.21/ 8.26
SA	24	10.4	2.62	7.24	1.77	23	0.09	-0.44/ 5.67
RG	24	25.4	35.05	5.52	8.56	23	0	7.32/11.98
OF	24	19	20.96	7.35	1.32	23	0.2	-1.13/5.08
EG	24	13.9	16.36	3.73	3.23	23	0	0.88/4.04
DO	24	15.8	12.71	5.18	-2.92	23	0	-5.28/-0.90
SR	24	27.9	27.06	4.56	-0.91	23	0.38	-2.77/1.08
NES = neuroticis	m and emotio	nal stability; SA	= social anxi	ety; RG = rigidity; OF =	offendednes	s; EG = egoism;	DO = dominance	; SR = self-respect

Table 3: Mean comparison between original NPV manual and translated NPV for Papiamento.

A one-sample t-test is conducted to compare the means of the subtest of the original NPV manual and the translated NPV; the results are shown in table 3. The means of neuroticism and emotional stability (M=13.93, SD=9.53; t (2.18)=1.62), rigidity (M=35.05, SD=5.52; t (8.56)=1.62), egoism (M=16.36, SD=3.73; t (3.23)=1.62) and dominance (M=12.71, SD=5.18; t (-2.92)=1.62) are significantly higher than the means in the original NPV manual.

Nine independent-samples t-test were conducted to compare the NPV scores for: having a permanent resident or not, being single or cohabiting, having a primary school or no education versus higher than a primary school education, being first offender versus recidivist, and whether the participants uses substances or not. These factors did not seem to have an influence on the outcome of the NPV (p>0.05 with α =0.05). A one-way between-groups analysis of variance was conducted to explore the impact of employment on the outcome of the

NPV. The participants we divided into three groups: Jobs, Permanent job, Unemployed. There was no statistically significant difference at the p<0.05 level in the NPV scores between the three groups.

The relationship between the individual BFIS items and the Papiamento NPV subscales was investigated using the Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violations of the assumptions of normality, linearity and homoscedasticity. The BFIS items were split into: a group of participants with no to mild functional impairment on a life domain (item score < 6) and a group of moderate to severe functional impairment on a life domain (item score > 5). For the functional impaired group, the correlations between the NPV subscales and the BFIS items 4, 5, 6, 10, 11, 13, 14 and 15 were not calculated because of violations on one or more of the assumptions on all seven results. BFIS items 2, 3, 4, 10, 13, 14, and 15, for the not functional impaired group

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NES	0.88	0.82 - 0.87
SA	0.84	0.82 - 0.87
RG	0.54	0.78 - 0.81
OF	0.78	0.77 - 0.83
EG	0.21	0.64 - 0.74
DO	0.62	0.70 - 0.80
SR	0.55	0.70 - 0.79

Table 2: Cronbach alpha for translated NPV compared with original manual

In table 2, The Cronbach alpha values of the Papiamento NPV and the values of the NPV manual are shown. Compared to the manual, neuroticism and emotional stability, and social anxiety in the Papiamento NPV have a good internal consistency, with 0.88 for neuroticism and emotional stability and 0.84 for social anxiety, both being between the lowest and highest values of the Cronbach alpha in the NPV manual. The internal consistency for offendedness is acceptable and higher than the lowest value in the manual. The remaining subscales have a lower internal consistency than reported in 0.62; self-respect: 0.55), with ower than the lowest manual's

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were omitted for the same reason. The medium and large correlations of the remaining items are shown in table 4. Participants being severely impaired in the life domain of functioning in home life with immediate family (BFIS item 1) reported high levels of social anxiety (r=0.48, n=12, p=0.12), rigidity (r=0.36, n=12, p=0.25), and offendedness (r=0.45, n=12, p=0.15). High levels of social anxiety (r=0.37, n=5, p=0.54), rigidity (r=0.35, n=5, p=0.57) and offendedness (r=0.41, n=5, p=0.50) were also found for participants not being able to complete chores (BFIS item 2). Low levels of dominance (r=-0.55, n=5, p=-0.34) and self-respect (r=-0.73, n=5, p=0.16) related to problems in completing chores were found. Participants having problems related to work or their occupation (BFIS item 3) reported a high level of egoism (r=0.44, n=6, p=0.38) and low levels of neuroticism and emotional instability (r=-0.66, n=6, p=0.15). Participants with educational problems (BFIS item 7) reported high levels of neuroticism and emotional instability (r=0.88, n=5. p=0.50), social anxiety (r=0.88, n=5. p=0.50). rigidity (r=-0.34, n=5, p=0.58) and offendedness (r=0.93, n=5, p=0.02). and low levels of dominance (r=-0.74, n=5, p=0.16) and self-respect (r=-0.98, n=5, p=0.01). Participants having problems taking care of their children (BFIS item 8) reported low levels of neuroticism and social instability (r=-0.56, n=9, p=0.12) and social

