Abstracts

A CROSS-CULTURAL INVESTIGATION OF SELF-COMPASSION IN ADOLESCENTS ACROSS GENDER

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Background: Self-compassion encourages one to accept oneself, reduce self-criticism and self-judgment, and see one's shortcomings and setbacks in a balanced view. Adolescent self-compassion is a crucial protective factor against mental illness. It is, however, affected by gender. Given the scarcity of self-compassion scales for adolescents, the current study evaluates the Self-Compassion Scale for Youth (SCS-Y) in a large cross-cultural sample and investigates how the subscales of SCS-Y relate to the dimensions of depressive symptoms across gender.

Subjects and Methods: Through the internet-based Qualtrics, a total of 2881 teenagers aged 12 to 18 years were recruited from Hong Kong (HK), China, and the United Kingdom. A Multiple Indicator Multiple Cause (MIMIC) model was used to evaluate measurement invariance of the SCS-Y, and differential item functioning (DIF) was checked across gender. Upon the establishment of the best model, a multigroup structural equation model (SEM) was built between factors of SCS-Y and Multidimensional depression assessment scale (MDAS) which assesses four dimensions of depressive symptoms (emotional, cognitive, somatic and interpersonal).

Results: The SCS-Y was shown to have good reliability and validity. The MIMIC model produced a good model fit for a hypothetical six-factor model (CFI = 0.980; TLI = 0.974; RMSEA = 0.038) and no item was flagged for DIF across gender. A gender difference was observed between SCS-Y factors and depression dimensions.

Conclusions: The SCS-Y exhibits good psychometric characteristics, including measurement invariance across gender. The study also highlights the gender difference between self-compassion factors and depression dimensions.

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EPIDEMIC EVOLUTION UNDIFFERENTIATED POPULATION WITHOUT INTERVENTION AND MARKETING OF ANXIETY SENSITIVITY

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Background: The sudden outbreak of the epidemic has had a significant impact on society and people's daily life. Epidemic prevention and control has become one of the focuses of attention of all countries. What is worth studying is how and why the epidemic has developed so violently. Therefore, this paper proposes an epidemic evolutionary game model between non anxiety sensitive intervention and undifferentiated population and government disease control units.

Course and Method: Application of differential equation and complex network modeling. According to the actual situation, the game matrix is constructed, and the replication factor dynamic equation of the game matrix is analyzed. Then, based on the game matrix and complex network evolution model, the network evolution model is designed for comparative analysis and scenario simulation. Finally, the sensitivity analysis and parameter adjustment are discussed. Parameter values refer to the assumptions and pre-conditions of the game. In order to better measure the relationship between residents' well-being and situational simulation, this study adopts the emotional regulation strategy questionnaire prepared by gross and John, including two dimensions of expression inhibition and cognitive reappraisal, with a total of 10 questions (4 questions of expression inhibition and 6 questions of cognitive reappraisal). The questionnaire adopts seven points scoring. The composite reliability of the expression inhibition dimension in this measurement is 0.83, the 95% confidence interval estimated by delta method is [0.81, 0.85], and the composite reliability of cognitive reappraisal dimension is 0.83, and the 95% confidence interval is [0.81, 0.85].

Results: The final strategy of evolutionary stability was calculated as “initiative and indulgence”, that is, the number of active individuals reached a certain value or the social and economic cost was low, or as “mobility, prevention and control”, that is, the government unit had strong control ability and could control the epidemic within a certain range. Then, the negative impact of complex networks and the necessity of prevention and control are obtained through simulation, and the positive impact of fixed cost investment on epidemic prevention and control is explained in detail. The evolutionary stability strategy of replicating dynamic equations is obviously inconsistent with the evolutionary game results of complex networks. The result of evolutionary game in complex networks is not absolutely stable. Obviously, the simulation results are closer to reality. The regression coefficients of the first and second steps are significant. In the third step, after the re-evaluation of intermediary variables is inserted, the impact of social support on adolescents' anxiety level is still significant. Therefore, it can be seen that the re-evaluation plays a partial intermediary role in the relationship between social support and adolescents' anxiety level, and its effect value is 0.07, accounting for 0.05-0.22 / 0.05 = 22% of the total effect. Taking the level of adolescent anxiety as the dependent variable, social support as the independent variable and re-evaluation as the intermediary variable, the intermediary effect analysis was carried out. The bootstrap self sampling number was 5000. The results show that the 95% confidence interval of the re-evaluated mediating effect is [-0.376, -0.058], and 0 is not within the upper and lower limits, indicating that the anxiety level of online game plays a mediating role.

Conclusion: the model provides a reference for improving the effect of epidemic prevention and control. This study uses evolutionary game model to analyze the game relationship between population and government departments during the epidemic. The model combines the complex network with the epidemic evolutionary game, and considers the individual's strategy choice in the evolutionary process. The study found that whether individuals are infected is closely related to their choice of consciousness or mobility strategies. However, the susceptibility, infection, recovery or death (SIR) chamber model proposed in 1926 divided the population into