Personality Organization and Sport Psychology

Etienne Hébert, Ph.D.¹
Louis Diguer, Ph.D.²
Dominick Gamache, M.Ps.²
Jean-Philippe Daoust, Ph.D.³

June 25, 2005

¹ Université du Québec à Chicoutimi, Etienne_Hebert@uqac.ca
² Université Laval
³ Centre Hospitalier Pierre-Janet
The personality organization model as a general model of functioning

- The theoretical model of personality organization has led to the development and validation of a specific treatment, the transference-focused therapy.

- However, as Kernberg and Caligor (2005) emphasize, this model is not just a model of psychopathological functioning but it also is a model of good, or normal, functioning.

- To our knowledge, there is no research that has taken interest in the validation and the usefulness of this model in a nonclinical setting.
Personality Organization and Sport Psychology

Personality organization and character

- Researches with nonclinical samples make massive use of self-report measures, which tend to evaluate a more observable, social and conscious level of functioning than the personality organization.

- These measures actually evaluate what Kernberg (Kernberg & Caligor, 2005) calls “character” and what academic psychology calls personality.

- Clinically, the character and personality organization are believed to have little in common. Bergeret (1974) has demonstrated how it is possible that two individuals possess a similar character, but that their personality organization will be completely different. A recent study by Laverdière, Gamache, Diguer, Hébert, Larochelle & Descôteaux (submitted) supports that claim.
Psychodynamic and sport psychology

This population was chosen because there has been a long debate in sport psychology over the fact that psychodynamic theories are useless in this domain because (a) they are unable to predict behavior and (b) they mainly are theories of psychopathological functioning (See Hebert [2004] for a comprehensive discussion on this topic).

As the model of Kernberg (1996; Kernberg & Caligor, 2005) proposes a general model of functioning, we chose to test it with a student-athletes sample:

- To demonstrate that psychodynamic theories can help to gain a better understanding of the personality of athletes;
- To bring closer the clinical and research fields in sport psychology.
Objectives

- Examine the relevance of Kernberg’s model of PO in a nonclinical and high-functioning sample: there will be more than one PO.
- Study differences between PO and the character.
- Demonstrate that the personality organization model of Kernberg (1996; Kernberg & Caligor, 2005) can help to gain a better understanding of the personality of athletes.
Method

Participants

- 40 student-athletes that have achieved a national level of competition have been selected.
  - They were all training in a North-American university and were full-time students.
  - None of them had a history of clinical consulting.
  - 11 football players and 29 swimmers ($X^2 = 8.1, p = 0.0044$)
  - 19 women and 21 men ($X^2 = 0.1, p = 0.7518$)
  - They range in age from 17 and 25 years ($M = 20.8, SD = 2.31$)

Procedure

- Meeting in their sport setting
- Invitation letter
- All athletes that expressed the desire to participate have been through the evaluation process.
## Method

### Measures

<table>
<thead>
<tr>
<th>Psychological variables</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality organization</td>
<td><em>Personality Organization Diagnostic Form</em></td>
</tr>
<tr>
<td></td>
<td>(PODF; Diguer, Normandin &amp; Hébert, 2001)</td>
</tr>
<tr>
<td>Character variables</td>
<td></td>
</tr>
<tr>
<td>Five-Factor Model</td>
<td><em>NEO-Five Factor Inventory</em></td>
</tr>
<tr>
<td></td>
<td>(NEO-FFI; Costa &amp; McCrae, 1992)</td>
</tr>
<tr>
<td>Iceberg profile</td>
<td><em>Short version of the Profile of Mood States</em></td>
</tr>
<tr>
<td></td>
<td>(POMS short version; Schacham, 1983)</td>
</tr>
<tr>
<td>Anxiety</td>
<td><em>State-Trait Anxiety Inventory</em></td>
</tr>
<tr>
<td></td>
<td>(STAI; Spielberger, Gorsuch &amp; Lushene, 1970)</td>
</tr>
<tr>
<td>Motivation</td>
<td><em>Echelle de Motivation dans les Sports</em></td>
</tr>
<tr>
<td></td>
<td>(EMS; Brière, Vallerand, Blais &amp; Pelletier, 1995)</td>
</tr>
<tr>
<td>Mental Health</td>
<td><em>Health-Sickness Rating Scale</em></td>
</tr>
<tr>
<td></td>
<td>(HSRS; Luborsky, 1962)</td>
</tr>
<tr>
<td>Psychopathology</td>
<td><em>Structured Clinical Interview for DSM-III-R Axis I Disorders</em></td>
</tr>
<tr>
<td></td>
<td>(SCID-I ; Spitzer, Williams, Gibbon &amp; First, 1990)</td>
</tr>
<tr>
<td></td>
<td><em>Structured Clinical Interview for DSM-IV Axis II Personality Disorders</em></td>
</tr>
<tr>
<td></td>
<td>(SCID-II ; First, Gibbon, Spitzer, Williams &amp; Benjamin, 1997).</td>
</tr>
</tbody>
</table>
Results: Interrater reliability