anxiety (r=-0.36, n=9, p=0.34). Participants being severely impaired in managing their money (BFIS item 9) also reported high levels of rigidity (r=0.67, n=8, p=0.07), dominance (r=0.68, n=8, p=0.07), and self-respect (r=0.42, n=8, p=0.30). Participants not being able to manage their daily responsibilities (BFIS item 12) reported low levels of neuroticism and social instability (r=-0.48, n=6, p=0.33) and social anxiety (r=-0.37, n=6, p=0.47), but reported a high level of egoism (r=0.66, n=6, p=0.15). 29 independent-samples t-test were conducted to compare the NPV scores for functional impaired and not functional impaired participants. The t-tests where the BFIS items 6 (community activities), 10 (driving a motor vehicle), and 13 (caring for yourself daily) were used as factor were omitted from the results because the items could not be split into two groups, on these items. All participants scored below 6 or higher than 5. One t-test was significantly different in NPV scores for functional impaired and not functional impaired participants. Participants having problems functioning in their home life with immediate family (BFIS item 1; M=15.90, SD =5.57) reported higher levels of social anxiety than participants with less problems functioning in that life domain (M=10.14, SD=7.77; t (-1.38)=1.62, p=0.18).

Item number and description			NES	SA	RG	OF	EG	DO	SR
Moderate to	severe impairment on life activity					1			
1	Immediate family	12		0.48 (0.12)	0.36 (0.25)	0.45 (0.15)			
2	Getting chores completed	5		0.37 (0.54)	0.35 (0.57)	0.41 (0.50)		-0.55 (0.34)	-0.73 (0.16)
3	Work or occupation	6	-0.66 (0.15)				0.44 (0.38)		
7	Education	5	0.88 (0.50)	0.88† (0.50)	-0.34 (0.58)	0.93† (0.02)		-0.74 (0.16)	-0.98† (0.01
8	Taking care of children	9	-0.56 (0.12)	-0.36 (0.34)					
9	Management of money	8			0.67 (0.07)			0.68 (0.07)	0.42 (0.30)
12	Management of daily responsibilities	6	-0.48 (0.33)	-0.37 (0.47)			0.66 (0.15)		

NES = neuroticism and emotional stability; SA = social anxiety; RG = rigidity; OF = offendedness; EG = egoism; DO = dominance; SR = self-respect

*BFIS = Barkley Functional Impairment Scale

†Significant with α < .05

 Table 4: Correlations between the translated NPV subscales and BFIS* items (functional and functional impaired subjects)

For the population used in this study, the normative scores for the Papiamento NPV were calculated based on the method used in the original manual. 'Very low' was assigned to a score lower than the fifth percentile. Scores higher than or equal to the fifth percentile and lower than the twentieth percentile were labeled 'low'. 'Below average' was assigned to scores higher than or equal to the twentieth percentile and scores below the mean score minus one, times the standard error of measure. Scores higher than or equal to the mean, minus one times the standard error of measure and lower than the mean plus one, times the standard error of measure were labeled 'average'. Scores higher than or equal to the mean plus one time the standard error of measure and lower than the eightieth percentile were labeled 'above average'. 'High' was assigned to scores higher than or equal to the eightieth percentile and lower than the ninety-fifth percentile. Finally, scores higher than or equal to the ninety-fifth percentile were labeled as 'very high'. The results are shown in table 5.

	NES	SA	RG	OF	EG	DO	SR
Very high	33-	25-	48-	34-	22-	22-	36-
High	24-32	17-24	39-47	29-33	21	18-21	32-35
Above average	17-23	16-17	-	24-28	20	16-17	30-31
Average	Nov-1 6	Oct-15	31-38	18-23	13-19	Oct-15	24-29

Below average	05-Oct	06- Sep	30	16-17	11-Dec	08- Sep	23
Low	02-Apr	0-5	27-29	Aug-1 5	10- Nov	03-Jul	19-22
Very low	0-1	-	0-26	0-7	0-9	0-2	0-18
Score range	Feb-34	0-26	25-48	Jul-35	Sep-2 3	Feb-22	19-36
Mean	13.9	13	35	21	16.4	12.7	27.1
St. Deviation	9.5	7.2	5.5	7.3	3.7	5.2	4.6
SEM*	3.3	2.9	3.7	3.4	3.3	3.2	3.1
SEE†	4.5	3.9	4.6	4.6	3.7	4.1	3.8
N	24	24	24	24	24	24	24

Table 5: Normative scores for the translated NPV

Discussion

Papiamento is a mainly spoken language, which makes assessment in written Papiamento challenging. The aim of this study is to translate and validate the NPV and create possibility to assess the Papiamento speaking. This article is the first step to achieve this goal. Despite challenges concerning language, the results of this study show promising results. Due to the small group of participants, the results need to be interpreted with caution.

