The Romanina version of „Consideration of Future Consequences Scale” Ro-CFC-S: Preliminary Data

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Abstract

The examination of temporal orientation is a good predictor regarding the risks for general health state and alcohol abusive consumption (Beenstrock, 2011), juvenile delinquent behaviour, workplace performance (Dane, 2011), and persuasion resistance. CFC-S is a useful instrument for assessing these matters. In order to achieve a reliable, stable, valid and standardized version we followed the guidelines of ITC (Hambleton, 2011). Using a sample of 87 students, aged between 19 – 33 years (\(\bar{x} = 21.35, \text{SD}=1.69\)), the psychometric results shown that RO-CFC-S has a high level of internal consistency reliability (\(\alpha = 0.80\)) and it can be used exclusive for equivalent populations.

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1. Introduction

The field of study which focuses on analyzing temporal orientation of human beings has captured scientist’s interest. Temporal orientation is a psychological construct which includes the following aspects of time: time perception, time orientation, temporal interpretation and investigates the role which time has in determining human behaviour, especially regarding the goals that people set, the risks they take, the influence on human interactions and organizational behaviour (Strathman & Joireman, 2005).

Most of psychologists interested in studying time construct ask themselves if this has implications on human behaviour. A diversity of thoughts, feelings, and behaviours are influenced by the way people perceive and relate to time. Most of studies regarding temporal orientation take into account the role of motivation. Motivation determines the way we relate to time, for example the desire to achieve success can make us behave in a way which focuses on obtaining future gratifications (Strathman & Joireman,
The construct that may be implicated in the formation of a certain behavior (present vs. future gratifications) is the consideration of future consequences (CFC), a stable individual difference that reflects the extent to which distant versus immediate consequences of behavior is considered. (Sirois, 2003). CFC is proposed to capture a unique aspect of future thought, and has been shown to predict a variety of health behaviors including alcohol use, cigarette use, and environmental behaviours. (Strathman et al., 1994)

Therefore, temporal orientation can be divided in proximal orientation and distal orientation, which means that individuals manifest different ways of concern regarding the consequences of their actions.

1.1. Proximal orientation

Proximal orientation is a concept which defines individuals who are orientated on present consequences of their actions, rather than considering future consequences. This type of thinking often leads to taking different risks, acting impulsively, a low level of self-control, a certain predisposition to addictive behaviours, easy to influence (Kess, 2011; Strathamn, 1994).

1.2. Distal orientation

Distal orientation captures the degree in which people take into consideration future consequences of their present behaviour. In contrast with proximal orientation, distal orientation is characterized through a higher level of concern regarding long-term consequences of one’s present action. Future orientated individuals are analytical, act in order to reduce the risk of producing certain unpleasant future events, have a higher degree of responsibility and awareness regarding environmental protection (Kess, 2011).

1.3. The present study

Testing individual’s temporal orientation can help us to predict their behaviour. Also persons who belong to a culture in which they have been deprived of many things are more present-orientated then the ones who lived in a culture where they had access to a diversity of things (Strathman, Joireman, 2005). The goal of the present study is the cross-cultural adaptation of Considerations Future Consequences Scale (CFC-S). Taking into account that the examination of temporal orientation is a good predictor regarding the risks for general health state and alcohol abusive consumption (Beenstrock, 2011), juvenile delinquent behaviour, workplace performance (Dane, 2011), and persuasion resistance, we considered the cross-cultural adaptation of this test and achieving a reliable, stable, valid and standardized version a matter of utmost importance. For the cross-cultural adaptation, we followed the guidelines of ITC (Hambleton, 2011).

