Proposed a hypothetical model of the following 8 factors:

- F1: Attention to audience
- F2: Body sensation
- F3: Erroneous motor actions
- F4: Vicious cycles at choking under pressure
- F5: Perceptual and cognitive confusion
- F6: Out of control of body movements
- F7: Memory slip
- F8: Passivity

During Piano Performance

- Experience of choking under pressure during piano performance (64 items)[1][2]
- Personality characteristics (29 items)[3][4]
- Five Likert-type choices
- Respondents: 297 pianists (245 female)

Exploratory factor analysis

- Factors' name
- Questionnaire items (Top 3 items)
- Maximum likelihood method
- Promax rotation

<table>
<thead>
<tr>
<th>Factors' name</th>
<th>Questionnaire items (Top 3 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Attention to audience</td>
<td>I was conscious of being evaluated by others</td>
</tr>
<tr>
<td>F2 Body sensation</td>
<td>My breathing was irregular and I felt short of breath</td>
</tr>
<tr>
<td>F3 Erroneous motor actions</td>
<td>My performance did not lead to what I wanted to</td>
</tr>
<tr>
<td>F4 Vicious cycles at choking under pressure</td>
<td>I could not move as I wanted to</td>
</tr>
<tr>
<td>F5 Perceptual and cognitive confusion</td>
<td>I saw scenes differently from usual</td>
</tr>
<tr>
<td>F6 Out of control of body movements</td>
<td>I felt the hand like floating</td>
</tr>
<tr>
<td>F7 Memory slip</td>
<td>I felt rushed</td>
</tr>
<tr>
<td>F8 Passivity</td>
<td>I played passively (failed to perform expressively)</td>
</tr>
</tbody>
</table>

Covariance structure analysis

- Proposed a hypothetical model of the following 8 factors
- F2: Body sensation
- F1: Attention to audience
- F6: Out of control of body movements
- F5: Perceptual and cognitive confusion
- F4: Vicious cycles at choking under pressure
- F3: Erroneous motor actions
- F7: Memory slip
- F8: Passivity

II. Personality Characteristics

- f-test
  - Classified respondents into high and low groups based on 8 factors score
  - Comparison of characteristics based on tendency to choke under pressure

I. During Piano Performance

- 8 factors underlie choking under pressure
- Our model supports processing efficiency hypothesis
- Out of control of the body affects performance accuracy
- Our model may aid in preventing performance degradation by stage fright

II. Personality characteristics

- C1, C4 and C5 are related to choking under pressure, but C2 and C3 is not

Reference: