

# Influence of Social Exclusion on the Inferiority Feeling of Community Youth

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#### **Abstract**

**Background:** Inferiority feeling leads to the negative reactions such as depression and anxiety among community youth, social exclusion also forms their negative emotions due to the alienation of social relations. We aimed to explore the effect of social exclusion on the inferiority feeling of community youth.

**Methods:** In December 2021, a total of 681 community youth from Wuhan in China were selected as the research object. They were evaluated using a social exclusion scale, inferiority scale, and rumination scale, respectively. The mediating effect of rumination on the relationship between social exclusion and inferiority of community youth was tested by using structural equation model and bootstrap test.

**Results:** The scores of social exclusion, inferiority complex, and rumination were positively correlated (P < 0.05). The mediation effect test showed that the mediation hypothesis model had a relatively good fitting index. Social exclusion was a positive predictor of rumination, and rumination was a positive predictor of inferiority. Ruminant thinking had a significant partial mediating effect in the relationship between social exclusion and inferiority feeling, the indirect effect was 0.078, the direct effect was 0.04, the total effect was 0.118, and the ratio of direct effect to indirect effect was approximately 1:2. Therefore, social exclusion exerted the influence on inferiority through rumination.

**Conclusion:** Social exclusion positively affects the inferiority feeling of community youth through the mediating effect of rumination thinking. The health prevention of community youth's inferiority feeling should not only prevent the negative impact of social exclusion but also strengthen the cultivation of rumination thinking.

Keywords: Social exclusion; Community youth; Inferiority feeling; Rumination; Mediating effect

#### Introduction

Inferiority feeling is easy to cause serious psychological injury or behavior deviation of community youth, such as somatization, depression, anxiety and terror. In recent years, the incidence of inferiority feeling among community youths has increased and become one of the important factors

affecting their mental health. About 15% of community youths have different degrees and types of inferiority feeling (1). This is worrisome given that low self-esteem will have a serious impact on the mental health development of community youths. In light cases, it will have a nega-

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tive impact on the normal life and study of community youths, and in serious cases, it will even lead to dropping out of school, suicide, and other behaviors. Therefore, how to carry out health intervention on the inferiority feeling of community youth has become the primary focus of social attention. Inferiority feeling is a low evaluation of an individual's unconfident performance (2). When comparing with others, individuals tend to underestimate their abilities, resulting in different degrees of negative emotional experience, which is called inferiority feeling (3). Especially after entering puberty, due to the imbalance of physical and mental development, community youth often experience conflicts, pressure and even serious psychological deviation, and the incidence of inferiority feeling is gradually increasing. Thus, to maintain the mental health of community youth, it is very necessary to explore the generation mechanism and influencing factors of community youths' inferiority feeling, which is of great practical significance for intervening public health in community.

Many factors cause community youth to feel inferior, mainly including school, individual, family environment, and social environment. Among them, the social environment is the most important factor for community youths' mental health. Social exclusion has been a hot research factor in recent years. It mainly refers to a phenomenon in which individuals refuse to participate in related group activities after being rejected by others, thus hindering and affecting their relationship needs and belonging needs (4). After suffering from social exclusion, individuals relatively lack social connection, which easily leads to the formation of social anxiety and disorder, insecurity, self-doubt, and psychological inferiority. Social exclusion has a positive predictive effect on the inferiority feeling of community youths (5). In the process of social interaction, a comparison of the active seeking of social support of community youths and their exclusion by the society shows that high levels of refusal over time can produce different degrees of normal social behavior of negative disgust reaction, with adolescents fearing that they will again be rejected, as well as produce negative emotions such as anxiety and depression. Scial exclusion has a positive predictive effect on social anxiety (6).