2. Method

2.1. Participants

Participants were initially 91 Romanian students at Lucian Blaga University of Sibiu. The English version of CFC-S was applied to a number of 91 students and after 10-14 days the Romanian version of CFC-S was applied to a number of 87 students: 23 men, 64 women, four students withdrawn the study. Mean age of the final sample was 21.35 (SD=1.69), ranging from age 19 to 33.
2.2. Instrument

The Consideration of Future Consequences Scale (CFC-S) was developed by Strathman, Gleicher, Boninger & Edwards (1994) and reflects the extent to which people take into account immediate or future consequences of their behaviour. CFC Scale was designed in order to measure this construct, for which the authors conducted psychometric studies on a sample of students from Missouri and California Universities. The results revealed an internal consistency ranging between 0.78 and 0.86. Moreover, test-retest reliability indicated a high level of stability ($r=0.76; \ p<0.01$, after 14 days) and the correlation of the scores acquired at Deferment of Gratification Scale/DGS (Ray & Najman, 1986), and Zimbardo Time Perspective Inventory/ZTPI (Zimbardo, 1992) attest its validity.

This test consists of a number of 12 items, indicating if the statements are or not characteristic (from 1=extremely uncharacteristic to 5= extremely characteristic). The CFC Scale is scored so that higher numbers indicate a greater consideration of future consequences. To do this, items 3, 4, 5, 9, 10, 11, 12 should be reverse-scored. These seven items should then be summed along with the five items which need not be reversed (items 1, 2, 6, 7, 8).

2.3. Procedure

Cross-cultural adaption procedure was based on guidelines of International Test Commission (Hambleton, 2011). The procedure began by achieving the author’s consent to use the original instrument, followed by consecutive translations and back-translations. In order to obtain a high quality Romanian version of CFC-S, the translation and back-translation were done by four independent translators, authorised and experienced, using double blind methods. Back-translation method consisted of translating CFC-S from English to Romanian, then from Romanian to English until a similar version of the four translators is obtained. The differences between the versions of translations were discussed and annihilated. Afterwards, the two versions of the scale were consecutively applied to the participants. English version was applied to a number of 91 students. After a period of 10-14 days, in order to prevent the possibility that the participants learn or memorize the items included in the instrument, the Romanian version was applied to a number of 87 participants.

The next stage was gathering the data obtained and perform a statistical analysis of it, which compared the answers achieved after the consecutive application. In order to identify if there are any statistically differences between the two versions (EN-CFC-S and RO-CFC-S), we used Wilcoxon test for two-dependent samples.

3. Results

Internal consistency was established using Alpha Cronbach coefficient, for each version; the reliability was made using test-retest method. For English version, the Alpha Cronbach coefficient was $\alpha = .722$ (Table1.) and for Romanian version $\alpha = .801$ (Table 2.), thus the scientific requirements interval ($\alpha = .70-.90$) were met. Also, Inter-Item Correlation Matrix was calculated, for both versions, indicating that the items are correctly formulated, due to the fact that each item correlates with the other items at a very low degree.

EN-CFC-S register for the 87 participants has a mean score of 47.09 (SD = 6.58) and for RO-CFC-S has mean score of 46.95 (SD = 7.16), which clearly indicates that the two versions are similar in this pilot study.

The psychometric results shown that Romanian version of the CFC-S has a high level of internal consistency ($\alpha = 0.80$). Inter-item correlation certified that the items included in Romanian version of
CFC-S are correct. Mean scores for CFC-S and RO-CFC-S is resembled and also after using Willcoxon test (two dependent samples), no statistically differences were identified.

Table 1. Reliability Statistics – English and Romanian Version

<table>
<thead>
<tr>
<th>Cronbach's Alpha CFC-S</th>
<th>Cronbach's Alpha Based on Standardized Items CFC-S</th>
<th>N of Items</th>
<th>Cronbach's Alpha Ro-CFC-S</th>
<th>Cronbach's Alpha Based on Standardized Items Ro-CFC-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.731</td>
<td>0.722</td>
<td>12</td>
<td>0.803</td>
<td>0.801</td>
</tr>
</tbody>
</table>

4. Conclusions

In conclusion, RO-CFC-S is to be temporarily considered a preliminary version of CFC-S, for equivalent populations with the ones used in the psychometric procedures mentioned above. For a good reliable and valid version of the CFC-S there are necessary additional studies which complete this procedure. RO-CFC-S is a useful instrument which can be used in any field of psychology. Thus, the results of the present research are applicable in the following areas: clinical psychology - it can be identified the individual attitude towards the consequences of his behaviour (especially addictive behaviour and aggressivity, preventive health behaviour), consumer behaviour (abusive consumption issues). Also, in career counselling, CFC-S is a useful instrument for identifying the educational path which is congruent with each individual’s pattern of thinking; moreover, work motivation can be determined and academically success can be attained.