The participants studied in this group are quite homogenous. Most participants are single men with a mean age of 29 years, having little education without a permanent job. All are defendants in the prison of Bonaire and half of the participants use one or more controlled substances. This might explain the fact that the t-tests and the variance analysis on socio-demographic factors showed little difference in the outcome of the NPV.

A dimensional approach to personality disorder is considered superior to a categorical approach [22]. Looking at the characteristics of this population and the DSM 5 [23], antisocial, paranoid, borderline and avoidant personality traits are to be expected [3, 24]. Personalities traits in the NPV are reflected by different score combinations on the subscales. High scores on self-respect and dominance, average to above average scores on egoism, offendedness, average scores on rigidity and low scores on social anxiety, neuroticism and emotional stability characterize a flawless self-presentation, matching with narcissistic personality traits [25]. Additionally, an intellectual impairment is often seen as compensation for the lack of appropriate coping skills [25]. High scores on social anxiety, neuroticism and emotional stability, average to above average scores on rigidity, offendedness, and egoism, and low scores on dominance and self-respect represent a neurotic personality, often seen in a borderline personality profile. Tables 3 and 4 give glimpses of the above-mentioned patterns. The means of the subscales in table 3, which are significantly higher than the manual, are the ones expected to be high for this population. Moreover, the life domains in table 4, where social interaction is key (item 1, 3, 7, and 8), correlate with social dysfunctional patterns of the NPV subscales in the impaired population. The Papiamento norm scores per scale (table 5), compared with the Dutch norm scores for every scale (table 5), follow a steeper curve from 'very low' to 'very high', except for social anxiety,

dominance and self-respect. Although the two norm groups represent different populations in terms of ethnicity, it is to be expected that a prison population reports more personality problems than a general population. The fact that the dominance curve is lower than the curve in the manual and the fact that the mean for dominance is significant lower than the mean in the manual is surprising considering the assumed presence of machismo among Papiamento speaking men [26].

Although the readability improved with some words differently than the official orthography, some items still seemed difficult to read for the participants. Participants would read sentences out loud to understand the words. Papiamento is spelled phonologically, as are words used in the Papiamento originating from another language. For example, the English word 'computer' is spelled as 'kompiuter'. As stated earlier, Papiamento is a mainly spoken language. Also, on the island of Curacao, most of the population speaks English, Spanish, and Dutch in addition to Papiamento. It might be possible that one is more familiar with the English spelling than the Papiamento spelling. To reduce the influence of Papiamento reading skills, adding audio to present the NPV items should be investigated. Recording the items or the use of a text-to-speech application are possibilities.

Conclusion

Although a small number of participants could be included for this study, the scores on the NPV in Papiamento represent the characteristics of the population. There was a sufficient internal reliability and a validity of the personality test. Preliminary norms for use of the NPV in Papiamento are also included. The use of NPV in Papiamento may lead to more valid results about personality of Future research should include a larger number of participants.