In addition, according to generalized strain theory, relatively serious social anxiety can cause the reality of community youths to develop some non-adaptive deviation behavior, and the difficulty encountered by individuals in handling interpersonal relationships to alleviate and avoid social exclusion, anxiety, and tension is likely to cause self-sealing behavior, further aggravating the psychological inferiority of community youths. Inferiority feeling comes from the inferiority of personality, love, learning, social, physique, and family (7). There was a close connection between inferiority feeling and interpersonal relationship in social interaction; in particular, the social relationship between individuals and "significant others" has a significant influence on the formation of inferiority feelings (8). Individuals with inferiority might be prompted to compare their defects with others, in turn, making these individuals with inferiority overly sensitive to interpersonal relationships (9). Individuals with high social exclusion experience have a relatively high probability of inferiority (10). Negative life events are risk factors leading to an inferiority feeling, and there is a positive correlation between negative life events and inferiority complex, which can have a direct impact on individual inferiority feeling and effectively predict inferiority feeling (11). Rumination, anger, depression, and anxiety are significantly positively correlated and that rumination is a direct factor causing the above negative emotions (12). Community youths who suffered from poor parenting in childhood are more likely to ruminate, resulting in negative concepts, which ultimately lead to a higher risk of inferiority feeling (13).

The influence of social exclusion on the inferiority of community youths is relatively complex, and there should be a correlation between them. Ruminant thinking involves numerous mood disorders, especially the important influencing factors of depression, anxiety, and inferiority (14). Reacting to life events with a ruminant style will also increase the risk of negative emotions, such as

community youths appearing self-abased. Rumination after thinking about individual development in self-abased psychology has a certain degree of prediction effect. Rumination is a thinking mode in which an individual repeatedly thinks about the impact, results, and causes of stressful events or negative emotions after experiencing relevant stressful events (15). Hertel et al (16) described rumination as individual attention focused on the behavior of domestic symptoms and its underlying factors, inferiority, and idea. It includes a relatively stable personality trait and is also a kind of negative response style and way of thinking when one has a problem. Rumination is a mood of thinking over and over again, which could lead to adverse consequences, rather than a positive solution to related problems. Rumination is more likely to occur in community youths who suffer from social exclusion and has a significant predictive effect on individual anxiety, depression, and inferiority (17). It is not only positively correlated with anxiety and depression but also has a serious negative impact on the interpersonal communication of community youths, thus causing social anxiety (18). Iferiority and other negative emotions are positively related to social exclusion, which is the main factor affecting the appearance of community youths' anxiety, depression (19). Community youths who are under long-term social exclusion are more prone to depression, anxiety, and other negative emotions, which then cause the human demand for a lack of interaction with others and promote the formation of an inferiority feeling. Inferiority feelings of community youths may be influenced by external factors like social exclusion or internal factors such as ruminant thinking. Rumination may act as an intermediary variable between social exclusion and community youths' inferiority feeling, that is, social exclusion promotes the development of community youths' inferiority feeling through rumination.

To further understand the relationship between social exclusion, inferiority feeling, and rumination in community youths, this study intends to construct a mediating model among social exclusion, inferiority feeling, and rumination to pro-

vide empirical support for alleviating community youths' sense of inferiority and improving their mental health. In view of the relationships among variables in the designed model, the following hypotheses were proposed: 1) both social exclusion and rumination have positive predictors of inferiority. 2) Social exclusion can positively predict rumination. Rumination plays a mediating role in the relationship between social exclusion and inferiority. Through a questionnaire survey, this study explores the influence of social exclusion on the inferiority feeling of community youths. The obtained findings are expected to provide reference for the prevention and treatment of community youths' inferiority feeling and promote their mental health development and social adaptation.

#### **Methods**

#### Data

In December 2021, a total of 681 community youth from Wuhan in China were selected as the research object through convenient cluster sampling method. Professional teachers explained the questionnaire before it was distributed.

The survey was approved by the community where the subjects were located. The subjects included 325 boys and 356 girls, aged 17–22, with an average age of 18.32±0.75. The explanation and distribution of the questionnaire were carried out by psychology teachers who have undergone strict training. In the case of informed consent, an anonymous questionnaire survey was conducted on the subjects, and their information was kept strictly confidential. The place was a preprepared classroom with a fixed activity space. Professional teachers introduced the content and purpose of the questionnaire in accordance with the prescribed procedures. The evaluation time of all scales was about 30 mins.

#### Measure

#### 1) Social exclusion scale

The social exclusion scale developed by Wu et al. (20) was used to conduct a questionnaire survey on the subjects of this study. The questionnaire

contains 19 questions, which are scored on a scale of 1–5 (never–always). The higher the degree of social exclusion is, the higher the final score will be. The Cronbach's α coefficient was 0.95. The results of inflammatory factor analysis were CFI=0.93, TLI=0.91, RMSEA=0.03, and SRMR=0.04, indicating that the scale had relatively good structural validity.