Personality Organization

- Interrater reliability: ICC GPO = 0.873
- According to the PODF, 15 participants were diagnosed with a borderline personality organization and 25 with a neurotic personality organization ($X^2 = 2.50, p = 0.1138$).

Mental Health

- Interrater reliability: ICC Global Mental Health = 0.839
- Average mental health = 80.125 ($SD = 8.480$)
- The mental health of NPO participants is better than the BPO participants, $F (1,38) = 31.20, p = 0.0001$
Results

Psychopathology

- 4 participants had suffered from an axis I disorder (2 mood disorders, 2 substance-related disorders).
- Axis II: 2 participants suffered from a personality disorder (obsessive-compulsive and antisocial); another 1 suffered from more than one (histrionic, narcissistic, borderline).
- 16 participants suffered from a pathological personality trait and seven of them suffered from more than 1.
- Twenty-three participants weren’t suffering from any pathological trait or personality disorder.
## Results

**Principal components analysis on character variables (58.57% explained variance)**

<table>
<thead>
<tr>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms sensitivity</td>
<td>Adaptation and investment capabilities</td>
<td>Capacity to experience pleasure in sport</td>
</tr>
<tr>
<td>POMS Fatigue</td>
<td>NEO-FFI Agreeableness</td>
<td>NEO-FFI Extraversion</td>
</tr>
<tr>
<td>NEO-FFI Neuroticism</td>
<td>NEO-FFI Conscientiousness</td>
<td>POMS Vigor</td>
</tr>
<tr>
<td>POMS Depression</td>
<td>EMS Autodetermination index</td>
<td>- STAI Trait</td>
</tr>
<tr>
<td>POMS Confusion</td>
<td>- POMS Anger</td>
<td>NEO-FFI Openness</td>
</tr>
<tr>
<td>STAI Trait</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POMS Anger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POMS Anxiety</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results

Principal components analysis on character variables

- ANOVAs revealed that personality organizations presented differences only for the second factor, Adaptation and investment capabilities, $F(1,36) = 5.79, p = 0.0214$

- Further ANOVAs indicated that the NPO participants had higher scores than BPO participants on two variables of the Adaptation and investment capabilities factor, Agreeableness and Conscientiousness of the NEO-FFI:
  - Conscientiousness, $F(1,38) = 15.13, p = 0.0004$
    - $M$ NPO = 2.9333, $M$ BPO = 2.1278
  - Agreeableness, $F(1,38) = 9.79$
    - $M$ NPO = 2.8733, $M$ BPO = 2.4444
**Discussion**

**Personality Organization**
- Usefulness of the personality organization model in a nonclinical high-functioning population.
- The absence of PPO demonstrates the difficulty of that PO to perform at a high level in multiple domains.

**Psychopathology**
- There is some psychopathology in athletes, thus confirming the importance of using psychodynamic theories in sport psychology to better understand the athletes.
- This result also lends credit to the continuum of pathology to normalcy proposed in the model of Kernberg.
- The prevalence observed in our sample is similar to what is generally reported in nonclinical samples:
  - Axis II: APA (1994); Ekselius, Tillfors, Furmark et Fredrikson (2001); Torgersen, Kringlen et Cramer (2001)
Discussion

Mental Health

- Our results are concordant with the researches of Daoust (2003) and Sundin et Armelius (1998).

Relations between Personality Organization and Character

- The results show small correlations between the personality organization and the character, which support the validity of Kernberg’s idea that PO differs from character, what academic psychology calls personality.
**Conclusion**

- The objectives of this study were attained:
  - Results show that Kernberg’s model of PO in a nonclinical high-functioning sample is relevant;
  - Small correlations between character and PO demonstrate that they are largely two different constructs;
  - Kernberg’s model can be useful in sport psychology because it sheds a new light on the researches about the personality of athletes.