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References


Appendix A.

Scala Analizării Consecințelor Viitoare Ro-CFC-S (© 2011, Romanian version can be used free of charge, only after obtaining written consent of the authors; Versiunea în limba romana poate fi folosită gratuit, numai dupa obtinerea acordului scris al autorilor).

Pentru fiecare dintre afirmațiile de mai jos, vă rog să indicați dacă afirmația este sau nu caracteristică pentru dumneavoastră. În cazul în care afirmația nu vă caracterizează deloc, vă rog să completați „1” pe foaia de răspuns; în cazul în care afirmația vă caracterizează extrem de bine, vă rog să completați „5” pe foaia de răspuns. Și, desigur, dacă vă clasificați între aceste extreme, utilizați cifrele intermediiare. Astfel, vă rog să țineți cont de următoarea scală în momentul notării fiecărei din afirmațiile de mai jos:

1= nu ma caracterizează absolut deloc, 2=imi este oarecum necaracteristic, 3= neutru, 4=imi este oarecum caracteristic, 5= ma caracterizează extrem de bine

___ 1. Ma gândesc cum vor fi lucrurile în viitor și încerc să le influențez desfășurarea prin intermediul comportamentului meu zilnic.
___ 2. Adesea adopt un comportament special pentru a ajunge la rezultate pe care nu le voi obține abia după ani.
___ 3. Actionez doar pentru rezolvarea problemelor imediate, gândindu-ma că problemele viitoare se vor rezolva de la sine.
___ 4. Comportamentul meu este influențat doar de rezultatele imediate ale actiunilor mele (imediat = de ordinul zilelor sau săptămânăilor).
___ 5. Interesul (avantajul) meu este un factor major în deciziile pe care le iau sau în actiunile pe care le întreprind.
___ 6. Sunt dispus să îmi sacrific fericirea sau bunăstarea imediată în favoarea unor rezultate pe care le voi obține în viitor.
___ 7. Consider că este important să iau în serios avertismentele legate de rezultatele negative, chiar dacă aceste rezultatele se presupun ca vor avea loc abia peste câteva ani.
___ 8. Consider că este mai importantă adoptarea unui comportament cu consecințe importante pe termen lung decât a unui comportament cu consecințe imediate mai puțin importante.
___ 9. În general ignor avertismentele privind posibilele probleme viitoare, deoarece consider că aceste probleme se vor rezolva înainte de a atinge nivelul de criză.
___ 10. Cred că de obicei nu este necesar să faci un sacrificiu acum pentru a te asigura de anumite rezultate în viitor, din moment ce obținerea acelor rezultate viitoare poate fi tratată într-un moment ulterior.
___ 11. Actionez numai pentru rezolvarea problemelor imediate, gândindu-mă că ma voi ocupa mai târziu de problemele viitoare care pot apărea.
___ 12. Din moment ce activitatea mea zilnică are rezultate specifice, aceasta este mai importantă pentru mine decât comportamentul care are rezultate pe termen lung.

SCORARE:

Scala este construită astfel încât scorurile mari obtinute să indice o preocupare importantă asupra consecințelor viitoare și o preocupare mai scăzută asupra consecințelor imediate ale actiunilor, în timp ce scorurile mici indice o preocupare mai importantă asupra consecințelor imediate și o preocupare mai scăzută asupra consecințelor viitoare ale actiunilor. Pentru a putea calcula scorul total, se aduna scorurile itemilor 1, 2, 6, 7, 8 cu scorurile cotate invers ale itemii 3, 4, 5, 9, 10, 11, 12 (din cifra 6 se scade scorul atribuit de către subiect itemului)