## 2) Inferiority feelings scale

The inferiority scale developed by The Insight Group of Peking University according to the characteristics of Chinese community youths was adopted (21). It consisted of 5 dimensions and 36 items to measure the inferiority degree of an individual in terms of physical fitness, appearance, learning ability, social confidence, and self-respect. Five-point Likert scale was used to evaluate the scale dimension items. The stronger the community youth inferiority feeling is, the higher the score will be. At the same time, there was no correlation between social expectation tendency and the score of the scale to avoid the influence of social expectation deviation on the scale evaluation. The Cronbach's  $\alpha$  coefficient was  $\alpha = 0.843$ .

#### 3) Ruminative responses scale

The rumination scale developed by Han et al. (22) was used to evaluate the subjects. The scale contained 3 dimensions (introspection and rumination, compulsive thinking, and symptom rumination) and 22 items, all of which were evaluated and scored using the 1–4 (never–always) four-level evaluation method. The Cronbach's  $\alpha$  coefficient was 0.93, and the Cronbach's  $\alpha$  coefficients of the three dimensions were between 0.86 and 0.94.

### Statistical analysis

Statistical software SPSS 20.0 (IBM Corp., Armonk, NY, USA) was used for the statistical analysis of the above data. Pearson correlation analysis was used to analyze the relationship between social exclusion, inferiority feeling of community youths, and rumination. Software AMOS 21.0 was used to build a model to test the mediating effect of rumination on social exclu-

sion and community youths' inferiority feeling. Bootstrap test was used to analyze the mediating effect data of rumination, and P<0.05 was considered statistically significant.

#### Results

#### Common method deviation

To avoid a homogeneity error that could potentially mislead or confuse the result of the research, this study conducted the single-factor Harman test and deviation test on the methods related to social exclusion, inferiority feeling of community youths, and the measuring project on ruminant thinking for exploratory analysis. The features of the principal component value greater than 1 could be extracted. The first component explained 22.87% of the total variance, which was relatively small compared to the critical value of 40%. Therefore, there was no serious deviation problem in the common methods used in this study.

#### Correlation analysis

The correlation analysis of social exclusion, rumination, and inferiority was conducted by the Pearson method. The results in Table 1 shows positive correlations among the scores of inferiority scale, social exclusion scale, and rumination scale (P<0.05).

## Mediating effect of rumination on social exclusion and inferiority of community youths

The structural equation model was constructed with the social exclusion score as the independent variable, rumination score as the intermediate variable, and inferiority score as the dependent variable. The fitting indexes of the model were relatively good (RMSEA=0.02, AGFI=0.89, CFI=0.89, TLI=0.93, IFI=0.92, NFI=0.88, df=4,  $\chi^2$ =18.35), indicating that the proposed model was acceptable. In this model, the passage of social exclusion from rumination to inferiority was statistically significant (P<0.05) as shown in Fig. 1.

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Variables (points)	$\bar{x} \pm s$	Forced Thinking	Reflection	Symptoms of Rumi-	Inferiority Feeling	Social Exclusion	
	nant						
Forced Thinking	10.85±2.13						
Reflection	$10.08 \pm 2.51$	0.491*					
Symptoms of	21.85±3.65	0.364*	0.393*				
Ruminant							
Inferiority Feeling	$18.99 \pm 2.18$	0.136*	0.116*	0.231*			
Social Exclusion	42.15±4.59	0.314*	0.242*	0.417*	0.194*		
RRS Total	42.39±5.46	0.812*	0.764*	0.859*	0.186*	0.421*	

Table 1: Correlation Analysis between Variables(r)

Annotation: \*P < 0.05

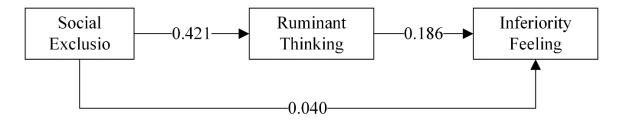


Fig. 1: Mediation models of rumination, social exclusion and inferiority

The bias-corrected percentile bootstrap algorithm was used to test the mediating effect of rumination on the social exclusion and inferiority of community youths. Rumination had a mediating effect on the relationship between social exclusion and inferiority of community youths in the 95% confidence interval (0.12–0.52), where 0 was not in this interval. This finding indicated that the mediating effect of the rumination model was

established with a significant effect of 66.10%. Ruminant thinking had a significant partial mediating effect in the relationship between social exclusion and inferiority feeling, in which the indirect effect was 0.078, the direct effect was 0.04, and the total effect was 0.118. The ratio between direct effect and mediation effect was approximately 1:2, as shown in Table 2.