References

- 1. Bebbington P, Jakobowitz S, McKenzie N, Killaspy H, Iveson R et al. (2016). Assessing needs for psychiatric treatment in prisoners:Prevalence of disorder, Soc Psychiatry Psychiatr Epidemiol 52: 221-229.
- 2. Hildebrand M, Ruiter D (2004). PCL-R psychopathy and its relation to DSM-IV Axis I and II disorders in a sample of male forensic psychiatric patients in the Netherlands. Int. J. Law Psychiatry 27: 233-248.
- Coid J, Moran P, Bebbington P, Brugha T, Jenkins R et al.(2009) The comorbidity of personality disorder and clinical syndromes in prisoners. Crim. Behav. Ment. Health 19: 321-333.
- Timmerman IG, Emmelkamp PM (2006). The relationship between attachment styles and Cluster B personality disorders in prisoners and forensic inpatients. International Journal of Law and Psychiatry 29: 48-56.
- Mikton C, Grounds A (2007) Cross-cultural clinical judgment bias in personality disorder diagnosis by forensic psychiatrists in the UK: a casevignette study. J Pers Disord, 21: 400-417.
- Vinkers DJ, Barendregt M, Beurs DE, Hoek HW, Rinne T (2011). Ethnic differences between pro Justitia reported suspects. [Ethnic differences between pre-trial suspected offenders]. Journal of Psychiatry 11: 801-811.
- Vinkers DJ, Heytel FG, Matroos GM, Hermans KM, Hoek HW (2010). Reporting Pro Justitia of Antillean suspects in the Netherlands and in the Netherlands Antilles. [Pre-trial psychiatric reports on Antillean suspected offenders in the Netherlands and on the Dutch Antilles]. Journal of Psychiatry 11: 745-752.
- 8. McGilloway A, Hall RE, Lee T, Bhuis KS (2010) A systematic review of personality disorder, race and ethnicity: prevalence, aetiology and treatment. BMC Psychiatry, 10: 33.
- 9. Hofstee WKB (1990) Applicability of psychological tests among immigrants." The Psychologist 25.6: 291-294.

Page 6 of 6

- Bochhah N, Kort W, Seddik H, Pond FVD (2001). Experts on testing minorities Rotterdam: National Bureau for Combating Racial Discrimination. [Professionals about assessing immigrants in Rotteram: National Office of prevention of Racial Discrimination]. (LBR); Dutch Institute of Psychologists (NIP), section interculturalisation.
- 11. Bleichrodt N, Vijver FVD (2001) Diagnostics among immigrants: possibilities and limitations of psychological tests [Assessment in immigrants: possibilities and limitations of psychological assessment tools]. Lisse: Swets en Zeitlinger.
- 12. Nieuwenhuis J, Hooimeijer P, Ham V, Meeus M (2016) Neighbourhood immigrant concentration effects on migrant and native youth's educational commitments, an enquiry into personality differences. Urban Stud, 54:2285- 2304.
- Kortmann FAM (2005) Measuring instruments in transcultural psychiatry. Assessment tools in transcultural psychiatry, Journal for Psychiatry 11: 787-793
- Allen T, Colin GDY (2017) Personality Neuroscience and the Five Factor Model. In T.Widiger, The Oxford Handbook of the Five Factor Model. Oxford: Oxford Press. USA.
- Paunonen SV, Keinonen M, Trzebinski J, Forsterling F, Grishenko R et al. (1996). The structure of personality in six cultures. J. Cross-Cult. Psychol. 27: 339-353.
- 16. McCrae RR, Costa PT (1997) Personality trait structure as a human universal. Am Psychol. 52: 509-516.
- 17. McCrae RR, Terracciano A (2005) Personality Profiles of Cultures Project. Universal features of personality traits from the observer's perspective: data from 50 cultures. J Pers Soc Psychol. 88: 547-61.

- Panicacci A, Dewaele JM. (2017) A voice from elsewhere: acculturation, personality and migrants'self-perceptions across languages and cultures. Int J Multilingualism, 14: 419-436.
- Beaton DE, Bombardier C, Guillemin F, Ferraz MB (2000) Guidelines for the process of cross-cultural adaption of self-report measure. Spine, 25: 3186-3191.
- 20. Evers A, Hall, Jac N, Evers AK (2002). Developments in the test use of Dutch psychologists. The Psychologist, 2: 54-61.
- 21. Digman, John M (1990): Personality structure: Emergence of the fivefactor model. Annu Rev Psychol 41.1: 417-440.
- 22. Ullrich S, Borkenau P, Marneros A (2001). Personality disorders in offenders: Categorical versus dimensional approaches. J Pers Disord, 15: 442-449.
- 23. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders . Arlington, VA: American Psychiatric Publishing. Washington, DC
- 24. Ullrich S, Deasy D, Smith J, Johnson B, Clarke M, et al. (2008) Detecting personality disorders in the prison population of England and Wales: Comparing case identification using the SCID-II screen and the SCID-II clinical interview. J. Forens. Psychiatry Psychol 19: 301-322.
- 25. Eurelings BEHM, Snellen WM (2003) Dynamic personality diagnosis using the Rorschach Ink Stain Method (RIM). Dynamic personality diagnosis: 241-261.
- 26. Marscha V, Verweel P (2005) The Curaçao man. Women about the social identity of Curaçao men. The Curaçao man. Women on the social identity of Curaçao men. Amsterdam, Netherlands: SWP Google Scholar.