Table 2: Effect Size and Effect Value of Mediation

Mediation Way	Effect Size	Effect of the	Interval		
		Amount	Value (95%)		
Social Exclusion→ Ruminant	0.421*0.186=0.078	0.078/0.118=66.10%	(0.12-0.52)		
Thinking → Inferiority Feeling					
Direct Effect	0.040	0.040/0.118=33.90%	(0.03-0.09)		
Total Effect	0.078+0.040=0.118				

#### Discussion

Table 1 shows that there was a positive correlation between social exclusion and community youths' sense of inferiority (P<0.05), which is

similar to the findings of Mao et al. (23). Negative social events experienced by community youths may have a positive predictive effect on their negative emotions, such as anxiety, inferiority feeling, and depression (24), and "self-denial"

is the core and essential content of inferiority feeling (25), while comparing with normal youths, inferior youths are more sensitive to social exclusion, mostly take a look at problems with a negative state of mind, and often deny their thoughts (26). In addition, ruminant thinking and community youths' inferiority mentality also have a certain positive correlation, which may be due to the high rumination thinking of community youths mostly being a kind of relatively negative processing mode of thinking about things or people around you. The youths show more of a negative attitude, and most of them will suppress their emotions out of their psychological conflict; over time, they will lack their value to have confidence, making it easier for them to form an inferiority feeling. When the value formation of community youths are under a variety of psychological conflicts at the same time, in the face of the school and family-reality pressure, the most troubled relationships occur when the social and self-abased psychology are closely linked, given that this stage is when the relationship between the adolescents and teachers, parents, and other youths are most tense. This also confirms the results of our research. Moreover, inferior youths have difficulty developing self-confidence and facing and solving related problems, which have an important influence on the level of their mental health. The results also showed that a positive correlation exists between social exclusion and rumination. This may be because after experiencing social exclusion, community youths will usually form a more negative cognitive mode, namely, rumination. However, community youths with higher rumination will show upward counterfactual thinking and more negative thoughts. Such negative rumination will have a negative impact on social interaction, resulting in more disharmonious interpersonal relationships and unreasonable self-recognition and evaluation as well as further aggravating the inferiority feeling.

Social exclusion has a positive predictive effect on rumination, which is consistent with the results of other studies (27-28). This may be because social exclusion provides rumination with content for reflection, while social exclusion can also stimulate the negative stress state of community youths. When community youths suffer from negative events such as social exclusion, they are more likely to immerse themselves in a state of repeated thinking about negative things to improve their rumination level. In addition, rumination has a positive predictive effect on inferiority. This may be due to the fact that individuals' ruminant thinking and the inferiority of community youths are a kind of subjective experience. The level of ruminant thinking is relatively high for community youths as the generation of inferiority feeling provides good space and condition that greatly motivate them to expand out of their thoughts, meaning that it is difficult to making and accepts more friends. In this state of selfprotection, they produce and experience the corresponding inferiority feeling. The social exclusion does not have a significant predictive effect on inferiority, which may be due to the fact that social exclusion does not have a direct impact on an adolescent's inferiority but does so through some intermediary variable, which is consistent with the theory of rational emotion (28). The idea is that it is people's perception of time (rumination, etc.), rather than the event itself, that determines individual behavior.

Rumination plays a mediating role in the relationship between social exclusion and inferiority. After experiencing social exclusion, community youths with relatively high rumination level will habitually reflect on the causes of this situation instead of seeking how to change this situation. Thus, they will be immersed in pain and unable to get away from it, making it easy for them to form a relatively negative cognitive mode (29). The social exclusion experienced by community youths is processed by ruminative thinking, which enhances their sense of inferiority and has a serious impact on their physical and mental health (30). According to the mediating model of inferiority, social exclusion, and rumination established in this study, the improvement of inferiority and the maintenance of mental health of community youths can be accomplished by reducing their social exclusion. If community youths experience all positive events in their life, then their rumination level will be very low or even nonexistent, and they will be full of confidence and positive cognitive mode, making them not prone to inferiority feeling (31). However, in reality, most contemporary community youths are faced with various pressures, and there is a big discrepancy between ideal and reality. It is difficult to reduce inferiority feelings by reducing social exclusion alone.

According to the model in this study, rumination can also be used as the entry point. Although it is difficult to predict social exclusion, if the characteristics of rumination can be changed, then a community youth's inferiority will be reduced to the greatest extent because social exclusion can affect their inferiority through the rumination mediating effect (32). Furthermore, community youths can dare to face and solve their problems, look at the problem positively and optimistically, explore the positive side of negative events, and change their ruminant thinking.

#### Conclusion

To intervene the inferiority feeling of community youth, decrease their psychological injury, this study explores the influence of social exclusion on the inferiority feeling of community youth and the mediating role of rumination in the relationship between them. Social exclusion, inferiority, and rumination are positively correlated. Social exclusion may generate a positive prediction function on ruminant thinking, ruminant thinking has a predictive value on inferiority feeling, and the direct prediction effect of social exclusion on inferiority feeling has statistical significance. Ruminant thinking between social exclusion and inferiority feeling plays a certain degree of intermediary function for community youths.

# Journalism Ethics considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submis-

sion, redundancy, etc.) have been completely observed by the authors.

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#### Conflict of interest

The authors declare that there is no conflict of interests.

#### References

- Akdogan R, Cimsir E (2019). Linking Inferiority Feelings to Subjective Happiness: Selfconcealment and Loneliness as Serial Mediators. *Pers Individ Differ*, 149(2):14-20.
- 2. Mogaka SM, Wawire C, Mugambi D (2021). Ability Streaming as a Predictor of Academic Inferiority Feelings among form Three Students in Kisii County, Kenya. *Int Learn dev*, 88(11):1-38.
- 3. Lim H, Choi J (2019). Mediating Effects of Intention Attribution in Relation to Inferiority Feelings and Relational Aggression in University Students. *Korean J Hum Dev*, 26(3):71-88.
- Tian XH, Zhang SS (2021). Social Exclusion and Depression: A Multiple Mediating Model of Communication Anxiety and Mindfulness. J Hangzhou Teac Coll Nat Sci Ed, 20(6):577-83.
- Taylor S, Wilson E, Murfitt K, et al (2020). Social Exclusion by Retailers of People with Complex Communication Needs. J Dev Phys Disabil, 33(6):909-30.
- Zhu LJ, Ye BJ, Ni LY (2020). Social Exclusion on College Students' Online Deviant Behavior: The Mediating Effect of Social Anxiety and Moderating Effect of Negative Online Emotion Experience. Chin J Spec Educ, (1):79-83.
- 7. Tümlü GÜ, Şimşek BK (2021). The Effects of Psychodrama Groups on Feelings of Inferiority, Flourishing, and Self-compassion in Re-

- search Assistants. *Arts Psychother*, 73(4):101763.
- 8. Li YM, Li YX (2015). Adolescents' Interpersonal Competence, Social Inferiority and Mental Health: The Mediating Role of Social Adaptiveness. *J Psychol Sci*, 38(1):109-15.
- Kim E, Koh E (2018). Avoidant Attachment and Smartphone Addiction in College Students: The Mediating Effects of Anxiety and Self-esteem. Comput Hum Behav, 84(9):264-71.
- Park A, Kim YM (2018). The Longitudinal Influence of Child Maltreatment on Child Obesity in South Korea: The Mediating Effects of Low Self-esteem and Depressive Symptoms. Child Youth Serv Rev, 87(12):34-40.
- 11. Dembińska A, Kosowska J, Ochnik D (2020).

  Ability to Initiate Relationships and Sense of Loneliness Mediate the Relationship between Low Self-esteem and Excessive Internet Use.

  Curr Psychol, 6(4):1206-13.
- Tong H, Hou WK, Liang L, et al (2021). Age-Related Differences of Rumination on the Loneliness–Depression Relationship: Evidence from a Population-Representative Cohort. *Innov Aging*, 5(4):igab034.
- 13. Samtani S, Moulds LM, Johnson LS, et al (2021). Higher Order Repetitive Negative Thinking is More Robustly Related to Depression, Anxiety, and Mania than Measures of Rumination or Worry. *Cognitive Ther Res*, 46(1):161-70.
- Gan XR, Hu W, Tang H (2017). Influence of College Students' Rumination on Anxiety and Depression. J Gannan Medical Univ, 37(5):688-91
- Royuela-Colomer E, Fernández-González L, Orue I (2021). Longitudinal Associations between Internalizing Symptoms, Dispositional Mindfulness, Rumination and Impulsivity in Adolescents. J Youth Adolescence, 50(10):2067-78.
- Hertel TP, Herrera P, Shamapant P (2020). Rumination: Practicing Retrieval of Autobiographical Memories. Cognitive Ther Res, 45(5): 858-68.
- 17. Heinzel VC, Kollárik M, Miché M, et al (2021). Is a Ruminative Thinking Style Related to Obsessive-Compulsive Symptom Severity Beyond Its Associations with Depressive and Anxiety Symptom Severity. *Int J Cogn Ther*, 14(3):575-91.
- 18. Moeller SB, Kvist V, Jansen JE, et al (2021).

- Clinical Case of a Schizotypal Personality Disorder: Rumination-Focused CBT for Anger Rumination. *J Contemp Psychother*, 51(4):311-21.
- Eikey VE, Caldeira MC, Figueiredo CM, et al (2021). Beyond Self-reflection: Introducing the Concept of Rumination in Personal Informatics. *Pers Ubiquitous Comput*, 25(3):601-16.
- Wu HJ, Zhang SY, Zeng YQ (2013). Development and Validation of the Social Exclusion Questionnaire for Undergraduate. *China J Health Psychol*, 21(12):1829-31.
- Li XS, Wu JJ (2021). Social Support and Feeling of Inferiority: Chain Mediation of Learning Burnout and Resilience. *Psychology*, 16(05):7-10
- Han X, Yang HF (2009). Chinese Version of Nolen-Hoeksema Ruminative Responses Scale (RRS) Used in 912 College Students: Reliability and Validity. Chin J Clin Psychol, 17(05):550-51.
- 23. Mao YN, He J, Yang DT (2020). The Dark Sides of Engaging in Creative Processes: Coworker Envy, Workplace Ostracism, and Incivility. *Asia Pav J Manag*, 38(4):61-81.
- Ji Y, Zhao B, Ma YJ (2015). Mediating Effect of Inferiority Feelings on Relationship between Childhood Trauma and Fear of Intimacy in College Students. *Chin J Ment Health*, (6):457-62
- 25. Burger D, Feucht M, Muench NL, et al. (2022). Good Clinical Outcomes after Patellar Cartilage Repair with No Evidence for Inferior Results in Complex Cases with the Need for Additional Patellofemoral Realignment Procedures: A Systematic Review. *Knee Surg Sport Tr A*, 30: 1752-68.
- 26. Frost A (2015). Inferiority Complex: Should State Courts Follow Lower Federal Court Precedent on the Meaning of Federal Law? Vanderbilt Law Rev, 68(1):53-103.
- Dos Santos MF, Roberto Pereira C (2021). The Social Psychology of a Selective National Inferiority Complex: Reconciling Positive Distinctiveness and System Justification. J Exp Soc Psychol, 95(30):104118.
- 28. Yi CD (2015). A Practical Study on the Cultivation of Emotion Management Skills by Using ABC Rational Emotion Theory. *Pop Psychol*, (10):21-2.

- 29. He YM, Zimmerman CA, Carter-Sowell AR, et al (2020). It's the Reoccurring Thoughts that Matter: Rumination over Workplace Ostracism. *Occup Health Sci*, 4(4):519-40.
- 30. Takebe M, Takahashi F, Sato H (2017). The Effects of Anger Rumination and Cognitive Reappraisal on Anger-In and Anger-Control. *Cognitive Ther Res*, 41(4):654-61.
- 31. Farber R, Wedell E, Herchenroeder L, et al (2021). Microaggressions and Psychological

- Health among College Students: A Moderated Mediation Model of Rumination and Social Structure Beliefs. *J Racial Ethn Health*, 8(1):245-55.
- 32. Barry JT, García-Moreno C, Sánchez-Mora C, et al (2019). The Unique and Interacting Contributions of Intolerance of Uncertainty and Rumination to Individual Differences in, and Diagnoses of, Depression. *Int J Cogn Ther*, 12(4):260-73.